• Introduce the idea that green economy interventions are ones that address one or more of the principles relating to efficiency, resilience and the protection of natural capital. Page 19

• Introduce the idea that multiple-players are required to achieve the goal of implementing systemic interventions and no single stakeholder (including government and business) will make progress on their own. In order to unite these stakeholder we require a common vision behind which the can unite. In South Africa, this vision is the National Development Plan (NDP)

• Using the NBIs analysis of the NDP in relation to the NBI principles framework (Pages 35 to 45 and Appendix III) introduce the ideas of:
  o National legislation is often complementary but can also be contradictory
  o Efficiency planning in national legislation thinks of efficiency in terms of resource use but rarely resource substitution
  o Government planning does not address resilience and the protection of natural capital in a robust and integrated way
  o Explain that there are also many (100s) of very specific recommendations in the NDP that range from macro-economic interventions like Carbon Capture and Storage to ultra-specific recommendations like every civil servant must where a name badge (provides a name a consumer can use to fight corruption and improve service delivery). However the manner in which the high level objectives and the specific recommendations are linked is less clear and the NDP does not appear to have a consistent framework to connect the two and aid more detailed planning
  o Introduce the ideas of implementation channels. These are innovation in Financial Service, Policy, Business Models and Consumer Behaviour. Page 35
  o Introduce the idea of systemic interventions that are already mentioned in government policy are potential candidates but not necessarily a complete list of systemic interventions – we refer to them as emergent interventions

• Revisit the purpose of the project which is to identify key systemic interventions that can provide both a systemic impact on the South African economy (in particular in overcoming systemic barriers in the financial services value chain) and significantly aid in a transition to a green economy. But that in the second phase of workshops that we will attempt to identify specific financial service and policy innovations to ensure implementation of these ideas

• Facilitate a discussion about potential systemic interventions and using Carbon Capture and Storage illustrate how the principles framework can be used to demonstrate trade-offs and the magnitude of those trade-offs. During the discussion note the biases and areas of reluctance of each stakeholder group. This meta-data may be useful in the solution development phase
  o Brainstorm a list of potential interventions in an open session writing down the projects on a flip-chart (allowing people to interrogate details of what the interventions might be). Depending on time you may need to limit this to interventions that relate to the green economy
  o Using Post-It-Notes get each participant to write their top 3 interventions (those interventions that have the most potential to scale, have an impact on the financial services sector barriers and also on the green economy) one on each Post-It-Note. Aggregate the Post-It-Notes on a board so that the same suggestions are clustered
together and similar suggestions are nearby. This will give a first pass suggestion of priority (a large grouping of suggestions), although one person may have had an idea that no-one else thought of that the wish they had

- Give each participant 3 green dot stickers and 1 red one. Instruct them to stick the green dot stickers on the ideas they like the most. They can use the single red dot sticker to indicate the idea (emphasise they are all good ideas) that they like the least. This gives the participants the opportunity to recognise single ideas. Aggregations of purely green dots are high priority ideas and aggregations of red dots are low priority ideas. Those that have both red and green dots indicate some confusion around the concept or differing ideological biases. If there is time the ideas with both red and green dots should be discussed. At the very least they may require additional research.

- Using the size of the Post-It-Note clusters and the aggregation of green and red dots write-up a prioritised list of systemic interventions for taking into the next phase.

- Focussing on the top priority ideas, use the policy framework to explore the trade-offs across the economic principles and identify reasons as to why there might be disagreement (red and green dots). For example a marked negative impact on Job Creation. Note the strength of views on these issues. The negative impacts will be the focus of the solution development phase and an idea is probably only feasible if marked negative impacts can be dealt with through policy or financial innovation.

- If there is time you can aggregate these interventions on an ease of implementation and time to benefits chart.

Be sure to thank the participants and inform them on how they can remain engaged in the project. Point them to the website www.nbigreeneconomy.wordpress.com for further means of engaging.
Appendix II – The impact of high quality government spending

Much of what is below is inspired by Box 1.2 of the World Economic Forum 2015 Global Risk Report titled Fiscal Crises: Just When You Thought It Was Safe to Go Back, a short comment that was contributed by the Global Agenda Council on Fiscal Sustainability.

If a government spends more than it earns (raised in taxes) it generates a deficit. Like anyone who spends more than they earn the government would need to then borrow money to cover the deficit. What they use this borrowed money for is really important and governments hope that the investment in the economy with this borrowed money will generate growth and economic returns for the economy that will fund the cost of borrowing this money. The might also generate a budget deficit in order to stimulate economic growth in times of low economic growth.

There are a number of ways government can borrow the money to make up the deficit and one of the cheapest ways is through issuing bonds, where they borrow money from private investors with the condition of repayment at a specific rate at a specific time. According to the Global Council on Fiscal Stability:

“a fiscal crisis occurs when investors begin to doubt the government’s future ability to repay; the government then has to offer higher interest on its bonds to compensate investors for the increased risk. A vicious cycle starts: ballooning interest payments add to government debt, increasing the doubts of investors and forcing interest rates up still further. This can rapidly turn into a fatal spiral, in which fears that a country will default on its debt become a self-fulfilling prophecy.

As government bonds tend to be held in substantial part by domestic banks, when the government defaults, the resulting losses on these bonds endanger banks’ solvency. In this way, a fiscal crisis can lead to financial crisis. The causation can also run the other way: the government may be forced to bail out large banks at risk of default to avoid a systemic financial crisis. However, the additional debt taken on can plunge the government from an already precarious fiscal position into a full-blown fiscal crisis.

Unsustainable debt developments ultimately force governments to undertake painful fiscal adjustments by cutting expenditures and/or raising taxes. If such austerity is not timed well, it can trigger a deep recession and a strong increase in unemployment…”

A government’s ability to raise inexpensive debt through bond markets is therefore a key fiscal management tool. This ability is in turn affected by the credit rating of the country as credit ratings agencies affectively signal to private investors their view on the government’s ability to pay their debt back. In part this credit rating and investor confidence is driven by the quality of government expenditure. If it is believed that the expenditure is on assets that will generate returns for the country then confidence will increase. If it is believed that the country budget is prudently managed confidence will increase. Furthermore, if the investment fails to generate returns for the country and therefore increase tax revenues the ability for the country to repay the debt is compromised.

This cycle, with some additional annotation, is reflected in figure 13.
In relation to our earlier frameworks, the potential for South Africa to build GDP per capita and move towards an aggregation with developed countries is constrained by institutional decline and corruption, which threaten to drop us towards the zone of requiring institutional solutions. It is therefore critical that government spending is structured in such a way that stimulates growth and encourages private sector participation. This adds further impetus to structuring a conversation between the private and public sectors on collaborating on implementing a sound development vision. In the case of South Africa, the National Development Plan.

The financing of green economy related interventions, particularly in relation to the public sector, should thus also be viewed in the context of supporting high quality government spending.
Appendix III – Policy document analysis detail

A highly detailed analysis of the various policy documents reviewed in the main body of the text is provided below.

Efficiency

Channels contributing to all aspects of efficiency

Many of the action items defined in the policy documents are channels, mostly in the form of policy, that are aimed to address or incentivise all sub-categories defined in the efficiency principle. These overarching channels are listed here, by policy document.

NDP channels

- **South African building standards (206)** Building standards, vehicle emission standards and municipal regulations to achieve scale in stimulating renewable energy, waste recycling and in retrofitting buildings. (64) scaled taxes on the sale of high-emission vehicles (177)

- **Carbon pricing (206) (64):** internalise the social and environmental costs of behaviour (207) Introduce carbon pricing with appropriate conditional exemptions: (IRP) exemptions in some sectors (or rebate or recycling schemes). Must be introduced alongside direct low-carbon policy actions. Additional tax in energy sector would further encourage renewable generation and diversify sources. (170-1)
  - **Carbon tax** - incremental application + conditional exemptions (electricity sector) (208)
  - National Treasury and DEA + JSE: develop the regulatory framework for a domestic market in carbon offsets (209)
  - **Public infrastructure investments** that need to be recouped over an extended timeframe must take account of the risk of a significantly increased cost of carbon, which will increase the cost of fossil fuels. (211)

- **Carbon budgeting:** emerge from a bottom-up sector-by-sector analysis, sensitive to: dynamics of SA economy; costs and risks of mitigation in certain sectors; development imperatives of the country: job creation and poverty eradication (207) + cumulative and reviewable + incremental implementation and targeted at sectors with greatest mitigation potential + aligned with international standards (UN Framework Convention on Climate Change): M&E and verification (208)

- **Rising energy prices - electricity pricing plans**, predicated on the need to obtain a return on investment on new generating capacity as contained in IRP 2010 (177,202) IRP: effective shadow carbon price (48)

- **Complementary fiscal reforms** needed to broaden price on carbon and encourage change: economy and green (48)

- **Implementing stepped tariffs** to promote the conservation of water and electricity, while ensuring continued access to free basic services. (204)

- **Research and Development**
- The National Treasury is to use fiscal instruments to **subsidise research and development** and the Department of Trade and Industry will invest in strengthening the ability of South Africa to support its innovators in the process of product development and marketing, with a particular focus on renewable energy and energy efficiency. (209)

- A wider system of innovation that links universities, science councils and other research and development role players with [each other] (48)

- **Public policy should focus on R&D in existing areas of competitive advantage** (where global markets are set to grow): **Innovation to meet environmental and energy efficiency objectives** (297)

**NCCRP Channels**

- **Market-based instruments**: In 2006, Government published a draft Environmental Fiscal Reform Policy Paper entitled *A Framework for Considering Market-Based Instruments to Support Environmental Fiscal Reform in South Africa*. This policy paper recognised the role for environmentally-related taxes to complement existing regulatory policy interventions and address environmental problems such as climate change (40). Including:
  - The **electricity generation levy** (31,40)
  - **Taxes on motor vehicle emissions** (31,40)
  - **Taxes on incandescent light bulbs**; (31,40)
  - **Carbon taxes**: As part of the process of exploring more comprehensive reforms for addressing climate change, the National Treasury published the carbon tax discussion paper entitled *Reducing Greenhouse Gas Emissions: The Carbon Tax Option* for public comments in December 2010. The paper elaborated on the role for **carbon taxes** as a policy measure to stimulate behavior changes among producers and consumers in favour of less energy intensive, lower-carbon emitting alternatives. (40)
    - Accordingly, the **prices of environmental goods and services that generate excessive levels of GHG emissions should be adjusted to reflect the full costs of production and consumption** (41)
    - **The tax rate should, over time, be equivalent to the marginal external damage costs of GHGs** to affect appropriate incentives. However, in the absence of an international climate change agreement and therefore a global emissions pricing system, a partial, rather than full, internalisation of the externality will be considered as an interim measure.
    - **Technical and administrative feasibility** – consideration will be given to whether the tax applies to carbon emissions or a proxy for such emissions (e.g. fuel inputs or outputs). Should a proxy tax base be used, the levy of the tax according to the carbon content of fossil fuels will be considered.
    - **Distributional implications** – measures will be taken, either in tax design or through complementary expenditure programmes, to offset the burden such a tax will place on poor households.
    - **Competitiveness** – to address potential negative impacts on industry competitiveness, the introduction of carbon taxes at initial low rates with a
commitment to phased-in increasing levels of taxation over a specific period will be considered; which would grant taxpayers an opportunity to adjust to the new tax.

- **A phased implementation of the tax** towards comprehensive coverage of all economic sectors is believed to be desirable and will be considered.

- **The minimisation of the potential regressive impacts on the poor and the protection of the competitiveness of key industries** will be considered. Furthermore, revenue recycling to minimise the costs of the tax through, for example, some form of tax shifting will be considered. However, although the full earmarking of revenues is not regarded as being in line with sound fiscal policy principles, some form of on-budget funding for specific environmental programmes will be considered.

- **Relief measures**, if any, will be considered by these will be regarded as being minimal and temporary. (41)

- **Carbon markets**: Mechanisms for exchanging emission reductions between entities, thereby optimizing efficiency and minimizing cost in controlling pollution levels (41)
  - **Cap-and-trade mechanisms**: mandatory limitations on emissions create markets in which polluters trade emissions allowances
  - **Offset schemes**: actors voluntarily pay compensation for emissions
  - National Treasury: investigate the feasibility of **an emissions trading schemes as a medium- to long-term response to climate change** (41)

- **Regulatory incentives**

- **Economic incentives**

- **Tax incentives and fiscal subsidies** are targeted at various programmes that support climate change mitigation and adaptation objectives; (31)
  - a range of tax incentive measures to support renewable energy investments (depreciation allowances for renewable electricity generation and biofuels production); (40)
  - Investments in projects under the **Clean Development Mechanism (CDM)** (that is, income tax exemption for revenues from the sale of certified emission reduction units resulting from CDM projects); (40)
  - Proposed energy efficiency savings tax allowances (40)
  - Biodiversity conservation and management; (40)
  - Further incentives will be explored as part of a suite of policy instruments to promote climate resilience, including job creation incentives in new green industries, especially for youth (41)
  - Lower fuel taxes on clean fuels

- **Appropriate standards** (31);

- **Information and awareness initiatives** including:
  - the motor vehicle emissions labelling scheme. (31)
  - Behaviour change through choice (15) empower, effective communication, all responses address education, awareness outreach human resources development, design, develop and rollout climate change awareness campaign (40)
NSSD Channels

- Research and development:
  - Increasing the country’s expenditure on R&D as a percentage of GDP (33-34)

- Renewable Energy Feed-in Tariffs (REFIT) as a mechanism to promote the deployment of renewable energy that place an obligation on specific entities to purchase the output from qualifying renewable energy generators at predetermined prices

- Develop, implement and maintain a GHG emissions information management system in respect of the energy sector (33-34)
  - A GHG emissions information management system in the energy sector will provide accurate, up-to-date and complete information to the South African Air Quality Information System’s National Greenhouse Gas Inventory, hosted by the South African Weather Service. This GHG emissions information management system should provide measurable, reportable and verifiable information on all significant interventions

- Development and implementation of the Green Building Regulatory Enforcement Programme, and awareness and capacity-building programmes at local levels of governance (25)

- Implementation of green cities and towns, event greening and tourism (25)

IPAP Channels


- 2015/16 Q4: Industrial Policy Roadmap to inform the transition to a low carbon manufacturing sector. (111)

Decoupling – resource efficiency

NDP Implementation Activities

Vehicle efficiency, modal shift and public transport & spatial efficiency

- Improvements in vehicle efficiency (electric cars and hybrid vehicles) and standards (206+209)

- Promotion of public transport (including rail freight) (206)

- Integrated transport planning (209) Focus on transport as a system. Instead of focusing on a particular transport mode, emphasis should be placed on the total transport network. This systemic approach will help improve transport efficiency and accessibility while reducing the overall environmental, social and economic costs. This approach should also consider transportation options that would contribute towards South Africa's decarbonisation efforts, for instance, the use of electric buses or offering companies incentives for using delivery vehicles powered by liquefied natural gas. (184)
- More reliable and affordable public transport + **better coordination between modes of transport** (47)

- Most of South Africa's bulk freight is transported on existing national road and rail networks. Planning should prioritise improving the capacity, efficiency and sustainability of these corridors while enhancing the performance of seaports and inland terminals. (186)

- **Non-motorised transport** e.g. cycling (206)

- **Spatial efficiency.** Productive activity and jobs should be supported, and burdens on business minimised. Efficient commuting patterns and circulation of goods and services should be encouraged, with regulatory procedures that do not impose unnecessary costs on development. (277)

**Energy efficiency**

- **Implementing new building design standards** (207) Ensuring compliance with strengthened environmental requirements in building regulations (203)
  - **More energy efficiency and building techniques** (149)
  - **Greater household energy efficiency** (207)
  - All new buildings to meet energy efficiency criteria set out in SA National Standard 204 Progressively strengthen the energy efficiency criteria set out in the South African National Standard 204 to achieve a zero carbon building standard by 2030. (288)
  - The roll-out of solar water heating. (203)

- **Industrial energy efficiency:** Industry has committed itself to an energy efficiency programme. There is also significant potential for improvements and changes in some industrial processes. This will be combined with a change in the focus of industrial manufacturing towards greener industries over time. (206)
  - **Closing down the most energy-inefficient plants.** (48)

- **A culture of energy efficiency in society** is well established. (215)

**Lower carbon energy**

- **Procure 20 000MW of renewable energy** (46) Move to less carbon-intensive electricity production through procuring at least 20 000MW of renewable energy, increased hydro-imports from the region and increased demand-side measures, including solar water heating. (63)

- **Decommission 11 000MW of aging coal-fired stations** (46)

- **Diversify energy market** (163)

- **Hydroelectric:** South Africa should invest in and help exploit the wide range of opportunities for low-carbon energy from hydroelectric and other clean energy sources in southern Africa. (32)
More efficient agricultural practices: reduce meat production, reduce use of nitrogen fertilisers, promote organic farming (207)

Water conservation

- Increasing efficiency of agricultural water use (177) (BUT: capital and skills intensive BUT will support job creation). New entrants will thus need substantial support to achieve these gains (182)

- “In most areas, additional water can only be made available if there is a concerted programme to improve the efficiency of existing irrigation, relocate water and ensure that new entrants use the water effectively” (225) = substantial support programme best introduced in partnership with existing farmers

- National water conservation programme (46) (63)

- National programme to support local and sectoral initiatives to reduce water demand (179) Demand-management projects with merit given priority and on par with water-supply expansion projects (179)

Clean coal technologies

- Carbon capture and storage (207) and investigating the financial and environmental feasibility of carbon capture and storage technologies. (202)

- Reducing the carbon footprint of existing and planned coal-powered power stations through retrofitting, clean coal technologies (202)

- There is potential to increase the efficiency of coal conversion, and any new coal power investments should incorporate the latest technology. As the existing fleet of old coal-fired power stations is replaced, significant reductions in carbon emissions could be achieved. Cleaner coal technologies will be supported through research and development and technology transfer agreements in ultra-supercritical coal power plants, fluidised-bed combustion, underground coal gasification, integrated gasification combined cycle plants, and carbon capture and storage, among others. (167) BUT: Medupi and Kusile, although more efficient, will still couple the economy to natural resource depletion (high carbon) (211)

- Carbon sinks: regional sequestration initiatives: forestry and land use planning (206-7)

NCCR Implementation Activities

The Energy Efficiency and Energy Demand Management Flagship Programme: (32) As part of the Energy Efficiency and Energy Demand Management Flagship Programme, the DoE will continue programme in industry, building on the experience of Eskom’s Demand Side Management programme and the DTI’s National Cleaner Production Centre, and covering programme will be established with appropriate initiatives, incentives and regulation, and a well-resourced information collection and dissemination process.

- A residential energy efficiency programme will also be included, consisting of two parts:
The development of appropriate initiatives, incentives for low-income housing will be determined through the National Sustainable Settlements Facility under the Department of Human Settlements.

- Regulation of commercial and residential building standards to enforce green building construction practices. The National Regulator for Compulsory Home Builders Registration Council will ensure that building construction and operation conform to green building requirements, including measures such as controlled ventilation, using recycled material, solar power, etc.

- **A government building energy efficiency programme** led by the Department of Public Works that initiates energy and emissions audits of all government buildings and facilities will be developed. It will develop comparable indicators and benchmarks, and make appropriate interventions. The programme will include lead programmes for key government buildings, including Parliament and the main government buildings in Pretoria. Ambitious goals for energy efficiency will be set out for all new government buildings. (32)

- **Develop an energy efficiency standard** (33)

- Significant upscaling of energy efficiency applications, especially industrial energy efficiency and energy efficiency in public, commercial and residential buildings and in transport;

The Transport Flagship Programme: (32)

- As part of the Transport Flagship Programme, the Department of Transport will facilitate the development of an enhanced public transport programme to promote lower-carbon mobility in five metros and in ten smaller cities and create an Efficient Vehicles Programme with interventions that result in measurable improvements in the average efficiency of the South African vehicle fleet by 2020. Furthermore, the planned rail re-capitalisation programme is considered an important component of this Flagship Programme in so far as it will facilitate both passenger modal shifts and the shift of freight from road to rail.

- **Reducing the transport sector’s carbon footprint through cost-effective interventions, including shifting freight from road to rail**

- **Transport modal shifts and efficient vehicles**

  - **Passengers towards public and non-motorized transport**, promoting transport-related interventions including transport modal shifts (road to rail, private to public transport) (27)

  - **Shifting from inefficient and internal combustion engine vehicles to efficient, hybrid and electric vehicles and lower carbon fuels** (27)

The Carbon Capture and Sequestration Flagship Programme: (32)

- Led by the DoE in partnership with the South African Energy Research Institute, the programme includes, among other initiatives, the development of a Carbon Capture and Sequestration Demonstration Plant to store the process emissions from an existing high carbon emissions facility. (32)

Water resource management

- Implementing effective, efficient and sustainable water resources and services management measures
Implementing best catchment and water management practices to ensure the greatest degree of water security and resource protection under changing climatic conditions and, in particular, investment in water conservation and water demand management. (18)

- Long-term strategic focus on planning, adaptation and the smart implementation of new concepts and proactive approaches to managing water resources

- In the implementation of low-cost housing, ensure access to affordable lower-carbon public transport systems, incorporate thermal efficiency into designs and use climate-resilient technologies.(22)

**NSSD Implementation Activities**

**Transport modal shifts and efficient vehicles**

- **Shifting freight from road to rail**
- **Passengers towards public and non-motorized transport**
- **Shifting from inefficient and internal combustion engine vehicles to efficient, hybrid and electric vehicles**

Initially led by the Department of Transport, the programme will also include a Government Vehicle Efficiency Programme that will measurably improve the efficiency of the government vehicle fleet by 2020. It will encourage new efficient-vehicle technologies, such as electric vehicles, by setting procurement objectives for acquiring such vehicles. (32)

**Develop an energy efficiency standard** (33)

- Develop energy efficiency methodology and monitoring tool

1 000 000 solar water heaters rolled out by 2014 to reduce electricity demand, and to provide universal access to modern, affordable and environmentally beneficial solar water heater services for all, off-setting rising electricity costs to residential households through savings on water heating through coal-generated electricity, and achieving renewable energy targets of 10 000 GWh, as contained in the White Paper on Renewable Energy of 2003 (33)

**Diversification of energy sources**

- **Percentage of power generation that is renewable** [10 000 GWh by 2014]

- Encouraging investment in renewable energy on a scale sufficiently large to justify the localisation of competitive technologies, along with active support for local renewable technology manufacturing to present an opportunity for sustainable economic development and job creation (25)

- **Biofuel strategy** aims to achieve a 2% penetration level of biofuels in the national liquid fuel supply (33)

- **Development and implementation of appropriate standards and guidelines and codes of practice for the appropriate use of renewable energy technologies**
  - Develop renewable energy methodology and monitoring tool
Water savings

- **Curtail water losses at water distribution systems** to an average percentage reduction (saving) [from 30 to 15% by 2014]

- **Reduction (saving) of demand as determined in the reconciliation strategies for seven large water supply systems** by 15% [assessment of water requirements and water monitoring systems implemented by 2014]

**IPAP Implementation Activities**

Second phase upgrade of the **electrical power and energy measurement standards by NMISA** to support measurements required by ESKOM for the maintenance of the national power grid. 2014/15 Q2 - 2016/17 Q4

**Energy efficiency standards, accreditations and labelling:**

- **New upgraded national measurement standards for energy efficient lighting.** 2014/15 Q4 – 2015/16 Q4
  - **Energy Efficiency Performance of Buildings Accreditation Programme** to be developed and rolled out. 2015/16 Q4
  - Amendment of Compulsory Specification VC 9006 for **hot water storage tanks; upgrading of energy-efficiency requirements and labelling finalised.** 2015/16 Q4
  - Expand the capacity of the **Appliances Laboratory to enable it to test for energy efficiency.** 2014/15 Q3
  - **Revision of SANS 204 - Energy Efficiency in Buildings.** 2014/15 Q4
  - Provide national measurement standards for building efficiency (energy saving) 2014/15 Q4
  - **SANS 53165 on thermal insulation products for buildings; specification for factory-made rigid polyurethane foam (PUR) products.** 2014/15 Q3

**Agro-Processing - enhancement of production efficiency in the fruit and vegetable Canning industry (pg86)** Implementation of a PPP fruit canning initiative designed to raise competitiveness for the long-term sustainability of the fruit canning industry.

- In collaboration with the NCPC-SA, the dti will identify and recruit companies from the South African Fruits and Vegetables Canners Association (SAFVCA) to **participate in the Resource Efficient and Cleaner Production Programme (RECPP).** It will then conduct RECPP training and awareness courses for employees at the companies and roll out the programme in the identified companies. 2014/15 Q1
- The dti will **support initiatives of SAFVCA in terms of market access and recruit 6 companies to participate in the RECPP.** 2014/15 Q1-2
- In further collaboration with the NCPC-SA, the dti will facilitate the application processes of companies seeking to access the incentive grants of the **MCEP for implementation of the Resource Efficient and Cleaner Production (RECP) Recommendation.** 2014/15 Q2
Decoupling – change source material

NDP Implementation Activities
Reduce domestic use of fossil fuels through universal electrification (207)

Biofuels and gas as alternatives

- Increase in biofuel content in fuel requirements (206)
- Increased bio-fuel production (206)
- Gas should be explored as an alternative to coal for energy production. (63)

Use of lightweight materials in freight and passenger vehicles, because of their lower lifecycle energy requirements and greater load-carrying capacity. (189)

NSSD Implementation Activities
Biofuel strategy aims to achieve a 2% penetration level of biofuels in the national liquid fuel supply (33)

IPAP Implementation Activities
Commercialisation of Natural Fibre Reinforced Composites (128)

- The establishment of pilot-scale manufacturing facilities and specialised testing equipment for proof of concept of new products developed from natural fibre based composite materials, with applications in the aerospace, automotive, boatbuilding, renewable energy and building and construction industries.
- The increased interest in natural fibre reinforced composites (bio-composites) is driven by economic and technical considerations as well as heightened environmental awareness. The advantages of bio-composites include cost and weight savings, a reduced environmental footprint, reduced energy consumption in production, and health and safety benefits.
- Pilot and up-scale agricultural fibre production and processing, commercialisation and implementation of various composite manufacturing technologies (including resin infusion, compression moulding, pultrusion, extrusion and injection moulding); and facilitate the establishment of natural fibre value chains.
- 2014/15: Undertake several techno-economic studies to assess the viability of new bio-composite products.
- 2014/15: Development of composite manufacturing and testing capability to support industry adoption of natural fibres into composite applications.
- 2014/15-2015/16: Prototyping, trial manufacture and limited manufacturing in partnership with industry.
Dematerialisation – reduce
See – ‘Decoupling – Resource efficiency’

Dematerialisation – re-use

NDP Implementation Activities
There is already extensive indirect reuse of water in inland areas, where municipal and industrial wastewater is reintroduced into rivers after treatment. However, there is considerable scope for further water reuse. Many municipalities lack the technical capacity to build and manage their wastewater treatment systems. As a result, a regional approach to wastewater management may be required in certain areas. (180)

Research into water reuse and desalination and the skills to operate such technology should be developed, perhaps under the auspices of a national water-resource infrastructure agency (discussed below) or the Water Research Commission. (180) National capacity to support research, development and operation of water reuse and desalination facilities. (183)

Waste to energy projects (199)
Cut down on solid waste disposal (207)
Countrywide programme to capture land-fill gas methane (207)

NCCRP Implementation Activities
Re-use of effluent, and desalination (18)

The Waste Management Flagship Programme: (32) [NATURAL CAPITAL & Efficiency]
- Led by the DEA, the Waste Management Flagship Programme will establish the GHG mitigation potential of the waste management sector including, but not limited to, investigating waste-to energy opportunities available within the solid semi-solid- and liquid-waste management sectors, especially the generation, capture, conversion and/or use of methane emissions. This information will be used to develop and implement a detailed Waste-Related GHG Emission Mitigation Action Plan aimed at measurable GHG reductions aligned with any sectoral carbon budgets that may be set. This Action Plan will also detail the development and implementation of any policy, legislation and/or regulations required to facilitate the implementation of the plan. (32)

NSSD Implementation Activities
Implementation of waste minimisation programmes and the provision of appropriate facilities and incentives to support them (22)

Dematerialisation – recycle

NDP Implementation Activities
Promote composting and recycling of organic waste (207) Encouraging the composting of organic domestic waste to bolster economic activity in poor urban communities. (199)
Consumer awareness initiatives (197, 199)

Sufficient recycling infrastructure (197, 199) As per the National Waste Management Strategy, implementing a waste-management system through the rapid expansion of recycling infrastructure

Local government must lead by example in terms of recycling and demand-side management. (204)

NSSD Implementation Activities
Implementation of waste minimisation programmes and the provision of appropriate facilities and incentives to support them (22)

IPAP Implementation Activities

- Data collection, stakeholder engagement and market research. 2014/15 Q2
- Waste Management and Recycling Industry Strategy. 2014/15 Q4

Input productivity – labour productivity

NGP Implementation Activities
A national Productivity Accord supplemented by sector and workplace productivity agreements.

Input productivity – capital productivity

NDP Implementation Activities
Rising rates of investment will be achieved initially through state spending on infrastructure, largely aimed at “crowding in” private-sector investment. The focus needs to be on infrastructure that promotes efficiency in the economy and reduces costs for business and for individuals. (115)

Input productivity – technology suitability

NDP Implementation Activities
Expand science, technology and innovation outputs by increasing research and development spending by government and through encouraging industry to do so. (67)

NGP Implementation Activities
Achieving targets for increased R&D: In line with current targets, raising public and private spending on R&D from 0,93% in 2007/8 to 1,5% in 2014 and 2% in 2018; increasing the number of patents from 91 in 2008 to 200 in 2014; increasing the number of professionals and technicians from the current seven per 10 000 people to 11. This will require costed and phased proposals from the relevant departments (DST, DHET , EDD and NT). (53)

Promote and cooperate in the development, application, diffusion and transfer of GHG emission mitigation technologies, practices and processes; (9) Prioritise cooperation and the promotion of research, investment in and/or acquisition of adaptation, lower-carbon and energy-efficient technologies, practices and processes for employment by existing or new sectors or sub-sectors. (15)
Rapidly extending access to and use of ICT based on a continual and rapid reduction in broad-band costs, resulting largely from rapidly expanding undersea cables, and accelerated improvement in access to ICT training as well as social development and public policy applications. (53)

Adaptation and diffusion of technologies in targeted sectors to support employment creation and growth. Existing measures and institutions strengthened and scaled up to support (a) rural development, (b) small and micro enterprises and cooperatives and (c) expanded broadband access across the economy.

Maintenance of our technological edge in knowledge-intensive sectors. This process will be linked to IPAP 2 as well as the targeted support strategies developed by DST. (54)

NSSD Implementation Activities
Implementation of the Ten-year Innovation Plan to support the commercialisation of green technologies (27)

Increasing the country’s expenditure on R&D as a percentage of GDP (27)

Input productivity – land rights

NDP Implementation activities
Change approach to land tenure systems: reduce uncertainty (= stimulate production and economic opportunity) (157)
Resilience

*Anticipation – scenario development/forecasting*

**NDP Implementation Activities**

**Research and capacity building:**

- The National Research Foundation is to establish a **national facility dedicated to funding research and developing human capacity in climate change adaptation and climate modelling.** (210)
- The **Agricultural Research Council** should establish a research focus on climate change and food security. (210)
- The **Water Research Commission** should continue its current programme to understand the potential impacts of climate change on the nation’s water resources. (210)

- **The Adaptation Research Flagship Programme:** (33)
  - Led by the South African National Biodiversity Institute, the design and roll-out of a national and regional research programme to scope sectoral adaptation requirements and costs and identify adaptation strategies with cross-sectoral linkages and benefits, including an assessment of climate change vulnerabilities in the sub-region, with a detailed scenario planning process to define potential sub-regional response strategies. (33)

**NGP Implementation Activities**

**Medium and long term planning:** (46)

- A human capital development plan for climate science and technology informed by the country’s climate change response requirements and the outcomes of the National Employment Vulnerability Baseline and Assessments as well as the Sector Jobs Resilience Plan.

- A complementary science and technology plan for climate change in partnership with the Department of Science and Technology (DST).

- A climate change technology roadmap. (46) Research and development funding instruments: Climate Change Research Chairs in the family of the DST/NRF South African Research Chairs Initiative.

- A Climate Change component within the current NRF-administered Technology and Human Resources and Innovation Programme sponsored by the DTI.

- Climate Change Centres of Excellence to develop much higher levels of climate change science and produce more PhDs and Post-Doctoral fellows in this area and to develop intellectual property and technologies that will make South Africa a global leader in climate change science.

- Research and innovation partnerships in the area of climate change resilience. (46)
NCCRP Implementation Activities

**Encourage voluntary reporting initiatives** (establish and maintained by variety of organised business associations) (38-9)

Support ongoing research to determine the impacts of climate change on artisanal fishing communities and livelihoods in coastal areas that are directly connected to coastal and marine resources and identify appropriate responses. (24)

**Monitoring climate change:**

- Ensure that *nation-wide climate change and atmosphere monitoring systems are maintained and enhanced where necessary*, including through monitoring networks at appropriate spatial density and frequency that monitor, among others, rainfall, ambient air temperature, humidity, soil moisture, wind and solar radiation, lightning, extreme weather event characteristics and their impacts, selected atmospheric GHGs, gas fluxes from selected vegetation, soil and marine carbon pools, sea levels, sea surface temperature, ocean current behaviour and acidity. Data analysis, synthesis, archiving, interpretation and dissemination will be a key component of this effort. (47)

- Ensure that *climate change impacts are monitored at appropriate spatial density and frequency*, where feasible, of changes in spatial distribution and incidence of climate-sensitive diseases; ecosystems and the goods and services they supply; key species responses (including invasive alien species); wildfire hydrology and water resources; and agricultural and forestry production. (47)

- Establish a monitoring system for *gathering information* (with bottom-up inputs where possible) and *reporting progress on the implementation of adaptation actions*. (47)

- Identify the key role-players involved in monitoring and measuring these indicators. Describe how these role-players will share and report information on observed climate change.

- In line with internationally agreed reporting requirements, include a *summary of climate change impacts and adaptation actions in the National Communication*, which highlights new areas of concern and areas in which observations do not align with modelled projections. (47)

- Develop a health data-capturing system that records data both at spatial and temporal scales and that ensures that information collected can be imported into multiple-risk systems such as the South African Risk and Vulnerability Atlas (SARVA).

**Medium and long-term modelling:**

- Within two years of the publication of this policy, *finalise, publish and start implementing the 10-year Global Change Research Plan for South Africa*, especially those elements of the plan that increases South Africa’s modelling capacity for climate and impacts projections and vulnerability assessments. (47)

- Within two years of the publication of this policy, *compile and publish a strategy to continuously update and maintain the SARVA*, using the full range of medium- and long-term climate modelling results and the full range of possible risks. Maintain, update and
enhance the SARVA as a tool that provinces and municipalities may use to inform their climate change adaptation planning. (47)

- Within two years of the publication of this policy, develop and pilot a methodology to downscale climate information and comprehensive impact assessments to specific geographical areas, including provinces and municipalities. This methodology will avoid inappropriate treatment of fine-scale information as indicating greater certainty in climate outcomes, allow for plans that can respond to unfolding climate trends, and lower the risk of mal-adaptation. Downscaling work should be done with appropriate monitoring and evaluation safeguards. (47)

- Invest in and improve research into water, nutrient and soil conservation technologies and techniques, climate-resistant crops and livestock, as well as agricultural production, ownership, and financing models to promote the development of “climate-smart agriculture” that lowers agricultural emissions, is more resilient to climate changes, and boosts agricultural yields. (19)

**Anticipation – early warning systems**

NCCR Implementation activities

Establish public platforms to assimilate and disseminate information

- Establish and/or support public platforms to assimilate and disseminate climate science, finance, technology and other related research and information to enable effective decisions about risk and investment.

- Ensure effective communications strategy in place for early warnings: extreme weather: flooding and droughts (38)

- Continue to develop and improve early warning systems for weather and climate (especially severe weather events) and pest infestation events and to ensure that these warnings reach potentially affected populations timeously. To this end, we will investigate and implement plans to use the mass media and appropriate information and communication technologies to alert vulnerable populations.

- Seek to collaborate with our neighbouring states to share early warning systems with regional applications and benefits.

- Facilitate increased use of seasonal climate forecasts among key stakeholders such as those in the water and agricultural sectors.

- Use early warning systems to give timely warnings of adverse weather and possibly related pests and disease occurrence. This will also provide up-to-date information and decision support tools to assess the vulnerability of farmers and inform farm management decisions. (19)

Develop and implement public awareness programmes

- Develop and implement education, training and public awareness programmes on climate change and its effects to promote and facilitate scientific, technical and managerial skills as
well as public access to information, public awareness of and participation in addressing climate change. (10)

- Strengthen the awareness programme on malaria and cholera outbreaks. (20)

- Develop and roll-out public awareness campaigns on the health risks of high temperatures and appropriate responses including improved ventilation and promotion of behaviours that minimize exposure to high temperatures, namely “avoidance behavior” (19-20)

- Design and implement “Heat-Health” action plans including plans in respect of emergency medical services, improved climate-sensitive disease surveillance and control, safe water and improved sanitation.

- Invest in education and awareness programmes in rural areas and link these to agricultural extension activities to enable both subsistence and commercial producers to understand, respond and adapt to the challenges of climate change. (19)

NDP Implementation activities

Policy-makers can look at global best practice employed by institutions such as the United States Centres for Disease Control, the United Kingdom’s Royal Society for Hygiene and Tropical Medicine, and the French Institut Pasteur to find ways of creating early-warning systems about outbreaks of disease. (253)

NSSD Implementation activities

Development of decision support systems, such as a malaria mapping tool (34)

Adaptation – autonomous adaptation

NDP Implementation activities

The National Development Plan has a general focus on planning for the long-term sustainability of South Africa, its people, environment and economy. It is about boosting the economy and increasing employment: thereby creating social resilience and class and social mobility. It has a heavy bent towards infrastructure development and upgrades as enablers of economic resilience, while at the same time ensuring the long-term sustainability of the environment: natural resource monitoring and efficiency and mitigation and anticipation actions in response to climate change and increasing environmental pressures.

The plan seeks to make rural communities more self-supporting and to ensure the inclusivity of rural businesses and people in the South African economy. From a rural perspective, the plan is also about ensuring that South Africa maintains and ensures food security, fundamentally contributing to the resilience of the country. The plan advocates an expansion of South Africa’s presence in, and partnerships with, the region, as well as an increase in South Africa’s global market share, particularly with respect to the BRICS group of countries. The plan addresses and provides clear
actions for human development, in the fields of human settlements, healthcare, education and social security.

It also aims to redress historical inequities through various empowerment measures, such as preferential procurement, land reform and BBBEE policies in the workplace, while simultaneously striving to achieve social cohesion and eliminate arbitrary discrimination.

Social protection as a preventive measure – acts as an economic stabiliser that seeks to help people avoid falling into deeper poverty and reduce vulnerability to natural disasters, crop failure, accidents and illness. (355)

NSSD Implementation activities
Introducing schemes that enable the very poor to access sufficient nutritional food to support quality of life

Strengthening financial support and extension services through the Land Care Programme to land claim beneficiaries, small-scale women farmers and African farmers’ unions, for example, the National African Farmers’ Union (NAFU)

Adaptation – planned adaptation

NDP Implementation activities
Sectoral development in areas where climate is a particular issue (water, agriculture, infrastructure) must be informed by the best available climate predictions and coordinated responses promoted through an effective national planning system (210) NCCRP: highlights a suite of sectors that need to consider climate change impacts in their planning: water, agriculture, commercial forestry, health, biodiversity, ecosystems, human settlements (coastal, rural, urban)

Medium-term adaptation strategies are being piloted and implemented, including for disaster preparedness, encouraging investment in adaptation technologies and research into the conservation and rehabilitation of ecosystems and biodiversity assets. (215)

NCCRP implementation activities
Reduce region’s dependency by working with regional partners

- Promote the development of, and investment in, a climate-resilient region and work with regional partners to create and maintain interdependent economic and social opportunities that reduce the region’s dependency on climate vulnerable sectors. (44)

Sectoral development and adaptation planning

- Undertake an audit of existing policy and legislation to ensure alignment with the objectives of the National Climate Change Response Policy and promote the integration of climate change resilience into all sectoral planning instruments
- Sectoral adaptation strategies based on sectoral plans and risk analyses.
- Develop climate change response plans to address integrated coastal zone, water resources, agriculture, and land protection and rehabilitation
- **Adaptation strategies** Integrated into sectoral plans for: (16)
  - Water
  - Agriculture
  - Biodiversity
  - Health
  - Human settlements
  - Disaster risk management

**Transfer technology and build capacity through social networks**

- Collaborate with social networks such as community organisations, non-governmental organisations (NGOs), women and farmers’ organisations, and the Adaptation Network to help raise awareness and to transfer technology and build capacity.

**Rural adaptation initiatives**

- **Empower local communities, particularly women who are often primary producers, in the process of designing and implementing adaptation strategies.** (23)
- **Design and implement economic and livelihood diversification programmes in rural areas.** (23)
- Within the country’s research and development system, prioritise technologies for climate change adaptation within rural areas, including low water-use irrigation systems, improved roll-out of rainwater harvesting strategies, and drought-resistant seed varieties. (23)
- Target adaptation programmes to build resilience among the most vulnerable sections of the rural population and ensure that disaster management architecture includes the provision of safety nets for rural communities most vulnerable to the impacts of climate change. This includes enhancing their knowledge of sustainable environmental conditions and optimising the ecosystem services that these provide. (23)

**NSSD Implementation Activities**

**Climate change adaptation plans developed** [12 sectors by 2012 (Biodiversity, Forestry, Water, Coastal Management, Agriculture, Health, Tourism, Land and Rural Development, Local government, Fisheries, Human settlements, Business/insurance)] (15)

**Recovery – disaster management**

**NDP Implementation activities**

The National Disaster Management Centre should include climate-change risks in the national disaster management plan and in its communication strategies. (210)

**NCCRP implementation activities**

**National Disaster Management Council** (38)

- Ensure effective communications strategy in place for early warnings: extreme weather: flooding and droughts
- Continue to promote the development of Risk and Vulnerability Service Centres at universities, which will, in turn, support resource-constrained municipalities.

Develop mechanisms for the poor to recover after disasters, including micro-insurance. (24)

**Recovery – emergency response**

**NDP – Implementation activities**
Provision for nutritional services during natural disasters or other emergencies needs more attention. (232)

**NCCRP – implementation activities**
Design and implement “Heat-Health” action plans including plans in respect of emergency medical services, improved climate-sensitive disease surveillance and control, safe water and improved sanitation.

**NSSD Implementation activities**
Establish emergency medical services and outbreak control systems (34)
Preservation of natural capital

Ecosystem services as a means of production – biodiversity

NDP Implementation activities

Land use regulatory frameworks and protected areas

- Put in place a regulatory framework for land use, to determine the environmental and social costs of new developments and ensure the conservation and restoration of protected areas. (64, 214 and 199)

- The Department of Environmental Affairs and South African National Biodiversity Institute should implement the protected areas expansion strategy and promote the biodiversity stewardship programme to build conservation partnerships around privately-owned land.

Medium-term adaptation strategies are being piloted and implemented, including for disaster preparedness, encouraging investment in adaptation technologies and research into the conservation and rehabilitation of ecosystems and biodiversity assets. (215)

Incentives to protect and rehabilitate ecosystems

- National Treasury should introduce incentives to protect and rehabilitate ecosystems, such as rebates and tax reductions. (202)

- The Department of Environmental Affairs, together with related Departments such as Agriculture and Rural Development, should investigate the socioeconomic implications and policy requirements of a system for requiring commensurate investment in community development and the protection of ecosystem services to mitigate the environmental and social impacts of new developments. (202)

NCCRP Implementation Activities

The Adaptation Research Flagship Programme: (33)

- Led by the South African National Biodiversity Institute, the design and roll-out of a national and regional research programme to scope sectoral adaptation requirements and costs and identify adaptation strategies with cross-sectoral linkages and benefits, including an assessment of climate change vulnerabilities in the sub-region, with a detailed scenario planning process to define potential sub-regional response strategies. (33)

Strengthening biodiversity research

- Strengthen biodiversity management and research institutions so that they can monitor, assess and respond effectively to existing anthropogenic pressures together with the additional pressures that climate change presents.

- Prioritise climate change research into marine and terrestrial biodiversity and ecosystem services, and institute effective monitoring to enhance the understanding and forecasting of critical future threats. Monitoring efforts at national and subnational scale, supported by experimental studies that quantify future risks to biodiversity and that improve projections of impacts, will help to design and refine adaptation responses.
- **Enhance existing programmes to combat the spread of terrestrial and marine alien and invasive species**, especially in cases where such infestations worsen the impacts of climate change.

Opportunities to conserve biodiversity and extend the conservation estate through the development of carbon off-set programmes will be actively developed, such as those presented by the preservation of Spekboom as part of the Eastern Cape Thicket Biome.

**Land use regulation and protected areas**

- **Expand the protected area network** (in line with the National Protected Area Expansion Strategy) where it improves climate change resilience, and manage threatened biomes, ecosystems, and species in ways that will minimise the risks of species extinction. A regulatory framework to support investment in conservation or land rehabilitation as a way of offsetting the environmental impacts of new property developments will be explored.

- **Encourage partnerships for effective management of areas not under formal protection**, especially freshwater ecosystem priority areas, critical biodiversity areas, ecological support areas and threatened ecosystems.

In the medium-term, **expand existing gene banks** to conserve critically endangered species that show increasing vulnerability to climate change trends. (21)

**NSSD Implementation Activities**

**Land use planning, regulation and protected areas**

- Integrating conservation opportunities (as an alternative economic opportunity) into the **land reform programme**, particularly where agriculture is marginal (30)

- **Rehabilitation of land affected by degradation** [3.2 million ha by 2014] (15)

- **Percentage of coastline with partial protection** [from 12 to 14% by 2014] (15)

- **Percentage of land mass protected** [formal and informal] [from 6.1 to 9% by 2014] (15)

- Finalising and implementing the **Protected Area Expansion Strategy** to create a network that is representative of South Africa’s biodiversity (21) **Implement more than 50% of the National Protected Areas Expansion Strategy (NPAES) by 2020** to build ecosystem resilience and reduce risk of natural disasters

- Mainstreaming biodiversity into spatial and land-use plans through provincial bioregional spatial plans, bioregional sector plans and bioregional plans (21)

- Development and implementation of **invasive species management plans** for protected areas

- Finalising and implementing the **Invasive Alien Species Regulations** (21)

**Capacity and support for stewardship and conservation programmes**

- Establishing and strengthening **provincial stewardship programmes** (21)
- Strengthening programmes that support the informal conservation system (21)

**Implementation of regulation on biodiversity**

- Implementation of the Integrated Coastal Management Act (21)
- Implementation of the Framework on Fiscal Incentives for Biodiversity (21)
- Implementation of the provisions of the National Environmental Management: Biodiversity Act (NEMBA) in respect of the listing and protection of threatened ecosystems (21)

Reintroducing environmental courts (21)

Establishing seed banks (21)

**Ecosystem services as a means of production – natural cycles**

**NDP Implementation Activities**

The Department of Water Affairs should ensure that the implementation of national strategies for water conservation and demand management are properly resourced and enjoy appropriate policy prioritisation across the economy. (202)

The Department of Environmental Affairs is defining a standard for soil quality and plans to report annually on the state of this resource. (footnote 4, 61)

**NCCRP Implementation activities**

The Water Conservation and Demand Management Flagship Programme: (31)

- The Water Conservation and Demand Management Flagship Programme includes the accelerated implementation of the National Water Conservation and Water Demand Management Strategy in the industry, mining, power generation, agriculture and water services sectors. (31)
- The accelerated provision of rainwater harvesting tanks in rural and low-income settlements will also form part of this programme. (31)

**Carbon budget approach** (28)

- Review of the contributions making up the national emissions trajectory informed by historical emissions and trends and the most recent and best available scientific evidence and information.
- Identification of a portfolio of enabling mitigation programmes and measures, including economy-wide measures and instruments, such as a carbon tax and incentives to industry and households, and the financial resources available to support them.
- Analysis of current and future emissions trends by sector and sub-sector, the timing, scale, cost and risk of different mitigation actions for each economic sector and sub-sector, and the economy-wide implications of mitigation actions, in particular on jobs.
- Development of desired emission reduction outcomes for each sector and sub-sector of the economy. These will include short-, medium- and long-term CBs for sectors and sub-sectors where a CB approach is relevant. In respect of significant point-source emissions, the CBs will be cascaded down to sub-sectors and, ultimately, companies whose emissions are above a specified threshold.
- The IGCCC will establish a process to provide analytical resources to support the development of the CB approach. (28)

Consultation with the National Treasury, the Departments of Trade and Industry and Economic Development on the implementation of fiscal measures, incentives and other support measures, such as the carbon tax, including an assessment of the measures’ effectiveness and benefits, and any other key parameters. Consultation with any other relevant entity about other means of implementation that may be required: stakeholders, in particular organised business and labour. (28)

NSSD Implementation Activities

Water-wise activities

- Implementation of water demand management via a staggered tariff structure, water loss management and conservation measures (20-22)
- Enhancing the water resources base by investing in desalination plants and water harvesting where appropriate

Management of catchments, rivers, estuaries and aquifers

- Establishing and strengthening catchment management agencies (20-22)
- Undertaking reserve determinations for priority rivers and estuaries, and incorporating ecological requirements into water resource planning (20-22)
- Determining sustainable use levels for strategic aquifers (20-22)
- Strengthening invasive plant management in catchments (20-22)
- Development and implementation of estuary management plans for priority estuaries (20-22)

Water use licenses and water allocation

- Integration of water availability concerns into economic development planning, water allocation reform and water reconciliation strategies for each water management area (WMA) (20-22)
- Addressing the backlog in the issuing of water use Licences
- Adoption of Integrated Water and Land Resources Management as a model framework for the sound and equitable allocation of water as a public good among all users, and its implementation in a sustainable way at all levels, including catchments (26)
- Eradicating backlogs in the issuing of effluent discharge permits
Ecosystem services as an input into social welfare – food security

NDP Implementation activities

Comprehensive food security and nutrition strategy

- Identify the main elements of a comprehensive food security and nutrition strategy and launch a campaign. (70)
- The food security strategy must ensure that increased agricultural employment and rural incomes translate into improved nutrition. This is particularly important where women of child-bearing age participate in agricultural production and in upstream and downstream economic activities. (231)
- Household food security strategies should include using and expanding existing public works programmes. In particular, the Community Works Programme for rural infrastructure development should be used. All eligible households should have access to social grants and the most vulnerable groups should have access to nutritional services. (231)

Regional cooperation and trade

- Cooperation with neighbouring countries has the potential to deliver competitive advantages not available to individual countries, and can boost renewable energy production and bolster regional food security in response to the effects of climate change. (201)
- The national food security goal should be to maintain a positive trade balance and not to strive for food self-sufficiency in staple foods at all costs. (231)
- Opportunities for regional food security strategies that contribute to greater stability of supply and price should be investigated. (231)
- Expand and diversify trade in agriculture and agro-processing - which should include a purposeful strategy on food security. (242)
- Managing southern Africa’s natural resources on a regional, as opposed to a local or national basis, would help countries in the region manage climatic variability and help to maintain food security (251)

Increased research focus on food security

- The Agricultural Research Council should establish a research focus on climate change and food security. (210)

NCCRP Implementation Activities:
Invest in and improve research into water, nutrient and soil conservation technologies and techniques, climate-resistant crops and livestock, as well as agricultural production, ownership, and financing models to promote the development of “climate-smart agriculture” that lowers agricultural emissions, is more resilient to climate changes, and boosts agricultural yields. (19)

NSSD Implementation activities
Promote self-sufficiency, food security and equitable access to natural resources that support livelihoods (30)
- Promotion of land stewardship and food growing programmes (urban and rural) (29)
- Incorporating sustainable land-use and agriculture principles into land claim projects in rural areas (30)
- Increasing support to urban food growing initiatives (30)
- Strengthening financial support and extension services through the Land Care Programme to land claim beneficiaries, small-scale women farmers and African farmers’ unions, for example, the National African Farmers’ Union (NAFU) (30)

Promoting conservation farming, permaculture and organic farming (30)

Ecosystem services as an input into social welfare – religious and cultural importance
No specific implementation activities identified

Ecosystem services as an input into social welfare – pollution control

NCCRP Implementation Activities
South Africa will integrate climate change considerations into health sector plans to: (19-20)

- Reduce the incidence of respiratory diseases and improve air quality through reducing ambient particulate matter, ozone, and sulphur dioxide concentrations by legislative and other measures to ensure full compliance with National Ambient Air Quality Standards by 2020. In this regard, the use of legislative and other measures that also have the co-benefit of reducing GHG emissions will be prioritised. **Progress in this regard will be published on the South African Air Quality Information System** (SAAQIS). (19-20)

- Improve the bio-safety of the current malaria control strategy. Although the current strategy, which includes the use of the persistent organic pollutant, DDT, has proven effective in reducing the incidence of malaria, there are significant concerns about its long-term impacts on environmental and human health.

- South Africa will use Section 29(1) of the Air Quality Act to manage GHG emissions from all significant industrial sources (those responsible for more than 0.1% of total emissions for the sector) in line with approved mitigation plans that conform to the Act’s requirements for pollution prevention plans prepared by identified industries and sectors. The synergy between prevention measures to reduce conventional air pollutants and GHG mitigation will be used in a holistic approach to manage air quality. (40)

IPAP Implementation Activities
2014/15 Q4 - 2016/17 Q4: Provide national measurement standards for air pollution monitoring. (49-50)

2014/15 Q4: Air quality testing accreditation programme to be expanded to include stack testing emissions monitoring. (49-50)
NSSD Implementation Activities

Implementation of air quality legislation and standards

- Speeding up the implementation of air quality legislation through air quality management plans in priority areas and hot spots
- Developing ambient air quality standards and reviewing air pollution permits

Implementation of the Programme of Action on Land based Sources of Marine Pollution

Ecosystem services as an input into social welfare – flood protection

NCCRP Implementation Activities

Conserve, rehabilitate and restore natural systems that improve resilience to climate change impacts or that reduce impacts. For example, mangrove forests reduce storm surge impacts and riparian vegetation and wetland ecosystems reduce the potential impact of floods.

Ecosystem goods – tourism

NDP Implementation Activities

Natural water sources will be protected to prevent excessive extraction and pollution. Water will be recognised as a foundation for activities such as tourism and recreation, reinforcing the importance of its protection. Where rivers are shared with other countries, South Africa will ensure that it continues to respect its obligations. (177-178)

NSSD Implementation Activities

Increase the number of Blue Flag beaches [to above 29 beaches] (15)

Ecosystem goods – agriculture

IPAP Implementation Activities

Agro-processing standards and accreditation (49)

- 2014/15 Q4: Organic Agriculture Production food accreditation programme to be developed and rolled out.
- 2014/15 Q4 - 2016/17 Q4: Provide reference measurement capability for pesticides and inorganic elements in environmental and food matrices, including fish, in support of food safety.
- 2014/15 Q4 - 2016/17 Q4: Provide reference measurement capability for dioxins and furans and dioxin-like toxic substances in environmental and food matrices in support of food safety and EHS.

NSSD Implementation activities

Support for food growing programmes

- Promotion of land stewardship and food growing programmes (urban and rural) (29)
- Incorporating sustainable land-use and agriculture principles into land claim projects in rural areas (30)
- Increasing support to urban food growing initiatives (30)

Support for sustainable agricultural practices

- Promoting conservation farming, permaculture and organic farming (30)
- Agricultural practices will reduce meat production, reduce the use of nitrogen fertilisers, and promote organic farming methods. (207)

NCCRP Implementation Activities
Invest in and improve research into water, nutrient and soil conservation technologies and techniques, climate-resistant crops and livestock, as well as agricultural production, ownership, and financing models to promote the development of “climate-smart agriculture” that lowers agricultural emissions, is more resilient to climate changes, and boosts agricultural yields. (19)

Ecosystem goods – fisheries

IPAP Implementation Activities
Fishing produce standards and reference measurement capabilities

- 2014/15 Q4 - 2016/17 Q4: Provide reference measurement capability for pesticides and inorganic elements in environmental and food matrices, including fish, in support of food safety. (49-50)

NSSD Implementation Activities
Reviewing fisheries rights allocation

- Implementation of a regulatory framework for rights allocation in subsistence, large pelagic, recreational and non-consumptive sectors (20-21)
- Reviewing the performance of rights-holders (20-21)
- Growing the fisheries sector (implementing the aquaculture policy, assessing the potential of new fisheries and the non-consumptive sector) in accordance with the Marine Living Resources Act (MLRA) (20-21)
- Intensification of compliance and enforcement efforts (20-21)

Rebuilding depleted stocks (abalone, hake and line fish) (20-21)

Implementation of an ecosystem approach to the management of seabirds, sharks and selected fisheries (20-21)
Ecosystem goods – forestry
NDP Implementation Activities
South Africa will seek to expand the forestry sector, and will re-establish natural plant cover in areas such as the thicket biome. (207)

Ecosystem goods – medicinal and cosmetic products
NDP Implementation Activities
A policy framework for how traditional medicine fits into the health sector is important. The Traditional Health Practitioners Act of 2007 provides for national policy on traditional medicine, but actual integration of traditional medicine into the national health care system and structured relationships with the pharmaceutical industry has been limited. (349)

IPAP Implementation Activities
2014/15 Q4: Revision of SANS 368 on aloe products. (49/50)

Ecosystem goods – biomass
NSSD Implementation Activities
Biofuel strategy aims to achieve a 2% penetration level of biofuels in the national liquid fuel supply (32-33)

Ecosystem goods – non-renewables
Refer to ‘Efficiency’ and ‘Growth’ principles for specific implementation activities on non-renewables

Growth
Economic Growth – All Sectors
NDP Implementation Activities
Expanded global market share - Strong economic diplomatic presence will be established in countries with the potential for expanded market share. Trade will be diversified towards emerging economies by improving market access for South African exports, working with regional trading partners to lower tariff and non-tariff barriers, and improving transport and logistics networks in the region. (128) Developing true partnerships between business and government will be essential. Cooperation can support market penetration globally.

- South Africa must continue to push for very high sanitary standards so that we can access European markets as well (242)
- Enhanced commercial diplomatic services: (40)

The tariff structure will be simplified while recognising the need for tariffs in specific areas. In addition, more emphasis will be given to offensive interests by seeking greater multilateral liberalisation from large emerging economies. Protection against unfair trading practices will be an essential barrier to undercutting domestic producers. (128)
South Africa will also support domestic cluster development. (128)

**Strengthen national systems of innovation and learning, permeate society and business:** (131)

**Innovation:** necessary for a middle-income country to develop (33)

- Schooling systems interventions
- Shop-floor behaviour
- R&D spending and commercialisation.
- While South Africa needs to spend more on R&D in general, the institutional setup also needs to **improve the link between innovation and business requirements.** Government should partner with the private sector to raise the level of R&D, with resources targeted towards building the research infrastructure required by a modern economy. (51)
- **Strengthen universities that have an embedded culture of research and development.** They should be assisted to access private sector research grants (third stream funding) in addition to state subsidies and student fees, attract researchers, form partnerships with industry and be equipped with the latest technologies. In turn, they should support postgraduate students, not only in their own institutions but also in those which focus on teaching and learning as well as in other sectors of the post-school system. (319-20)
- **Expand science, technology and innovation outputs** by increasing research and development spending by government and through encouraging industry to do so. (66)
- **South Africa and China:** Strategic drive on R&D (239, 242)

**Raising the rate of investment:** (126)

- Measures to reduce business costs and uncertainty and enhance profitability
- Public sector commitments to capital investments and maintenance
- Regional integration: expand consumer base
- Savings rate ratcheted up over time

**Lowering the cost of doing business** (116)

**Providing a stable and enabling macroeconomic platform** (137)

- Explore approaches to protecting firms from Rand volatility (137)
- Considerable attention to fiscal impact on development: (137)
- Improved efficiency in government spending (137)
- Appropriate balance between investment and consumption expenditures (115)
- Using fiscal policy to raise savings and investment and to reduce consumption (115)
- Taking measures to increase competition in regulated sectors or broadening price regulation in sectors that are natural monopolies (115)
- counter-cyclical fiscal policy
- Monetary policy
- Preventing excessive overvaluation of Rand
- Stronger social security net
- Protect sectors with long-term prospects
- Re-orient trade to emerging markets

**Strengthen capacity of government to implement economic policy:** (120)

- Demonstrate strategic leadership among stakeholders to mobilise around a national vision (121)

**Broaden access to finance, strengthen credit extension:** (151)

- Continuously **broaden access** to banking services to poorer people and **lowering costs** through a combination of **competitive pressures** and **reducing other infrastructure costs**. (151)
- Strengthen **credit extension to productive investments**, especially small and expanding firms, and for working capital. **Government and the private sector** have to work together to find ways of **increasing business lending**. (151)
- Provide **small-business advisory and support services**, financed partly by the state. (151)
- Conclude discussions to **identify and deploy investable capital to increase production in labour-absorbing sectors**. (151)
- Encourage **private firms, such as construction firms**, to partner with South African banks in **providing project finance** for contracts on the continent. (151)

**NGP Implementation Activities**

**Reforms in policies on skills, competition, industry, small business, the labour market, rural development, African integration and trade policy** (38)

**Active monetary policy interventions to achieve growth and jobs targets.** The monetary policy stance will continue to target low and stable inflation but will do more to support a more competitive exchange rate and reduced investment costs through lower real interest rates. This will be accompanied by measures proposed below to contain inflationary pressures and build competitiveness. (39)

**More competitive exchange rate.** Additional and larger purchases of foreign currency flowing into South Africa, as a result of foreign direct investment and portfolio inflows, in order to counter appreciation of the rand as required. An African development fund will be established to invest in African infrastructure, as outlined below. A further set of tools to address the competitiveness of the exchange rate is being explored, including measures to address the negative effects of short-term capital inflows. These tools will take into account global agreements to deal with imbalances. (39-40)

- Targeted measures to control inflationary pressures (38)
More restrained fiscal stance. Greater restraint in fiscal policy to slow inflation despite easier monetary policy. A counter-cyclical fiscal stance through the business cycle will manage demand in support of a more competitive currency while achieving critical public spending goals. The MTE F foresees real growth in expenditure of just over 2% a year for the next few years. (41)

Reprioritisation of public spending. Mobilisation of resources to finance growth path priorities, particularly jobs, skills and infrastructure. The new fiscal policy will require vigorous prioritisation and improved value for money, with reductions in less important areas while protecting priority public services. Spending proposals need to be subjected to a clear and rigorous prioritisation process, corruption and waste eliminated, and remuneration growth moderated to avoid squeezing crucial developmental programmes. (41)

Active industrial policy (42-3): New sources of competitiveness that lie in innovation and productivity, with an adequate base in skills, infrastructure and efficient state action; and Measures to enhance domestic and regional demand as well as extending export promotion strategically to the rapidly growing economies of the global South. These measures need a competitive rand to succeed.

Rural development policy (43-4): agricultural value chain + smallholder schemes and processing and sales of agricultural products; Reprioritising budgets for housing and social services to address rural backlogs, which requires managing trade-offs and addressing gross inequalities in municipal revenues; Support for market and financial institutions, especially coops, that enable small producers to enter formal value chains and take advantage of economies of scale; and The identification of viable opportunities, including smallholder schemes, that can improve livelihoods on a large scale, especially by building on regional synergies and clusters.

Competition policy (45-6):

- Competition investigations should continue to focus on areas of strategic importance, including the food sector, construction and infrastructure, other key input costs, the green economy and the IPAP sectors.
- Law-enforcement agencies will cooperate more actively with the competition authorities to address pervasive breaches of the competition laws.
- The competition authorities will review their procedures to reduce the opportunity for vexatious litigation and speed up competition probes.
- More consideration should be given to mandating public interest conditions on proposed mergers, particularly in respect of employment and prices.
- Competition authorities should involve trade unions more, as provided for in the Competition Act. Unions should develop their capacity to share information and insights on employment issues in mergers and acquisitions.
- Government will consider draft amendments to the Competition Act to enhance the Tribunal’s power to order divestiture where inherited market power permits repeated abuse and to provide mechanisms to address pricing in markets characterised by economic concentration.
- The competition authorities and DFIs should cooperatively identify instances where support for new market entrants is needed to secure more competitive outcomes, in order to combine competition and investment measures.
- Government will develop guidelines for granting exemptions in terms of the Competition Act for cooperation between producers where it will demonstrably benefit job creation and expansion into export markets.

NCCR Implementation Activities

Exploring new and unused resources, particularly groundwater, re-use of effluent, and desalination. (18)

NSSD Implementation Activities

Progress on the implementation of the nine green economy programmes: social, economic and environmental benefits by 2014

- Increase percentage (or amount) of financial resources ring-fenced/streamlined and spent for green economy programmes [2010/11 amount – IDC: R11.7 billion; DBSA: R25 billion; private: >R100 billion; National Treasury: R800 million]

- Number of patents, prototypes, and technology demonstrators added to the intellectual property (IP) portfolio annually from funded or co-funded research programmes (five additions to the IP portfolio – patents, patent applications, licences and trademarks – by March 2014)

Reduce dependency on fossil fuels and enhance security of electricity supply: (32-3)

IPAP Implementation Activities

Strengthening implementation of competition policy (55)

- 2014/15 - 2016/17: Continued active focus of competition authorities on investigation, prosecution and policy advocacy with regard to:
  o Intermediate industrial and energy-intensive products, such as steel, chemicals, coal, fuel and cement;
  o Air transport, information technology;
  o Food and agro-processing;
  o Banking and insurance;
  o Infrastructure and construction.

- 2014/15 - 2016/17: Annual reporting on the impact of competition enforcement in these sectors, and identification of appropriate complementary measures to be taken by Government and public institutions to improve competitive outcomes.

Ensuring competitive outcomes (56) This intervention focuses on the economic impacts revealed by the findings of investigations into anti-competitive behaviour. This entails strictly monitoring compliance with the conditions attached to penalties imposed on firms. It could also involve leveraging various kinds of government support to encourage competitive behaviour. Increased
competition within the South African economy through increased support for new entrants into the market and reduced abuse of market position by dominant enterprises.

- 2014/15 – 2016/17: Stronger conditionalities to be established on state support for large firms, including development finance and infrastructure inputs, linked to competitive conduct. Review of Competition Act in particular to strengthen capacity of Commission to initiate investigations and to enforce conditions.

- 2014/15 – 2016/17 Q1: Develop a guidance paper to assist Government on pro-competitive means of implementing localisation in the industries that have been designated.

- 2014/15 – 2016/17: Wider actions to be identified, including possible regulatory measures, against dominant firms engaging in anti-competitive conduct, particularly with regard to key inputs into labour-absorbing sectors and the pricing of wage goods.

- 2014/15 – 2016/17: Increased support for entrants and smaller rivals relative to entrenched dominant firms.

**Technology Commercialization Strategy (61)** The Technology Commercialisation Strategy seeks to accelerate the journey between ideation and/or research and development and commercialisation, so as to assist start-ups and other players in the commercialisation space to overcome the ‘valley of death’ (i.e. the gap between R&D and the creation of successful products, processes and services. To bridge the gap between the pre-production prototype stage and commercialisation; and also to enhance the probability of successfully commercialising new technologies.

- 2014/15 Q1: Finalise the Terms of Reference for the Technology Commercialisation Strategy.

- 2014/15 Q3: Hold workshops with relevant stakeholders and consolidate inputs.


**Re-calibration of existing dti incentives (47)** South African companies are faced with a wide range of critical problems arising from the intense international competition for capital, rising input costs (especially electricity) and low and falling levels of investment arising from institutional and private sector market failures. It is critical that the manufacturing sector be provided with support during the continuing economic downturn and that market failures are actively addressed in order to raise competitiveness, prevent further industrial decline and maximise the opportunities which exist and will flow from an improved global economic climate. Greater levels of competitiveness arising from access to industrial financing for working capital; product development; new market access, energy efficiency; clustering and other potential outcomes not specifically covered in existing incentive schemes - including enhanced support for BEE in the manufacturing sector.

- 2014/15 Q3: Scope the design, range, quantum, conditions, take-up and impact of the full suite of government industrial financing packages and incentives across and in consultation with other departments and institutions.

- 2014/15 Q4: Develop and design a set of proposals for expanding the suite of existing support mechanisms, including fine-tuning the MCEP and designing a specialised incentive to support BEE in the manufacturing sector.

Public Procurement - Roll-out of the new National Industrial Participation Program (NIPP) Guidelines (45) There is considerable import leakage, loss of procurement leverage and potential loss of domestic jobs and economic activity. The aim is to maximize the value of NIPP by securing compliance within government, the local business community and the obligors. The roll-out is expected to lead to the maximization of the value of NIPP through increased levels of investment, domestic manufacturing capability and capacity, industrial competitiveness, export opportunities and the creation of new jobs that can be directly linked to the NIPP.

- 2014/15 Q1: Obtain capital expenditure projections of major procuring entities and develop tender-specific strategies on how to exploit the direct NIPP option to leverage investment and competitiveness upgrading in the value chain of the tenders
- 2014-15 Q1-Q2: Ensure that existing PFMA, MFMA and associated regulations, including practice notes, are amended to make NIPP compliance unambiguous and explicit.
- 2014-15 Q1-Q3: Create awareness and secure compliance in Government and the private sector through NIPP presentations on the revised NIPP policy and Direct NIPP as a preferred method of fulfilling NIPP obligations.
- 2014-15 Q1-Q4: Create a culture of compliance with the NIPP requirements through presentations of the revised NIPP policy at strategic procurement forums and industry workshops so as to minimize the levels of non-compliance and import leakage through government tenders.

Developmental Trade Policy - Ongoing developmental tariff reform (53) South Africa’s tariff framework is informed by the National Industrial Policy Framework (NIPF) and is defined by a strategic approach to tariff-setting. It is administered by the International Trade Administration Commission under the terms and conditions of SA’s obligations to the World Trade Organisation. South Africa’s tariff policy-setting takes place on a sector-by-sector basis, informed by different sector strategies. Therefore, both developmental tariff reform and tariff setting are continuous ongoing interventions. Improved competitiveness through further downstream value-addition and increased manufacturing sector employment.

- 2014/15 – 2016/17 ongoing: Scope for industries to apply to ITAC for selective tariff increases on products with significant potential for the creation and retention of sustainable jobs, import replacement and “water” between bound & applied rates.
- 2014/15 – 2016/17 ongoing: Scope for further selected decreases in tariffs, particularly in monopolistic sectors that manufacture intermediate inputs into manufacturing and other productive sectors, in order to support downstream value-addition.
- 2014/15 – 2016/17 ongoing: Scope for selective creation of rebates for manufacturing products that attract duties, particularly where these are intermediate products in manufacturing, in support of the value-adding manufacturing sectors.
Special Economic Zones (SEZ) and Industrial Development - Establishment of Industrial Clusters through SEZs (63) Designation of SEZs across the country to promote industrial development, export of value-added goods and job creation.

- 2014/15 Q1-Q4: Rollout of Saldanha Bay IDZ (SBIDZ): Infrastructure support provided within the IDZ.
- 2014/15 Q1-Q4 Establish SBIDZ Board.
- 2014/15 Q3: Sign MOU between the dti and Indonesia to facilitate collaboration on the establishment of Oil and Gas industry at Saldanha Bay.
- 2014/15 Q1-Q4: Secure 8 Investments into Saldanha Bay IDZ within Oil & Gas and Marine Repair Cluster.

Implementation of SEZ Bill proposals (64) The Bill seeks to provide for the designation, development, promotion, operation and management of Special Economic Zones. The concurrent and incremental establishment of SEZs within the appropriate legislative, regulatory, institutional and governance framework, leading to their consolidation and strengthening.

- 2014/15 Q2: SEZ Regulations and Guidelines (in line with the promulgation of the SEZ Act).
- 2014/15 Q2: Establishment of the SEZ Board (Once the SEZ Act has been promulgated).
- 2014/15 Q1-Q3: Implementation Protocols entered into by the Minister (the dti) and 4 government departments that are critical to the success of the SEZs.
- 2014/15 Q3: Testing of the SEZ One Stop Shop Model.
- 2014/15 – 15/16: Ongoing establishment of SEZs.

Regional Integration - Work programme of the Regional Economic Communities (66) Implementation of the work programme with Regional Economic Communities as agreed by SADC member states. Increased economic integration and co-operation between the regional economic communities.

- 2014 - 2018: Work with fellow member states to implement the approved SADC Industrial Development Implementation Matrix to build on the Regional Industrial Development Strategy, prioritising agro-processing, mineral beneficiation and pharmaceuticals as initial sectors of focus.

Cross-border infrastructure and sector development (66) This intervention seeks to promote a cross-border infrastructure and sector development project to complement the Free Trade Area (FTA) discussions to create a market of more than 600 million people in South, Central and East Africa. A critical constraint to regional industrial development and integration is the continuing prevalence of weak cross-border infrastructure. Integrated cross-border infrastructure that facilitates investment, trade and development of regional value chains.
- 2014 - 2016: Promote regional sourcing in all regional infrastructure development programmes.
- 2014 – 2018: Identify viable regional value chains and relevant levers to promote their development.

Economic Growth – Primary Sectors

NDP Implementation Activities

Focus on developing:

- Platinum group metals (42)
- Gold (42) (Free State goldfields and Northern Cape) (228)
- Diamonds (42)
- Manganese (42)
- Coal (42)
  - open up Waterberg for mining (62)
  - More comprehensive coal field planning (62)
  - Heavy-haul rail corridor – Waterberg (62)
  - Upgrade central coal basin network (62)
  - Expand export capacity – in line to Richard’s Bay (62)
  - More on coal: infra (165) and cleaner coal (167)
- Iron ore (42)
- Uranium (42)
- Aluminium smelting (202)

Mining as focus area for raising exports (39) South Africa and China: strategic drive to engage on minerals and mining (239) (242) Proposals to grow investment, outputs, exports and employment in the minerals cluster include:

- ensuring certainty in respect of property rights; (147)
- passing amendments to the Minerals and Petroleum Resource Development Act (2002) to ensure a predictable, competitive and stable mining regulatory framework; (147)
- secure reliable electricity supply and/or enable firms to supply their own plant with an estimated potential of 2 500MW by 2015; (147)
- And secure, reliable rail services, potentially enabling private participation. (147)
- Develop, deepen and **enhance linkages with other sections of the economy**. This includes: linkages with both manufacturers of inputs (capital goods and consumables) and suppliers of mining-related services; and downstream producers, especially for platinum-group metals and chrome ore. In this regard, an **export tax** could be considered.

- Provide focused **research and development** support to enable improved **extraction methods that lengthen mine life**; better energy **efficiency** and less water intensity; and **alternative uses** of South Africa’s extracted minerals, especially platinum-group metals, titanium and others that have potential for application in new energy systems and machinery.

- Identify opportunities to **increase regional involvement** and benefit in the whole minerals cluster. This could include encouraging the establishment and development of **alternative providers of partially processed intermediate inputs** in other countries in the region.

- Ensure active engagement on, and resolution to, issues raised through the **Mining Industry Growth and Development Task Team** process.

- Improve **alignment of mining charter requirements** to ensure effectiveness in local communities. (147)

- Provide focused R&D support to minerals cluster (212)

- Alternative uses of SA’s extracted minerals, especially platinum group metals and titanium (147)

- Increase the benefit to the country of our mineral resources by: Giving clear certainty over property rights (the right to mine); Increasing rail, water and energy infrastructure; Structure a taxation regime that is fair, equitable and predictable and that recognises the non-renewable nature of mineral resources. (61)

**Develop Gas industry** (62) *(Including shale gas)*

- Exploratory drilling – identify economically recoverable coal seam and shale gas reserves + environmental investigations to ascertain if sustainable exploitation possible (62)

- If reserves proven + environmental concerns alleviated: fast-track (gas-to-power) (62)

- Greater share of gas in energy mix (62)

- Import liquefied natural gas + if commercially viable, use shale (62)

- Develop infra for import of liquefied gas: mainly for power production (short-medium term) (62)

- Coal-bed methane gas: Experiments are under way to assess the potential for mining coal-bed methane gas, although the overall potential of this resource for producing electricity in South Africa is probably less than previously thought. Underground coal gasification technology is also being developed. (167)

- **Shale gas**: Even if economically recoverable resources are much lower than currently estimated, shale gas as a transitional fuel has the potential to contribute a very large proportion of South Africa’s electricity needs. For example, exploitation of a 24-trillion-cubic-feet resource will power about 20 gigawatts (GW) of combined cycle gas turbines,
generating about 130 000GW-hours (GWh) of electricity per year over a 20-year period. This is more than half of current electricity production. South Africa should seek to develop these resources, provided the overall economic and environmental costs and benefits outweigh those associated with South Africa’s dependence on coal, or with the alternative of nuclear power. (167)

**Liquid fuels:** (63)
- Local fuel refineries
- Imports

**Water:** (63)
- Management strategy
- Lesotho Highlands Phase II
- New water and irrigation schemes
- Water and wastewater utilities established

**Agriculture: large and small scale (and agro-processing: secondary industry)**(145) Focus on high value agriculture and focus area for raising exports (39)
- **Substantial investment in irrigation infrastructure**, including water storage, distribution and reticulation throughout the country where the natural resource base allows, as well as in water-saving technology. A 50 percent increase in land under irrigation would cost R40 billion in off-farm infrastructure over a 10-year period. (145) Expand irrigated agriculture. Evidence shows that the 1.5 million hectares under irrigation (which produce virtually all South Africa’s horticultural harvest and some field crops) can be expanded by at least 500 000 hectares through the better use of existing water resources and developing new water schemes. (219-227) (225-226)
- **Greater investment in providing innovative market linkages for small-scale farmers** in communal and land-reform areas. (145)
- **Tenure security.** Farmers will only invest in these areas if they believe that their income streams from agriculture are secure. Tenure security will secure incomes for existing farmers at all scales, for new entrants into agriculture, and for the investment required to grow incomes. (145) Create tenure security for communal farmers (225-226)
- **Technology development.** Growth in agricultural production has always been fuelled by technology, and the returns to investment in agricultural research and development are high. (145) Increase and refocus investment in R&D for the agriculture sector (225-22
- **Policy measures to increase intake of fruits and vegetables,** and reduce intake of saturated fats, sugar and salt, as recommended in the South African food dietary guidelines, to accompany strategies to increase vegetable and fruit production. (145)
- Exploration of innovative measures, such as procurement from small-scale farmers to create local buffer stocks and community-owned emergency services. (145)
- Use some underused land in communal areas and land-reform projects for commercial production. (219-227)
- Greater support for innovative public-private partnerships
- Investigate whether extension and other agricultural services are appropriately located at provincial level
- Major investments (e.g. IDC and private) into the expansion of the table grape industry along Orange River and sugar industry into Mpumalanga (145)

- Land reform:
  - Enable a more rapid transfer of agricultural land to black beneficiaries without distorting land markets or business confidence in the agribusiness sector. (226-7)
  - Establish monitoring institutions to protect land markets from opportunism, corruption and speculation. (226-7)
  - Bring land-transfer targets in line with fiscal and economic realities to ensure that land is successfully transferred. (226-7)
  - Identify land readily available from the following categories: land already in the market; land where the farmer is under severe financial pressure; land held by an absentee landlord willing to exit; and land in a deceased estate. In this way, land can be found without distorting markets. (227)
  - After being identified, the land would be bought by the state at 50 percent of market value (which is closer to its fair productive value) The shortfall of the current owner will be made up by cash or in-kind contributions from the commercial farmers in the district who volunteer to participate. (227)
  - In exchange, commercial farmers will be protected from losing their land and gain black economic empowerment status. This should remove the uncertainty and mistrust that surrounds land reform and the related loss of investor confidence. (227)
- A stepped programme of financing should be created. This would include the involvement of the National Treasury, the Land Bank as well as established white farmers. The model envisages that the cost of land reform be spread between all stakeholders. It also envisages new financial instruments being designed for the purpose of facilitating land reform. These could include 40-year mortgages at preferential rates for new entrants into the markets, as well as land bonds that white farmers and others could invest in. (227)
- Established agricultural industries must be enabling partners for smallholder agricultural development (219)

Also a focus on fisheries

NGP Implementation Activities

Effective review of mineral rights regime (accelerating mineral reserves exploitation) (30)

Lowering cost of critical inputs: logistics and skills to stimulate private investment in mining sector (30)
**IPAP Implementation Activities**

**Promote public and private investments in aquaculture (88)** This intervention is intended to leverage substantially increased investment levels in the aquaculture sector. Increased investments in both marine and freshwater fish species, for both domestic and export markets, in order to create employment in rural areas.

- 2014/15 Q1-Q2: Review and package 1 investment proposal targeting new black entrants into the aquaculture sector.
- 2014/15 Q3-Q4: Project preparation towards implementation of at least 1 project commences.
- 2014/15 Q4: Implementation and Monitoring of at least 1 project commence

**Economic Growth – Secondary Sectors**

**NDP Implementation Activities**

**Innovation and focus required on minerals beneficiation: downstream processing (131)**

Focus areas for raising exports:

- Construction (39)
- Mid-skill manufacturing (39)
- Agro-processing (39)

**Promotion of supplier industries to mining**: supply global mining projects + lateral linkages to other uses: water purification; electronics; robotics (123)

**Automotive and clothing priority areas for gaining global market share**: (127)

**Focus on developing manufacturing and manufacturing cluster (especially mid-skill manufacturing)**

- Focus areas:
  - Plastics, food, steel, metal, wood, printing and manufacturing for construction, chemicals, industrial equipment, clothing and textiles, rubber, packaging, sport equipment, pharmaceuticals (142)
  - Electronics and robotics (122)
  - South Africa could be a global leader in manufacturing of goods and services for the mining industry: substantial know-how (42)
  - Capital-intensive processed minerals, metals and chemicals (half of manufacturing exports) (148)
  - Motor industry: has received extensive support: assembly, backward linkages, vehicle retail sales (148)
- Other: supplier industries to construction, energy sector, waste reutilisation, mining inputs, downstream processing of metals, and others (148)

- Stimulation of these sectors will mainly be facilitated through:
  - Ensuring a growing share of products that are dynamic, and have potential for domestic linkages
  - Leveraging public and private procurement to promote localisation and industrial diversification
  - Intensifying research and development support for product development, innovation and commercialisation
  - Exploring approaches to buffering manufacturers from the effects of currency volatility
  - Strengthening network infrastructure and skills supply, and bringing administered prices under control. (148)

Fuel cells and related technologies (minerals processing)

Proposals to grow the construction and infrastructure sector: (149)

- Address government’s ability to spend its infrastructure budget, particularly with regard to project-management capacity, long-term planning, and monitoring and evaluation of both expenditure patterns and construction work. (149)
- Support the civil construction and the supplier industries in their export efforts – with the establishment of a Financial Centre for Africa, and more support in commercial diplomatic relations. (149)
- Intensify support to supplier industries such as building supplies, steel, glass and cement. (149)
- Create conditions for a less cyclically volatile industry by emphasising numerous, smaller-scale, regionally dispersed projects to address backlogs, which are more accessible to smaller firms and new entrants. (149)
- Expand public funding for alternative types of low-income housing that would generate more demand directly and in supplier industries. (149)
- Promote a simultaneous focus on more energy-efficient buildings and building techniques to reduce demands on electricity supply in the longer term. Home insulation and the installation of solar water heaters are labour-intensive activities that have strong backward linkages to supplier industries. (149)
- Public-sector employment (152) and public employment schemes (153): EPWP and CWP

Develop infrastructure: (affordable and sustainable) to facilitate economic activity: growth and job creation (39) Investing in competitive infra (109) Substantial investment in: energy and infra: regional scale + promotion of regional supply chains (regional agricultural and industrial production) (40)(121) South Africa and China: strategic drive to engage on infrastructure in Africa (239) (242)

- Commercial transport
- Energy
- Telecommunications
- Water (40)
- Rail services development for mining and metals cluster (147)

**Electricity sector recommendations**

- Amend the National Energy Regulator Act (2004) and the Electricity Regulation Act (2006) to ensure a more efficient and predictable regulatory environment. (176)

- Move Eskom’s system operator, planning, power procurement, power purchasing and power contracting functions to the independent system and market operator and accelerated procurement of independent power producers. (63)

- Upgrade fuel refineries to ensure they meet new fuel quality standards and insist on larger strategic fuel stocks to ensure security of supply. (63)

- 23. Continue to import refined fuels, ensuring that the growing deficit in petroleum products is met, and defer decision on a new refinery to 2017. (63)

- Growth in coal exports needs to be balanced against the need for domestic coal-supply security. (63)

- There needs to be a greater mix of energy sources and a greater diversity of independent power producers (IPPs) in the energy industry. (64)

- **Regional cooperation:** Sub-Saharan Africa is particularly well positioned to develop solar and hydro-energy, and to produce bio-fuels. The Grand Inga project could provide sufficient electricity for Africa and allow it to export energy through interconnecting links to southern Europe. This would require three major African interconnection projects: the northern highway (between Inga and Egypt), the southern highway (between Inga and South Africa) and the western highway (between Inga and Nigeria). (88) HEP in Zambia and Mozambique (169) (206)

- Improve electricity demand-side management: **smarter grid management – innovative control systems and smart meters:** opportunities for more distributed generation systems, meet local demand + feed back into grid (170)

- **Electricity prices** (170-1) **Widen participation and accelerate investment in electricity sector:** (169-170)

  - South Africa needs a clear policy that makes explicit the electricity market structure and how it will evolve over time. New build opportunities need to be clearly divided between Eskom and IPPs. It is also important to employ effective procurement processes that initiate timely, internationally competitive bidding for new capacity and negotiate robust contracts. The government, with the cooperation of Eskom, needs to quicken its plans to establish an independent system and market operator. This operator should be tasked with procuring and contracting IPPs and, preferably, managing transmission assets. Remaining regulatory uncertainties that need to be resolved include the question of IPPs selling to customers other than Eskom, access to Eskom’s grid and rights to trade
electricity. Effort must be made to maximise debt-raising on capital markets for Eskom, backed where necessary by sovereign guarantees. However, private investment will be needed to augment public initiatives.

- Introduce measures such as stepped tariffs and targeted penalties that would reduce the demand for electricity and water, cut water leakages, eliminate waste going to landfill, and generally discourage high-consumption lifestyles. (288)

- Eskom has a mandate to provide reliable and competitively priced electricity to mining, industry and business, but it also has a mandate to extend affordable access to electricity services to poor households. The former should generally pay a tariff that reflects the full cost, whereas the latter may be eligible for subsidies for their connection fees and possibly a portion of their energy-consumption costs. It can be disastrous to the financial sustainability of SOEs to confuse these mandates and provide services at below cost if the gap is not covered by an alternative source of finance. (442) – decisions should be based on a full understanding of different commercial, social and developmental objectives.

- Electricity prices will have to increase to cost-reflective levels if Eskom is to be able to service its debt and fund effective operations, refurbishment and system expansion. (170–1)

- Regulator can establish appropriate mechanisms to prefund capital and create smooth price path over a longer term: customers can predictability and manageability (see Trans-Caledon Tunnel Authority: Gauteng and water tariffs) (170-1)

- Reassess the timing and/or desirability of nuclear power (details: 172) and a new petroleum refinery (details: 172). (171-2).

**Integrated energy planning** (174)

- The Commission can assist the DoE in defining various policy, scenario and planning options and is willing to play a facilitating role between relevant stakeholders. (174)

**Strengthening and reforming regulation of the energy sector, in particular:**

- Ensuring the nuclear regulator has sufficient capacity for proper regulation of the industry, commensurate with the risks involved. (213)

- Establishing the independent systems and market operator (see chapter 4) for the electricity sector and establishing a policy framework under the National Energy Regulator of South Africa to promote diversification in the electricity sector. (213)

**ICT infrastructure and regulatory recommendations** (63-4)

- National, regional, municipal fibre-optic network: broadband backbone (private investment) + complemented with public funds to meet social objectives (63-4)

- Change regulatory framework – ensure internet broadband capacity improves + prices fall significantly + access improves (63-4)

- In future, the state's primary role in the ICT sector will be to facilitate competition and private investment, to ensure effective regulation where market failure is apparent, and to intervene directly to meet specific social goals. Direct involvement will be limited to
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Interventions to ensure universal access and to help marginalised communities develop the capacity to use ICTs effectively. (191)

- Implement an enabling, coordinated and integrated **e-strategy** (191) Cross-cutting national strategy

- **Drive investment**: network upgrades and expansion (broadband esp), local apps and content;

- **Review market structure** and analyse benefits of sharing vs duplicating (mobile networks radio spectrum limited);

- **Establish common carrier network**: separate Telkom: backbone vs retail;

- **Open access policies** to encourage sharing of backbone fibre network but not discouraging long-term investment

- Targeted public investment: **ppp’s**;

- Develop **institutional capacity**: policy keeps up with evolution + effective regulation

**Expand and upgrade freight, road and public transport infra**: (63, 183-189)

- Durban-Gauteng freight corridor upgrade + new port at old Durban airport

- Expand capacity of coal, iron ore, manganese lines (perhaps concession part of network) (63)

- Build N2 through Eastern Cape (63)

- Public transport infra + systems: renew commuter rail fleet + enhanced links with road-based transport (63)

- Create workable urban transit solutions: (185-6)

- Increase investment in public transport and resolve existing public-transport policy issues (186-7)

- Devolve transport management to local government (186-7)

- Provide incentives for public transport use (186-7)

- Improve road infra (186-7)

- Renew the commuter train fleet (186-7)

- Strengthen and optimise freight corridors: (186-7)

- Durban-Gauteng corridor (187-188)

- Coal-transport corridors (187-188)

- North-south corridor (Durban to Dar es Salaam) (187-188)

- Provide long-distance passenger transport options: (187-188)

- Intercity bus, taxi, private transport, air travel, limited intercity passenger trains (188)

- Rural access and mobility (188)
NGP Implementation Activities

**Mining:** Stronger measures to address uncompetitive pricing of intermediate inputs, e.g. export taxes on selected mineral products linked to clear industrial strategies (30)

**Continue to reduce cost and improve access to broadband** (74) (32) Communications infra: backbone of economy (28)

**Nuclear power: improve economic efficiency and reduce emissions** (28)

Expansion of rail transport

**Water infra:** essential for agriculture and agro-processing expansion

NCCRP Implementation Activities

**The Renewable Energy Flagship Programme:** (31-2)

- The Renewable Energy Flagship Programme is inclusive of a scaled-up renewable energy programme, based on the current programme specified in the IRP 2010 and using, for example, the evolving South African Renewables Initiative led by the Department of Public Enterprise and Department of Trade and Industry (DTI), as a driver for the deployment of renewable energy technologies. The programme will be informed by enhanced domestic manufacturing potential and the implementation of energy efficiency and renewable energy plans by local government. Furthermore, the Department of Energy’s (DoE) solar water heating programme will be expanded through, amongst others, the promotion of the domestic supply of products for solar heating with support from the DTI to build local manufacturing capacity. (32-3)

NSSD Implementation Activities

**Manufacturing:** Implement Industrial Policy Action Plan (27)

- Manufacturing aspects of the green economy within social, economic and environmental criteria: interventions in green industries, industrial energy efficiency and the South African Renewables Initiative (SARI) (27)

- Implementation of regulatory instruments to stimulate the Environmental Goods and Services (EGS) Sector (27)

- Interventions to promote greater localisation and manufacturing (27)

IPAP Implementation Activities

**Nuclear energy**


**Development of the local wind and solar industry through the REIPPPP (112)** In consultation with other relevant line departments, the dti is mandated to set local content targets for the REIPPPP. The nature of the intervention is to revise the minimum and target levels of local content of renewable energy projects linked to the REIPPPP. The aim of the revision is to increase the local
content requirement to incentivise and support local industrial development and to align its requirements with the realistically anticipated state of local industrial capability. It is therefore necessary to conduct studies to assess localisation potential for all renewable energy technologies, and determine the appropriate localisation roadmaps in consultation with the broader stakeholder community. Increased local content threshold for renewable energy projects in line with the development of a competitive local renewable energy manufacturing industry.

- 2014/15/16: Adjustment of local content requirements with every successive REIPPPP bidding round, based on the developmental status of the component industry and demand conditions created by the REIPPPP.
- 2014/15 Q1: Analysis of actual local content achieved in previous bid rounds, and analysis of possible new technologies to be employed in the REIPPPP.
- 2014/15/16 Q2: Review the local content targets on an annual basis and make recommendations to the DoE on local content targets for future bidding rounds.

**Accelerated development in the biofuels sector (91)** This intervention will facilitate the production of biofuels feedstock in seed production for soybean and sorghum. It will further the development of the biofuels industry by leveraging the Regulations on Mandatory Blending of Biofuels with Petrol and Diesel which is due to come into operation from the 1st October 2015. Accelerated investment in the biofuels and upstream agricultural sectors.

- 2014/15 Q1: **the dti**, with Grain SA, to support the increase in the capacity of biofuels feedstock in seed production for Soy bean and Sorghum.
- 2014/15 Q2: **the dti**, with Grain SA, to increase research capacity into the development of suitable cultivars in the biofuels feedstock in SA.
- 2014/15 Q3: **the dti**, with DAFF, to link small-holder farmers to markets via a supplier development programme and sign take-off agreements with industry players in the biofuels industry in time for the arrival of mandatory blending in 2015.
- 2014/15 Q4: **the dti** and DoE to host an industry stakeholder seminar on Biofuels.

**Upstream and Midstream Oil and Gas - Shale gas. Strategy to leverage opportunities presented by SA’s shale gas resources (118)** The intervention is aimed at developing an industrial strategy that can support the optimal exploration and extraction of SA’s shale gas resource. This will include an analysis of the backward and forward linkages in terms of the upstream localisation opportunities in the capital equipment and metals fabrication sector and downstream polymer beneficiation opportunities for the plastics sector. The strategy will investigate gas as a potential long-term low cost energy option and include an assessment of the regulatory, policy, financing and technology requirements to exploit the resource. A strategy that analyses the upstream and downstream opportunities including required mechanisms for support, gas as a potential low cost energy option, infrastructure requirements and technology assessment.

- 2014/15 Q1: Identification and analysis of the shale gas upstream localisation opportunities
- 2014/15 Q2: Identification and analysis of the downstream localisation opportunities.
- 2014/15 Q3: Analysis of gas as a potential low cost energy source and infrastructure requirements (distribution, reticulation, compression, liquefaction etc.)
- 2014/15 Q4: Analysis of the regulatory, policy requirements and mechanisms of support.
- 2015/16 Q1: Analysis of the technology and financing requirements and mechanisms of support.

Upstream and Midstream Oil and Gas - Developing a ship/rig repair implementation strategy (120)
Having recognised the potential multiplier effects of this industry (and other port-related industries) the dti, the DPE and NPA have resolved to jointly develop a ship/rig repair implementation strategy. This strategy will be informed by the findings of the recent investigation into port related industries that was commission by the dti, the DPE and NPA during the previous financial year. The objectives of this strategy will be to develop a way forward in terms of implementing the recommendations of the ports industry study. A ship/rig repair implementation strategy that seeks to establish a world-class oil and gas servicing hub.

- 2014/15 Q2: The DPE/dti/TNPA joint task team will develop a ship/rig repair implementation strategy that seeks to address short, medium and long term constraints through the implementation of tangible projects. Arising from this a “product offering” and requisite marketing material to drive an investment promotion programme will be developed.
- 2014/15 Q4: Launch of an Investor Conference that will showcase South African capabilities within this sector.

Public Residential Electrification Programme for low cost housing. Localisation of electrification components through designation as per amended Preferential Procurement Policy Framework Act (PPPFA) (137) The localisation of electrification components comes close to meeting the procurement requirements of ESKOM and municipalities as it includes a number of major components that are an integral part of the electrification programme and gives practical effect to the designation of these components for use in the electrification or low voltage reticulation system. This will lead to the creation of a sustainable demand market for local manufacture of electrification components/products. Identification and stimulation of local content for the entire or parts electrification or reticulation low voltage system; Strengthening of the local electro technical manufacturing industry

- 2014/15 Q4: Designation of products for the electrification system as identified above.

Advanced Manufacturing - Commercialisation of Natural Fibre Reinforced Composites (128) The establishment of pilot-scale manufacturing facilities and specialised testing equipment for proof of concept of new products developed from natural fibre based composite materials, with applications in the aerospace, automotive, boatbuilding, renewable energy and building and construction
industries. The increased interest in natural fibre reinforced composites (bio-composites) is driven by economic and technical considerations as well as heightened environmental awareness. The advantages of bio-composites include cost and weight savings, a reduced environmental footprint, reduced energy consumption in production, and health and safety benefits. Pilot and up-scale agricultural fibre production and processing, commercialisation and implementation of various composite manufacturing technologies (including resin infusion, compression moulding, pultrusion, extrusion and injection moulding); and facilitate the establishment of natural fibre value chains.

- 2014/15: Undertake several techno-economic studies to assess the viability of new bio-composite products.
- 2014/15: Development of composite manufacturing and testing capability to support industry adoption of natural fibres into composite applications.
- 2014/15-2015/16: Prototyping, trial manufacture and limited manufacturing in partnership with industry.

Additive Manufacturing (129) Advantages of Additive Manufacturing over conventional manufacturing processes include short lead times (in the order of days or even hours), no tooling, high complexity, freedom of design (almost any shape can be made), moving parts (integrated joints and couplings), customisation and the use of various unconventional combinations of materials (including nylon, polycarbonate and even metals such as titanium, aluminium, and stainless steel). South Africa’s competency in Additive Manufacturing has built up steadily over the past two decades and there are pockets of world-class excellence emerging at universities and local companies that can be leveraged by government to improve the competitiveness of local industries. There are approximately 1,600 3D printers in South Africa and estimates for 2013 place total Additive Manufacturing systems sales at R86 million in South Africa. The global 3D printing market (consisting of all 3D printing products and services) grew at a cumulative average growth rate of 28.6% to US$2.2 billion in 2012. The market is expected to grow to US$4 billion by 2015, about US$6 billion by 2017 and to around US$11 billion by 2021. South Africa needs to ensure that it taps into these growth opportunities.

- 2014/15 Q4: Launch of an Integrated Additive Manufacturing Industry Support Pilot Project

Facilitate a favourable tariff regime and introduce a rebate mechanism for local white goods manufacturers (140) The programme will seek to ensure that there are no tariff duties on input components manufactured locally, in order to assist in reducing final cost-of-product and improve international competitiveness. This will further assist in: Increasing export volumes and finding new markets for South African products; Enhancing the access of both local and SA-located global industry players to the African market; Reducing the negative impact of cheap imported products on
local employment; Applying a reasonable level of protection for domestic producers; and Increasing overall competitiveness within the white goods industry.

- 2014/15 Q4: Finalise the review of tariffs for the white goods industry.

**Development of a White Goods Export Strategy (140)** The development of a well-researched and structured White Goods Export Strategy to enlarge South Africa’s footprint in both international and local/regional markets; in particular leveraging SA’s competitive advantage in terms of proximity to Southern Africa and logistical and transport capabilities. This export push will be supported by various trade concessions related to SA’s membership in regional trade agreements with the SACU and SADC groupings.


**Electronics industry support - To develop an action plan to support broadband roll-out (138)** The objective of this work will be to consider/identify industrial policy interventions that can support and stimulate electronics manufacturing and assembly arising from the broadband roll-out programme. Building on the designation of STBs, Cables, and residential electrical meters, this work will seek to further assess existing standards, compulsory specifications, incentives and industrial financing for products that are required to support domestic broadband roll-out and other public sector initiatives. Strengthened capacity and capabilities in electronics manufacturing. Improved competitiveness of local industry. Increased employment.

- 2014/2015 Q4: Develop an approach that supports both electronics and contract manufacturing.

**Plastics, Pharmaceuticals, Chemicals, Cosmetics - Re-alignment of technical infrastructure activities with IPAP sectors (50/52)**

- 2014/15 Q1: Revision of SANS 597 on sterilized components sodium lactate intravenous infusion (Ringer-lactate solution for injection).
- 2014/15 Q4: Revision of SANS 1557 on sunscreen products.
- 2015/16 Q1: Development of standards for traditional/complementary medicines.
- 2015/16 Q1: SABS upgrading facilities for testing of supplements and complementary medicines.
- 2015/16 Q4- 2016/17 Q4: Provide analytical reference measurement traceability for pharmaceutical, personal care and cosmetic products; specifically to analyse for toxic elements.
Pharmaceuticals and medical devices - Facilitation of Project Ketlaphela (96) Project Ketlaphela aims to establish domestic manufacture of ARV APIs supplying 40% of South Africa’s projected peak demand for ARVs in 2016-2017. Ketlaphela will be a state-controlled enterprise (the State controlling 60% via the IDC and Pelchem), jointly operated with a private investor and technology provider. The rationale of Project Ketlaphela is more strategic than economic. However, by improving the security of supply of ARVs and averting treatment interruptions, the project will help to slow-down the drift from the low-cost 1st line ART to the expensive 2nd line. Reduced reliance on imports of APIs will improve the security of supply of ARVs.

- 2014/15 Q1: Selection of the preferred bidder, negotiations and signing of contract.
- 2014-2015: Commencement of project (detailed design, followed by construction).
- 2017/18 Q1: Commissioning of the project and start of production (1st ARV API)

Plastics, pharmaceuticals, chemicals and cosmetics - Development of plastic production and innovation cluster (92) Cluster development in the plastics sector to deal with testing, R&D and skills. Plastics conversion plants are generally small to medium-sized, family owned businesses with no or limited R&D activities, testing facilities and skills deficits. The intervention will enable converters to develop economies of scale based on shared infrastructure, equipment and knowledge, thereby strengthening capacity to access existing and new markets. Cluster development will assist unemployed learners to participate in accredited work programmes and acquire skills, while enhanced R&D will transform the training division into a value added, high performance strategic partner to the industry. Sustainable plastic cluster with access to markets.

- 2014/15 Q1-Q2: the dti to facilitate establishment of the cluster management structure.
- 2014/15 Q3: the dti to facilitate the acquisition of operational resources for the cluster through the MCEP.

Automotive Products and Components - Developmental trade policy (50)

- 2014/15 Q4: Finalise Amendment of Compulsory Specifications VC 8022, 8023, 8024 and 8025, to add additional safety features to automotive vehicles and align SA requirements with latest UN (ECE) requirements.
- 2014/15 Q4: Finalise Amendment of Compulsory Specifications VC 8013 for hydraulic brake and clutch fluid.

Automotive - Competitiveness Improvement Initiatives (75) Promote the adoption of base operating standards at automotive suppliers. Increased manufacturing competitiveness to drive
further localisation, thus generating the potential for employment creation. Enhanced supplier productivity through the establishment of base operating standards at suppliers, with a particular emphasis on tier 2 suppliers.

- 2014/15 Q1: Concept Note and scoped Project Plan: base operating standards.
- 2014/15 Q4: Project implementation.
- 2014/15 Q4: Preliminary project evaluation.

**Metal Fabrication, Capital & Rail Transport Equipment - National Foundry Technology Network (80)** The National Foundry Technology Network (NFTN) is a foundry industry support initiative. Its key objective is to facilitate the development of a revitalised foundry industry through appropriate skills training, technology transfer and diffusion of state-of-the-art technologies. The programme is aimed at reversing the erosion of the industry which has negatively impacted on the competitiveness of manufacturing as a whole. The NFTN represents a concerted effort to reverse the significant decline that the foundry industry has experienced over the past two decades and the consequent weakening of the important linkages that this industry has with the entire manufacturing sector. Reduced import leakage, increased human skills capacity, investments in key manufacturing processes and activities and employment creation.

- 2014/15 Q1-Q4: 20 foundries assisted under the competitiveness improvement programme.
- 2014/15 Q1-Q4: 3 new localisation and/or casting opportunities identified and supported.
- 2015/16 Q1-Q4: 20 foundries assisted under the competitiveness improvement programme.
- 2015/16 Q1-Q4: 3 new localisation and/or casting opportunities identified and supported.
- 2016/17 Q1–Q4: 20 foundries assisted under the competitiveness improvement programme.

**Boatbuilding and Associated Services Industry - Formation of a ship/boatbuilding/repair cluster (123)** To assess the feasibility of establishing a shipbuilding and repair cluster for the ship/boatbuilding industry. Create a cluster for the ship/boatbuilding and repair industry to address the constraints the industry face as a collective and build international competitiveness.

- 2014/15 Q1 - Q2: Conduct research into clustering opportunities in the shipbuilding/ repair industry in locations that can offer suitable space for ship/boatbuilding and repair.
- 2014/15 Q3 – Q4: Commence consultation process with relevant stakeholders on the feasibility of establishing a ship repair cluster. Facilitate workshops to inform ship/boatbuilding industry about the cluster idea and identify potential cluster participation.
- 2015/16 Q1 - Q4: Finalise the modalities of establishing the shipbuilding and repair cluster in collaboration with industry and stakeholders.

**Boatbuilding and Associated Services Industry - Industry Standards and Accreditation (124)** Develop standards for quality, safety and environmental compliance in order to enable all
boatbuilding firms to build to international standards, increase competitiveness and access to international markets. The strategy will be phased in over a period of 5 years and support programmes will be established to help offset the often prohibitive costs associated with changing manufacturing processes and tooling to build to internationally competitive standards. The industry accreditation programme will be reviewed and a study undertaken to explore its applicability to the wider boating sector.

- **2014/15 Q1-Q2**: **the dti** and industry to review the current Accreditation system and look at necessary changes to structure and implementation.
- **2014/15 Q3 - 2015/2016 Q3**: **the dti** in conjunction with SABS to develop standards of phased approach to the implementation of international standards across the industry.
- **2016/2017**: Phased implementation of standards and review of the accreditation programme.

### Clothing, Textiles, Footwear and Leather Competitiveness Programme (71)
The programme will enable the sector to compete sustainably and effectively against international competitors in both the domestic and the export markets. In addition, company-level competitiveness will be improved substantially. The programme will assist in building sustainable competitiveness. The roll-out of the CTCP will be extended to new companies in the textiles, clothing, and leather and footwear industries. New decent jobs will be created as the sector starts to grow.

- **2014/15 Q1-Q4**: Ongoing roll-out of the PIP and CIP programmes. There will be a concerted focus on the cluster programmes, where successful impact is beginning to be realised.

### Clothing, Textiles, Leather & Footwear - Innovation and technology (72)
Distinct technologies will be identified and, where commercialisation is possible, this will be undertaken with relevant partners. The technologies to be pursued will include the establishment of a South African garment-sizing database using three-dimensional (3-D) body-scanner technology, computer-aided design (using 3-D scanner data) and the processing of new natural fibres such as flax, cashmere and kenaf. New technologies such as non-woven products and fibre-reinforced composites will be commercialised. Technologies in garment designing and servicing the fashion industries will also be pursued. The main outcome of the programme will be a transformed clothing industry, which will be in a position to compete globally with home-grown garment technologies and the establishment of the linen garment manufacturing industry.

- **2014/15 Q1**: Finalise the data consolidation using the 3 D Body Scanner technology

### Exotic Leather Cluster (73)
The project will focus on the implementation of the Exotic Leather National Cluster programme which focused on crocodile hides in the previous financial year. The
programme will include ostrich hides in the new financial year. The exotic leather industry has been working under the radar for a long time, with very little local beneficiation: historically, over 90% of skins exported having been in raw form. Exportation of high value-added exotic leather goods and manufacture of affordable exotic leather goods for the local hospitality industry and local retailers.

- 2014/15 Q1: Bring the ostrich industry association fully on board as a member of the National Exotic Leather Cluster
- 2014/15 Q2 – Q4: Establish partnerships between the National Exotic Leather Cluster and the FETs and begin the development of syllabi in collaboration with the Vaal University of Technology and the FDDI of India.

Agro-Processing - Development of emerging broiler producers (85) Facilitate the development and entry of successful emerging poultry producers into the main-stream broiler value chain in order to grow the domestic industry as well as improve its competitiveness. Increased participation and integration of emerging producers into the domestic broiler value chain. This will contribute towards both import replacement and mitigation of South Africa’s negative trade balance.

- 2014/15 Q1-Q2: Mapping of existing hatcheries and contract growers towards the development of new broiler clusters.
- 2014/15 Q3-Q4: Review and package for funding at least 1 broiler investment project targeting small scale producers.
- 2014/15 Q4: Implement at least one small scale project

Development of a small-scale dry and wet milling industry (86) This intervention will facilitate the entry of small-scale maize millers into the South African market. They are expected to be particularly competitive in rural areas, where high transport and logistics costs raise the price of basic food products. The intervention consists of the packaging of a range of support measures from the dti to facilitate the market entry of small-scale maize mills. Small-scale maize milling enterprises producing for local markets at competitive prices, thereby creating jobs and contributing to enterprise development and poverty alleviation.

- 2014/15 Q1: the dti, FABCOS, and the NMC to facilitate the roll-out of small-scale maize milling in one additional province.
- 2014/15 Q4: the dti to facilitate the roll-out of small-scale maize milling and branding of the in-house products of FABCOS (home-grown) in one additional province.

Enhancement of production efficiency in the fruit and vegetable Canning industry (86) 2014/15 Q3: In collaboration with SAFVCA, the dti will facilitate a transformation programme that will establish new fruit orchards in the Western Cape.
Commercialisation of industrial cassava starch (87) Increase starch production in the cassava industry to replace imports of starch and create jobs in the domestic economy. Reducing dependence on imports (which compounds the trade deficit) and creation of a new industry.

- 2014/15 Q1: Conduct a feasibility study to determine the commercial viability of a cassava starch industry.
- 2014/15 Q2: Identify small scale farmers to participate in the programme.
- 2014/15 Q3-Q4: Conduct field trials for cassava production in selected areas in South Africa.

Forestry, Timber, Paper, Pulp and Furniture. Furniture Cluster Development (90) Cluster development in the furniture sector. Companies to be located in the same geographical areas, with targeting of furniture design trainees exiting the incubators. SMMEs in the furniture industry are not able to access a reliable market. This is mainly due to their size, and its impact on their ability to supply required quantities and quality. This affects their level of competitiveness and sustainability. The establishment of clusters will begin to address the size constraints upon small enterprises’ access to market. SMME clusters can be defined as groups of small and medium sized enterprises located in a relatively confined geographic area engaged in the production of the same sorts of products. Clustered SMMEs can deliver economies of scale through shared physical infrastructure, information and knowledge exchange and can improve competitiveness through specialisation and co-operation in the joint marketing of products. Eg. Competitive furniture clusters.

- 2014/15 Q1: Develop TOR for the cluster management.
- 2014/15 Q3-Q4: Implementation of the business plan.
- 2014/15 Q4: Facilitate acquisition of resources for the functioning of the cluster.

Craft - Scaling up of handmade and manufactured craft (108) The aim of this programme is to upscale the roll-out and implementation of the Craft CSP product development interventions to improve design and production capacity. The goal is to strengthen established craft enterprises in the production of Handmade Products by introducing production-line systems and equipment where appropriate, with linkages to national retail platforms. The programme will also introduce manufacturing processes for appropriate craft designs and products to support the scaling up of these businesses and the building of a light manufacturing industry. Improved design and production capacity of established and emerging entities. Establishment of local streamlined craft manufacturing processes.

- 2014/15 Q2-Q4: Product development programmes implemented for both traditional and contemporary craft supported to implement production line systems to increase and improve productivity, volume and quality of product.

Craft - Access to domestic and foreign Markets (109) The aim of this programme is to upscale the roll-out and implementation of the Craft CSP market access programme to grow domestic and
international market share for South African crafts through two main instruments: Establishment of marketing, retail and distribution mechanisms and channels for crafters and craft enterprises. Continued support and funding of craft hubs and other agencies/entities to enable them to implement and support market access programmes as well as other interventions as per the Craft CSP. Increased marketing and distribution channels; access to direct sales; sustainable job opportunities for emerging craft enterprises across the country.

- 2015/16 Q1 – Q3: Approve and implement a marketing, retail and distribution model for craft as well as an e-commerce platform; establish provincial Craft Emporiums/Permanent Craft Markets, in partnership with four Provinces and Municipalities.
- 2015/16 Q1-Q4: Increase support and funding of craft hubs and Economic Development Agencies from two craft hubs and one Agency to four craft hubs and two Agencies to enable them to implement and support market access, product and enterprise development programmes.

Cultural and creative industries - Developing Manufacturing in the Music Industry (pg105) This programme will aim to encourage investment into development of manufacturing across the music value-chain; support partnerships with international musical equipment manufacturers; and support research and development for locally designed and produced music technology, instruments and equipment. Increased investment into local manufacturing of musical instrument and equipment. Establishment of a local musical instrument and equipment manufacturing industry for both international and local music industry products. Increased employment creation.

- 2014/15 Q1: Develop an investment proposition to attract foreign manufacturers to establish local manufacturing plant for musical instruments and audio equipment.

Aerospace and Defence - Development of a Titanium Production Capability Roadmap with the focus on downstream manufacturing technologies and products (131). Evaluation of the industry’s ability to adopt these new technologies and use them in repair work and maintenance for the entire defence industry, including marine systems, thus ensuring its readiness to meet global supply chain requirements. Strengthened coordination between the dti, DST, research and development institutions (Science Councils and universities) and the Industry, both in support of titanium manufacturing and of South Africa’s evolution towards a knowledge economy. In the long term, the aim is to locally produce niche titanium products and components for the global aerospace and defence industry, positioning South Africa as an established and reliable supplier base.

- 2014/15 Q2: Approval of the Industrialisation Roadmap.
- 2014/15 Q3: Development of a Titanium Production Capability Roadmap - other than using additive manufacturing - for the local aerospace and defence industry.
- 2014/15 Q4: Introduction of the Titanium Production Capability Roadmap to the relevant stakeholders, including industry.
Broadening industry participation in aerospace and defence through a supplier development scheme offered by IDAP (133) An incentive scheme aimed at ensuring the inclusion and integration of a representative supplier base which would otherwise not have had the opportunity to participate in the industry.

- 2014/2015 Q1: Scope and design the range and quantum of the support mechanism based on a consultative identification of qualifying SMMEs by the dti, industry associations and system integrators.
- 2014/2015 Q4: Evaluate the take-up and impact of the mechanism with a view to further development and fine-tuning and to ensure effective support and broadening of the BB-BEE supplier base in the aerospace sector.

Advocacy and promotion of aerospace and defence products and capabilities in global markets (133) Support the establishment of the following: An integrated web portal for the Aerospace and Defence Industry. A permanent Exhibition Centre at an appropriate location. A vibrant Export Council which will promote and champion the interest of local manufacturers in international markets and ensure an increase in aerospace and defence exports. The aim of these support mechanisms is to retain and develop sovereign aerospace and defence capabilities whilst marketing these capabilities to the international defence community.

- 2015/16 Q2: Feasibility Study for the formation of the Permanent Exhibition Centre.

Building a competitive industry through advanced manufacturing, aerospace and defence cluster development (134) Integration of sub-tier suppliers of the local industry into the global supply chain by bringing aerospace and defence industry suppliers into close proximity with one another and co-locate them next to major system integrators and anchor partners. Promotion of local innovation, new business and exports in the aerospace and defence sector. The completion of the bulk utility, infrastructure and services and the finalisation of the uptake agreements will open the way for the construction of buildings by prospective tenants and industry investors.

- 2014/2015 Q3: Conclusion of uptake agreements with prospective tenants and industry investors.
- 2014/2015 Q4: Completion of the prioritised core CAV landside bulk utility services and infrastructure, including water and sanitation, roads and storm-water drainage, electricity and land management.

Economic Growth – Tertiary Sectors

NDP Implementation Activities
Focus areas for raising exports:
- Higher education (39)
- Tourism (39)
- Business services (39) South Africa will strengthen its positioning for offshore business services, taking advantage of its telecommunications, banking and retail firms operating in other countries. (128) Expansion of offshore business services: 700 000 jobs (Gauteng and Western Cape)

**Expand services industry:** finance and business services and tourism (127) Innovation needed in Financial services (131)

**Stimulating domestically oriented activities:** (128) Domestically oriented services: (141)
- 40% of new jobs (smaller proportion)

**Promote tourism and creative and cultural industries:**
- Guest houses, bed and breakfasts, hotels, lodges, backpackers, tour operators, conference venues (142)
- Emphasis will be placed on increasing the total number of tourists entering the country, and the average amount of money spent by each tourist. (153)
- Ease of doing business, as well as availability of appropriate levels of tourism infrastructure (particularly transport, tourism offerings/products and accommodation), will play an important role in attracting different types of tourists. (153)
- Foreign business tourists arriving by air generate the most significant multipliers. South Africa will be positioned as the business and shopping centre for the region. (153)
- South Africa can do more to develop the region as an international tourist destination by emphasizing [assets] the broader biodiversity, cultural diversity, scenic beauty and range of tourism products, and making it easier for tourists to travel between countries in the region. A Schengen-type visa for the region will be considered. (153)

South Africa sets up Financial Centre for Africa (attract project finance): South Africa will be well established as financial and services platform and will receive and provide regional support (40)(121-122)

**In future, the state’s primary role in the ICT sector will be to facilitate competition and private investment, to ensure effective regulation where market failure is apparent, and to intervene directly to meet specific social goals.** Direct involvement will be limited to interventions to ensure universal access and to help marginalised communities develop the capacity to use ICTs effectively. (191)
NSSD Implementation Activities

ICT: Grow and strengthen a portfolio of niche high-potential science and technology capabilities, as well as actively facilitate the exploitation of both existing and new capabilities to support sustainable development priorities and green economy ambitions (27)

Implementation of the Ten-year Innovation Plan to support the commercialisation of green technologies

- Increasing research, development and innovation in human capital for a growing knowledge economy
- Increasing investment in strategic research and development (R&D) that contributes to improving government decision-making on science and technology as productive investments and to promote the private sector’s R&D activities
- Increasing the graduate output in natural and physical sciences
- Increasing the country’s expenditure on R&D as a percentage of GDP

IPAP Implementation Activities

Enhancing the participation of innovative enterprises and high-technology SMEs (60)

- Improved linkages between SMEs and the knowledge-creation capabilities located in universities and science councils:
  - Commission a study to identify the key constraints currently blocking the conversion of prototypes into marketable products.
  - Approved Memoranda of Understanding between rural communities/townships and 3 identified industry partners.
  - Support 5 incubators in rural communities and / or townships. Support 3 university- or science council-based incubators.

Music industry - Domestic and international market share development (106) This programme aims to increase the domestic and international demand and consumption of South African music industry products and services by supporting and incentivising distribution and marketing of music goods and services on all distribution platforms. At the same time it seeks to support and incentivise local and foreign music venues to host and programme regular live music performances, thus creating more regular work opportunities for artists.

- 2014/15 Q1-Q2: Develop a comprehensive music marketing and distribution model for both local and international market access to stimulate distribution and grow domestic and international market share for South African music.
- 2014/15 Q3-Q4: Establish and develop a direct South African presence in key markets, with either foreign representative or SA companies continuously investigating and expanding market opportunities for South African products and services.
- 2014/15 Q1-Q4: Leverage or amend existing dti incentives to better support local and foreign music venues to host regular live music performances, thus creating more regular work opportunities for artists.
Implementation of the Business Process Services (BPS) incentive programme (102)  Ongoing implementation of the BPS incentive programme. For BPS investors, the cost of operating is one of the critical areas of consideration for an investment decision. The rationale behind this initiative is to counteract high operational costs in certain business areas and profile South Africa as an attractive BPS destination that can match and exceed the offerings of other key competitor countries. The dti has revised its capital expenditure-based BPO & O incentive programme, replacing it with the BPS incentive under which investors can offset against any operational expenditure. It is expected that as South Africa becomes more clearly competitive as a destination, more investment will necessarily flow in and more jobs will be created. An additional 10,000 off-shore jobs leveraged by March 2015 through provision of incentives to the value of approximately R600 million.

- 2014/15 Q1: Launch of the new BPS incentive guidelines.
- 2014/15 Q1-Q4: Ongoing implementation of the BPS incentive

The South African software industry - Software Development Process Improvement Programme (136) To improve the quality of South African software through process improvement training using Capability Maturity Model Integration (CMMI) and Team Software Process (TSP) methods and through alignment of product development with domestic and global requirements. This will include widening participation of unemployed graduates as part of a skills development and capacity building programme for better performance. This initiative will enhance the competitiveness of local SA software companies and create a significant breakthrough in market access for SA software developers. It will also result in large-scale creation of high-skilled employment opportunities.

- 2014/2015 Q2: Two additional software development entities identified and participating in the process improvement programme.
- 2014/2015 Q3: Establishment of an Advisory Council, comprised of government and private sector representatives, to oversee the roll-out.
- 2015/2016 Q1: Further review of performance of all software development entities; refinements to Operations Manual & training curriculum; Add four more software development entities as part of the roll-out.

Cultural and creative industries – Film - Access to Finance and Infrastructure (107) The programme aims to: improve investment and access to capital, funding, production capacity and greater overall business skills; Support enterprises to meet technological and infrastructure requirements and strengthen business support mechanisms; Promote access to information on how best to access available funds within the industry.
- 2014/15 Q1-Q4: Roll out of the revised Film and Television Incentives incorporating the “Emerging Black Film Makers Incentive” category.
- 2014/15 Q1-Q4: Existing dti incentives are leveraged or amended to support infrastructure development for innovative and new converging technologies for the production of digital content.

**Personal well-being – Emotional**

No specific implementation activities identified.

**Personal well-being – Relational**

No specific implementation activities identified.

**Social Cohesion**

**NDP Implementation Activities**

**Developing a broad social compact with National Development Plan as a basis:** (154)

- For South Africa to achieve its objective to eliminate poverty, reduce inequality and create jobs requires greater trust between the state and business. As highlighted in the diagnostic report and the inputs of various organisations and individuals, the lack of trust between government and business and in turn, between these and the labour movement, is a stumbling block towards faster economic development. Various accords have been signed between social partners and an institutional mechanism such as the National Economic Development and Labour Affairs Council (NEDLAC) exists. But because of the lack of strategic engagement among the social partners, focus on immediate sector interests and general questioning of each other’s “bona fides”, no effective partnership exists. This problem is especially acute at regional and local level. (154)

- The Commission proposes that the National Development Plan serves as a basis for developing a broad social compact among critical role-players and society at large. See chapter 15. This should also find expression at local and regional levels, with greater engagement between businesses and provincial and local government, as well as trade unions and other sections of civil society. (154)

- Citizens active in their own development: Better communication, more honesty and a greater degree of humility by those in power would go a long way towards building a society that can solve problems collectively and peacefully. (37)

**NSSD Implementation Activities**

**Improve equity, security and social cohesion** (30)

- Black Economic Empowerment (BEE) programmes and gender mainstreaming

- **Enhance spatial planning to promote social cohesion and integration between communities, as well as between communities and the natural environment** (29)
- Development of national spatial planning guidelines

**Social Cohesion - Human Development Indicators**

**NDP Implementation Activities**

**Promote adult literacy**

- **The Kha Ri Gude Mass Literacy Campaign** run by the Department of Basic Education caters for adult literacy learners and has been very successful. There is a need for relevant programmes and qualification for adults many of whom are Kha Ri Gude graduates. The existing programmes and qualifications for adult learners should be restructured to ensure they are appropriate for their target audience. The proposed Community Education and Training Centres will help expand opportunities for graduates of the adult literacy campaign as well as other adult learners. (322-3)

**Focus on infant and maternal healthcare in health sector (52) (67) (101) (331)**

- Increase the number of community health workers and midwives (345-6)
- Training more midwives and deploying them in the appropriate levels in the health system could have an immediate positive impact on maternal, neonatal and child health, which would reduce maternal and child mortality. (347)
- Maternal health and food security (361)

**Security and combating violent crime**

- Demilitarise the police. The police should be selected and trained to be professional and impartial, responsive to community needs, competent and inspire confidence. **Police:** interventions to demilitarise the police and ensure a fairer use of power. (392-3)
- Make the police service professional: (389-392) code of conduct; national policing board; selecting for professionalism and excellence; training for professionalism
- An integrated approach to safety and security will require coordinated activity across a variety of departments, the private sector and community bodies, the latter to include revitalised community-safety centres.
- All vulnerable groups including women, children and rural communities should enjoy equal protection and their fear of crime should be eradicated through effective, coordinated responses of the police, business, community and civil society. (385)
- Increasing rehabilitation of prisoners and reducing recidivism (402)
- Increase community participation in safety (404-5) Reduce overcrowding (spatial relations) to promote community safety (402-3) **Develop community safety centres to prevent crime** and include youth in these initiatives (30)
- **Seven-point-plan:** (388) The criminal justice system is to have a single set of objectives, priorities and performance measurement targets. Further implementation of the seven-point plan will receive greater interdepartmental coordination.
  - Adopt a single vision and mission
  - Establish, through legislation or by protocol, a new and realigned single coordinating and management structure
  - Make substantial changes to the present court process
  - Put into operation priorities
  - Establish an integrated and seamless information and technology database
  - Modernise, in an integrated and holistic way, all aspects of systems and equipment
  - Involve the public in the fight against crime

**NSSD Implementation Activities**

**Increase in the South African Human Development Index (HDI)** (2010 HDI: 0.597) (15)

**Social Cohesion - Combating discrimination**

**NDP Implementation Activities**

**Implementation of the Constitution:**

- The Constitution stipulates that neither the state nor any person may discriminate against anyone on the basis of race, gender, sex, pregnancy, marital status, ethnic or social origin, colour, sexual orientation, age, disability, religion, conscience, belief, culture, language or birth. (469): there is still much to be done to achieve this because of our history: the legislation is there but we need to address ineffective implementation and enforcement

- This will not be resolved by passing more laws. Families, communities and schools all have a role to play in bringing up children who respect the rule of law and understand the values in the Constitution. (461) attitudes need to change otherwise people will just not adhere to the laws

- Fostering constitutional values in children and schools: bill of responsibilities (461-2) The fostering of Constitutional values though schools and the media should help create a tolerant and gender-sensitive South Africa. These institutions should empower people to challenge prejudice and discriminatory practices. (470-1)

- Unity in diversity will be fostered by a shared commitment to constitutional values. The values entrenched in the Constitution and its Preamble and further expanded upon in the Bill of Responsibilities are part of children’s education and should also be promoted amongst adult South Africa. (456)

It is important for all **South Africans to be active citizens and exercise leadership throughout society** (456)
A **social contract** could help propel South Africa onto a higher developmental trajectory as well as build a more cohesive and equitable society (456)

The country needs **sustained campaigns that focus on changing attitudes and behaviour in relation to racist, homophobic and xenophobic tendencies**. It needs to **strengthen existing campaigns** for non-racialism and gender equity, and against gender violence. (470-1)

**Pursue gender equality**

- The **Commission of Gender Equality and the ministry should develop joint targets, indicators and timelines for monitoring and evaluating progress towards gender equality**. These must be realistic, and should be accomplished through proper gender mainstreaming in departments. The government must address gaps and weaknesses in legislation. For example, the Traditional Leadership and Governance Framework Act (2003) entrenches patriarchal values and limits women’s participation in traditional governance. Rather than a separate Gender Equality Bill, the Electoral Act (1998) could be amended to require political parties to ensure gender parity in electoral lists. (470-1)
- **Local government should include more women** at representative level, as well as in shaping budgetary priorities. Women are frequently marginalised in local politics and excluded from decision-making processes. Women’s participation in integrated development planning is uneven. (470-1)
- Public employment should have a specific focus on women. (470-1)
- Social, cultural, religious and educational barriers for women to enter the job market should be addressed. Concrete measures should be put in place to address these barriers and the results should be evaluated over time. Improved access to safe drinking water, electricity and quality early childhood education, could reduce the burden of domestic work and so make it easier for women to seek job opportunities. This is particularly so for rural women. (470-1)
- Security of tenure should be created for communal farmers, especially women. (470-1)
- Qualitative indicators need to be developed to measure the progress made to secure the safety of potential victims of gender based violence and the existing quantitative measures need to be expanded to include all categories of vulnerable people. (395)
- Cultural and religious practices which condone inequality of the sexes to the extent that gender-based violence is tolerated and even encouraged should be addressed head-on by government, religious and cultural bodies and society as a whole. (396)
- In submissions to the National Planning Commission, attention was drawn to the fact that discrimination is perpetuated by traditional beliefs upheld in the criminal justice system, the government, education, law, politics, the media, the public and at home. It was further stated that this inequality and discrimination has become so pedestrian and institutionalised, that some women are unable to even imagine, much less expect, a different life. Any programme to attain social cohesion in society should narrow the inequality divide between men and women with measures in place to ensure that women, girls, people with disabilities and any other group at risk of discrimination, are able to enjoy their rights enshrined in the Constitution. (396)
Discrimination on the grounds of sexuality and homophobic violence are also a major problem. More needs to be done to protect the constitutional and legal rights of sexual minorities. (459)

Racism and non-racialism: (471-2)

- All South Africans should learn an African language
- To make it easier for South Africans to interact with each other across racial and class divides, the country needs to improve public spaces and public services (456) + improving parks and public transport will also bring people together

Properly managing migration and addressing Xenophobia

- If properly managed, migration can fill gaps in the labour market and contribute positively to South Africa’s development. Energetic and resourceful migrant communities can contribute to local and national development, and diverse, cosmopolitan populations are often the focus of cultural, economic and intellectual innovation. If poorly managed, however, the skills and potentials of migrants will be neglected. Migration will remain a source of conflict and tension, and migrants will be increasingly vulnerable, subject to continued abuse, exploitation and discrimination. (105)
- We must constantly guard against narrow nationalism, dislike of ‘others’ or the development of a superiority complex in relation to people from other countries or continents. Nationalism, taken to an extreme, engenders new forms of racism, discrimination and chauvinism. (461)

Social equity

Redress past injustices (all categories)

NDP Implementation Activities

Policy instruments to encourage private sector to change ownership patterns: (42) (141) There is a need to improve the effectiveness of the instruments mentioned above, with an understanding of the trade-offs that exist. (42)

- Voluntary scorecards;
- Procurement regulations; Preferential procurement legislation BEE charters, the codes and the BEE scorecard
- Development Finance Institutions which either specifically seeks to broaden black ownership or generally seeks to grow new sectors. (139) (42)
- Licensing arrangements (e.g. as in telecommunications and mining and broadcasting); (42)
- Aligning all legislation and the codes and charters that flow from the BBBEE Act. (139-140) (468-9)
- **New models of BEE to be explored** to improve the efficacy of the programme. (73)
- **Clear targets should be set for broadening economic participation**, enhancing predictability for economic actors. (73)

Ensure that the state procurement lever is used more effectively to advance socioeconomic targets in certain geographies and industries. (139-140)

- **Mandatory targets for socioeconomic development and job creation for all tenders above R10 million** should be introduced. (139-140) (468-9)

The **National Empowerment Fund must be resourced adequately to execute its mandate**. It must strengthen its support to black-owned small and medium sized enterprises as well as strengthen and expand the provision of finance and other support to new black industrialists and entrepreneurs. This should not just be in the form of financial support, but must also include enabling market access and the removal of administrative and regulatory burdens on small businesses. (140) (469)

The state must develop capacity to optimize returns from South Africa's natural resources. **Rent collected from mining companies should be used to drive an accelerated development agenda for skills development and sustainable job creation.** (140) (468-9)

Creating an enabling environment for small, micro and medium enterprises and entrepreneurs to **thrive** (139-140):

- This includes **inculcating the spirit of entrepreneurship in schools**, (139-140) (468-9)
- **Lowering the cost of doing business** in the economy, (139-140)
- **Reducing barriers to entry** in various value chains. (139-140)
- **Access to land, capital and skills** (141) Land reform (140) (469) Access to debt and equity finance (multiple mentions) (e.g. 140)
- **Facilitating ownership and management of enterprises and productive assets by communities, workers, cooperatives and other collective enterprises**. (466)

**Improvements in regulation of BEE verification:**

- A **recommended statutory body to regulate BEE verification should be established** (468-9)
- The **Department of Trade and Industry be empowered to revoke the accreditation status of verification agencies that deviate from officially defined processes of accreditation**. (468-9)
- **Compliance requirements and regulations for reporting on employment equity and skills development should be simplified for small firms**, or even eliminated for very small firms. (135)

**Improvements in skills development incentive structures**

- The government may need to **review the present incentive structure embodied in the Skills Development Act (1998)** to ensure higher spending on staff development. (138)
- In line with the priorities of the plan, people with disabilities must have enhanced access to quality education and employment. **Efforts to ensure relevant and accessible skills development programmes for people with disabilities**, coupled with equal opportunities for their productive and gainful employment, must be prioritised. (52)

As part of comprehensive support packages for farmers, **preferential procurement mechanisms to ensure that new agricultural entrants can also access these markets.** (145)

**NGP Implementation Activities**

**A substantial revision of the BBBEE Codes to do more to incentivise employment creation;** (51)

- Investment in new productive capacity by black entrepreneurs, including small businesses and co-ops (using among others stronger local procurement);
- Skills development and employment equity; (51)
- collective and other forms of broad-based ownership; and sector strategies to create jobs; (51)
- Consistent implementation of broad-based (instead of narrow) BEE in all sectors, with a systematic assessment of the effects on the cost of capital and investment; and (51)
- Continuous monitoring and evaluation of the impact of broadbased BEE on overall equity, employment creation, support for new entrepreneurs, growth and innovation. (51)

**Access to basic services and provision of human rights – water and sanitation**

**NDP Implementation Activities**

**Local and user involvement in water management**

- **Involve users** (understand and respond to emerging constraints) (178) Some **decentralization** to get local users involved (178)
- **Local planning to ensure optimal use of groundwater resources** (if optimally managed can be more effective than large regional infra projects)

**Water use regulation and management**

- **Regulating uses** (disposal of wastewater: sustainability) (178)
- **Revision of water allocations** (in areas where users seeking access + current users take more than can be provided eg. in upper Vaal and Olifants River (water management areas)). Statutory provision (existing) for these reviews must be undertaken to avoid over-use, decreased reliability, damage environment (180)
- **Evolving water-resource management,** Regular review of management approach (178-9)
- **Existing statutory public process:** national water resource strategy every 5 years (informed by: catchment management strategies; local govt’s water services development plans [IDPs]) = identify priority areas for intervention and monitor implementation (179)
- **Systematic monitoring** to ensure effective supply planning, development, operation (178)

**Investment in protection and development of water resources**
- The national water-resource strategy should be tabled for consultation by mid-2012 and approved by year-end to guide the development of the sector. Along with the water-resource investment programme, it should be reviewed in consultation with water users and other stakeholders every five years to ensure that it adapts to changing environmental, social and economic circumstances.

- A comprehensive investment programme for water-resource development, bulk-water supply and wastewater management must be established for major centres is being finalised and should be reviewed every five years. This programme will include the following major investment projects, with clear allocation of responsibilities for financing and implementation and set targets for completion:
  - The Lesotho Highlands Project Phase 2, which is to be completed by 2020 to supply the Vaal system.
  - Current KwaZulu-Natal Midlands projects (eThekwini and Msunduzi municipalities and surrounds), which need to be completed and future major augmentations decided on. These augmentations could be through desalination, reuse or by building a new dam on the Mkomazi River in time for water to be available in 2022.
  - Western Cape water-reuse and groundwater projects, which are to be completed by 2017.
  - Regional water infrastructure investments and bulk-water supply programmes, which must be defined by the end of 2012, with clear implementation targets.
  - The management of water services must be strengthened and regional water and wastewater utilities established to support municipalities (including expanding mandates of existing water boards) by 2017.

- Urgent: coherent plan for protection of water resources in Mpumalanga Highveld coalfields, upstream of Vaal and Loskop dams, Lephalale-Waterberg area (179)

- Existing plans translated into well-timed investment programmes to avoid supply constraints. Large investments in regional systems... Water infra investment includes projects to treat and reuse water (180)

**Water management institutions to be established and developed**

- Establish a national water-resources infrastructure agency (modelled on SA National Roads Agency) (179) that will develop and manage large economic infrastructure systems.

- Water Research Commission: research and skills development. National capacity to support research, development and operation of water reuse and desalination facilities.

- Catchment management agencies to undertake resource management on a decentralised basis, with the involvement of local stakeholders.

- Build on foundation of Trans-Caledon Tunnel Authority (already supporting implementation of several large projects) (179)
- The need for an **independent economic regulator for water**, its specific functions and the potential costs and benefits in relation to the current arrangements should be carefully assessed. This assessment could take place within the proposed cross-sectoral review of infrastructure regulators. (180)

- A **dedicated national water-conservation and demand-management programme, with clear national and local targets for 2017 and 2022**, and sub-programmes focused on municipalities, industry and agriculture.

**Finalise institutional arrangements for water-resource management** (establish number of water-management areas; mechanisms for users to be involved in water management; organization of management and development of major water-resource infra) (180)

- The institutions that manage [and develop] water resources should **reflect the shared, public nature of water: respect limits and be involved in decisions** (180)

- Institutional development critical in: Olifants River, Crocodile-west subcatchments of Limpopo, Nkomati River, upper and middle Vaal subcatchments, Umzimvubu (E.Cape) (180)

- **Strong support from national bodies** (resource monitoring and infra planning) (180)

- **Consultative process** that produces National water-resource strategy (5 years) could be used to ensure alignment and **Commission should support and facilitate process** (180)

- **Future institutional arrangements for water resource management must be defined by the end of 2012, with implementation by 2015 at the latest**, if institutional memory is to be retained and continuity in management ensured.

**Household grants for self-supply of water supply and sanitation may be considered in some areas.** (180,182) Any review of norms and standards for basic water supply and sanitation services should consider whether service provision through public infrastructure is advisable outside formal settlement areas, given the high costs associated with serving scattered rural communities.

**Implementing stepped tariffs to promote the conservation of water and electricity**, while ensuring continued access to free basic services. (204)

**Develop integrated programmes to tackle energy poverty** by building on research done since the 1990s around household energy use. Even poor households with access to electricity can afford to use only modest amounts and rely on other sources such as paraffin, gas and fuel wood. An integrated programme could include sustainable production of fuel wood and its safe combustion in efficient stoves in rural areas. (17)

- **Public infrastructure investments**: (10% of GDP) focused on water (and transport and energy) (34) + greater policy and regulatory certainty for investors (41) (44) (156) (160) + delaying critical investments in water sector may result in water shortages during a drought period (160)

- **Resolution for above**: clarification of responsibilities: large cities have greater fiscal and political powers to coordinate, while regional utilities could provide services on behalf of less-equipped municipalities (MUST be led by municipalities though to avoid undermining accountability for service delivery) (56) (60)
- **Regional cooperation**: South Africa is water-scarce and so we should partner with neighbouring countries that have an abundant supply (32) (65) especially in the well-watered area between the Tropics of Cancer and Capricorn (89)

- **Water resources**: (from ‘Summary of Objectives and Actions’) (63)
  - A comprehensive management strategy including an investment programme for water resource development, bulk water supply and wastewater management for major centres by 2012, with reviews every five years.

- **Complete phase 2 of the Lesotho Highlands** water project by 2020

- Timely development of several new water schemes to supply urban and industrial centres, new irrigation systems in the Umzimvubu river basin and Makhathini Flats, and a national water conservation programme to improve water use and efficiency

- Create regional water and wastewater utilities, and expand mandates of the existing water boards (between 2012 and 2017).

- Water purification (123) (opportunity)

- Local franchising of water (178)

- Water reuse and desalination (180)

- **Grants** to households or municipalities to provide free services (161) (and Ch.3)

- The regulator can establish appropriate mechanisms to prefund capital and create a smooth price path over a longer term so that consumers face more predictable and manageable price increases. (There are lessons in the way the Trans-Caledon Tunnel Authority smoothed water tariffs for the Gauteng area). (171) (here the NDP is talking about electricity but the lesson is generic)

**Ring-fence the electricity distribution businesses of the 12 largest municipalities** (which account for 80 percent of supply), resolve maintenance and refurbishment backlogs and develop a financing plan, alongside investment in human capital. (63)

**Municipal electricity-distribution services need to be improved.** (64) Improving electricity distribution (170)

- Invest in human capital and physical capital in the 12 largest municipal distributors (170)

- Improve governmental support for combating illegal use (170)

**Electricity pricing and access need to accommodate the needs of the poor.** (64) National electrification and energy poverty (171-174)

- Widen access to reduced tariffs for low-income families: more consistent application to shield the poor from price increases. Costs of subsidies will be significant in the future, so proposals for a new subsidy mechanism should be carefully assessed as part of local government fiscal review (170-1) **Electricity subsidies**: for those who cannot afford access (45)
Subject to costs, South Africa could aim for at least 90 percent grid connection by 2030, with alternative off-grid options offered to the remaining households for whom a connection is impractical. (63, 171)

- **Rural options:** As part of the National Electrification Programme, the Department of Energy should address the delivery backlog in dispersed rural settlements by expanding the use of renewable energy in off-grid electrification. (205) (232)

- **Develop integrated programmes to tackle energy poverty by** building on research done since the 1990s around household energy use. Even poor households with access to electricity can afford to use only modest amounts and rely on other sources such as paraffin, gas and fuel wood. An integrated programme could include sustainable production of fuel wood and its safe combustion in efficient stoves in rural areas. (171)

**NCCRP Implementation Activities**

**The Water Conservation and Demand Management Flagship Programme:** (31) The accelerated provision of rainwater harvesting tanks in rural and low-income settlements will also form part of this programme. (31)

**NSSD Implementation Activities**

**Ensure universal access to basic and community services** (29)

- Integration of service provision requirements, including bulk infrastructure, into development planning process

- Provision of free minimum services to be combined with demand management for water and electricity (29)

**Access to basic services and provision of human rights – housing**

**NDP Implementation Activities**

**Need to properly locate and plan settlements:** improve access to adequate and affordable services (Ch 8)

- Strong measures to prevent further development of housing in marginal places (47)

- **Responsibility for housing should shift to the level at which planning is executed: the municipal level.** The plan sets out recommendations for effective urban development. (45)

- The existing system can be improved, with clarification of responsibilities in the areas of housing, water, sanitation, electricity and public transport. Large cities should be given greater fiscal and political powers to coordinate human settlement upgrading, transport and spatial planning. In other areas, regional utilities could provide services on behalf of less well resourced municipalities (led locally to avoid undermining accountability) (56)

- **Public participation:** A national discussion is required on the future funding of housing in South Africa, and on the respective roles of the state, the private sector and individual households in providing housing and creating integrated and sustainable human settlements. (270)
- Communities should be consulted on housing and business developments in their locale and their inputs on the spatial planning of the physical environment, safety designs and layout of these projects should be solicited. (404)

- New ghetto formation should be avoided by promoting a mix of race and income groups in new housing developments. (286)

**Urban densification:**

- Urban sprawl should be contained and possibly, reversed as denser forms of development are more efficient in terms of land usage, infrastructure cost and environmental protection. A pragmatic approach is required to ensure that the raised cost of land and housing associated with increased densities does not burden the poor. (258) **Urban densification:** Promote mixed housing strategies and more compact urban development to help people access public spaces and facilities, state agencies, and work and business opportunities. (28)

- A pragmatic approach is required to ensure that the raised cost of land and housing associated with increased densities does not burden the poor. See: This may require implementing inclusionary housing policies, using state-owned land for affordable housing and introducing land value-capture instruments. (285)

- Improved spatial planning that links high-density areas to public transport networks: Strengthen the link between public transportation and land-use management with the introduction of incentives and regulations to support compact mixed-use development within walking distance of transit stops, and high-density developments along transit routes. (286)

**Enhance existing national programme for upgrade of informal settlements** (289)

**Implementing inclusionary housing policies** (285)

- The process initiated in 2007 to produce an inclusionary housing act needs to be concluded. (293) (footnote 27)

- Emphasis on increased social housing delivery and inducements on affordable rental; (269)

- Encouraging a holistic approach to low-cost housing developments that include local recreational facilities, retail opportunities, as well as community, social, and health services. (203)

- Where housing is provided, greater emphasis should be on rental housing as many individuals do not settle permanently in towns and cities, or require interim accommodation before they do so. (284)

**Using state-owned land for affordable housing** (285) unlocking well-located land, especially state-owned, for affordable housing; (269) Introducing land value-capture instruments. (285)

**Changing the role of the state from direct housing provider to facilitator through infrastructure and services:**

- The state should gradually shift its role from a direct housing provider of last resort to a housing facilitator ensuring adequate shelter and greater access to a wider choice of housing options. (284)
- The state should ensure optimal settlement performances by developing public goods through investment in public transport, other economic and social infrastructure, quality public spaces and jobs. (284)
- The housing programme must be aligned with other public investments in transforming the form and functioning of towns and cities. It should ensure overall growth of the property market and a more equitable distribution of its value. (285)

Strengthen municipal planning and spatial development capacities

- IDPs translated into spatial contracts that are binding (286-289)
- Actively support development of plans that cross municipal, and even provincial boundaries (collaboration in other fields e.g. biodiversity protection and tourism) (286-289)
- Tools developed to enable municipalities to redress past segregation (286-289)
- Retool instruments of land-use management (zoning and fiscal instruments) (286-289)
- Strengthen link between public transportation and land-use management (286-289)
- Strengthen the enforcement of local planning and building control (286)

Improving mechanisms for financing lower end of housing (269)

- Urgently review existing grant and subsidy regime for housing (47, 287) to ensure that the instruments used are aligned with positive changes in human settlement policy. (47)
  - Conduct a comprehensive review of the grant and subsidy regime for housing with a view to ensure diversity in product and finance options that would allow for more household choice and greater spatial mix and flexibility. This should include a focused strategy on the housing gap market, involving banks, subsidies and employer housing schemes. (66)
  - Diversity in product and finance options (287)
  - State-funding does not support non-strategic housing (287)
  - Prioritise development in inner cities and other areas of economic opportunity (287)
  - Housing provision supports livelihood production and job creation (287)
  - Progressively shifting state support from only providing top structures to investing in public space and public infra (287)
  - Support growth of housing delivery in gap market: address affordability constraints and reduce cost of products (287)
  - Recognise that funding issues often constrain municipalities from taking bold steps to achieve spatial restructuring. Integrate flow of funding into a consolidated national spatial restructuring fund (288)
  - Support municipalities to develop capital and operational financing strategies to allow them to provide the bulk and link infra for large developments (287)

- In part the solution may come from a more innovative application of the instruments available by provincial and local governments, but there is a need for new instruments that will incentivise and complement investment by households, such as housing vouchers that are not spatially tied as well as a need to reorient funding towards public infrastructure and public environments. (272)

- Territorial plans of this nature would work best in South Africa if they are supported by a spatial fund that can direct support to specific areas to address specific spatial objectives. The development of such a fund would need to be part of a process that interrogates the
fragmented fiscal arrangements for spatial development in housing, infrastructure and neighbourhood development. (279)

- Special incentives and subsidies should be designed to make affordable, large-scale high density housing possible in inner cities, on well-located land parcels, taking into account property markets. (285)

- Mechanisms to increase private finance in bottom end of housing market (269)
  o Leveraging private sector funding: providing increased levels of finance to lower end of market + investments linked to well-located areas (287)
  o Incentivise private housing developments to include a proportion of affordable housing (287)
  o Focused partnerships with the private sector to bridge the housing gap market. (47)

Introduce mechanisms to make land markets work more effectively for poor (287)

- Clear strategies and budgets to open up well-located land + identify informal settlements for possible upgrade (287)
- Ensure all state-funded houses have clear property rights (title deed or clear rental agreement) (287)
- Review 8 year sales restriction on state-provided houses to find correct balance between property rights and greater flexibility and locational choice (288)

Urgent and comprehensive review of national planning system (290) Improved spatial planning and coordination (290)

Creation of national observatory for spatial data assembly and analysis (291)

Introduce spatial compacts from neighbourhood to city level (291)

Develop skills in housing, urban design and spatial planning

- Universities and technical colleges should develop courses to promote urban design that will take account of safety in future housing developments and carry out corrective designs in established housing developments. (404)
- Support citizen training in spatial competencies (291)
- Develop a capability framework for spatial governance (291)

NSSD Implementation Activities

Upgrading of 400 000 households in well-located informal settlements with access to basic services and secure tenure (approximately 2 700 informal settlements are in good locations, i.e. located close to metropolitan areas and basic services, have high densities and, in 2008, housed approximately 1.2 million households) (15)

Improve the quality of housing and other structures to optimise resource efficiency (energy, water, building materials, etc.) (29)

Strengthening the People’s Housing Process (29)
**Have city-wide public transport systems in place by 2020** (32-33)

**Develop and support quality housing projects/programmes** including building community self-sufficient farming strategies, indigenous knowledge, the sustainable production of herbs and traditional medicine, and businesses to secure societal equity and cohesion. (7)

*x Access to basic services and provision of human rights – health*

NDP Implementation Activities

**Phase in national health insurance**, with a focus on upgrading public health facilities, producing more health professionals and reducing the relative cost of private health care. (34) Implement the scheme in a phased manner, focusing on:

- Improving quality of care in public facilities (69)
- Reducing the relative cost of private medical care (69)
- Increasing the number of medical professionals (69)
- Introducing a patient record system and supporting information technology systems. (69)

- **Evolution towards NHI** (339): universal coverage: progressive inclusion of private providers into publicly funded system (Green Paper on NHI: 14-15 years). Focus: strengthening public health services (national health service-type system) + substantial cross-subsidisation in early decades (high unemployment and income inequality) (339)

- Support Green Paper on NHI + continued investigation of most appropriate mechanisms. Start by improving public system: audit facilities and set appropriate standards. (342)

- By 2030, the health system should provide quality care to all, free at the point of service, or paid for by publicly provided or privately funded insurance. The primary and district health system should provide universal access, with a focus on prevention, education, disease management and treatment. Hospitals should be effective and efficient, providing quality secondary and tertiary care for those who need it. More health professionals should be on hand, especially in poorer communities. (51)

- District-based approach to primary health care (pilot phase of NHI): more personnel (+ professionals and paramedics); new management authority, strengthened statutory structures for community representation (52)

- **Strengthen primary health-care services and broaden district-based health programmes**, such as the community health worker and midwife programmes, and health education. (28)

- **Universal health care coverage**: Everyone must have access to an equal standard of care, regardless of their income. A common fund should enable equitable access to health care, regardless of what people can afford or how frequently they need to use a service. (334)

*Financing universal healthcare coverage (Priority 5)*: (338-345)

**Build human resources in the health sector** (68-69), Improve human resources in the health sector (345-348):
- Accelerate the production of community health specialist in the five main specialist areas (medicine, surgery, including anaesthetics, obstetrics, paediatrics, and psychiatry) and train more nurses. (68)
- Recruit, train and deploy 700 000 community health workers to implement community-based primary health care. (69) Community-based health care (Thailand, Brazil, Bangladesh and Rwanda);
- Deploy primary healthcare teams provide care to families and communities. (68)
- Appropriately skilled nurses; increased investment in health personnel development
- Review management positions and appointments and strengthen accountability mechanisms (348-349)
- Equip health personnel to lead intersectoral development
- Strengthen human resources management
- Collaborate with traditional healers
- Volunteers should be deployed to at-risk schools, health clinics, pension- and grant-payment points, taxi ranks, parking spaces, open fields, areas with poor street lighting or public congestion, and generally unsafe areas. (405) – safety may affect access

**Complete health system reforms:** (334) Strengthen the health system (336-337): leadership and management; accountability to users; additional capacity and expertise; quality control

- Integrate the different parts of the health system. (334)
- Develop an information system for managing diseases. (334) **Improve health information systems** (337-338)
- Separate policy-making from oversight and operations. (334)
- Decentralise authority and devolve administration to the lowest levels. Rationalise clinical processes and systematise the use of data, incorporating community health, prevention and environmental concerns. (334)
- Address infra backlogs, including making more use of ICT (334)
- Ensure that primary health care teams are established throughout the country with the required number of doctors, specialists, physicians and nurses. (334)
- Bring in additional capacity and expertise to strengthen health system at the district level; implement a national health information system to ensure that all parts of the system have the required information to effectively achieve their responsibilities; put in place a human resource strategy with national norms and standards for staffing, linked to a package of care; determine minimum qualifications for hospital managers. (69)
- **Better patient information systems:** supporting decentralised and home-based care models (52)
- DOH has recently launched programme to evaluate management competence + complementary reforms: greater delegation of authority over staffing, shift structures and routine procurement (52)
Reduce inefficiencies to control costs (private sector): review Health Profession’s Council that bars hospitals from employing doctors. (Doctors operate privately in hospitals and thus generate demand for beds, which leads to over-servicing and increases costs). (342)

A nutrition intervention programme for pregnant women and young children (30,43) The Department of Health should design and pilot.

Prevent and reduce the disease burden and promote health (68, 338)

- Prevent and control epidemic burdens through deterring and treating HIV/AIDS, new epidemics and alcohol abuse; (69)
- improve the allocation of resources and the availability of health personnel in the public sector; (69)
- and improve the quality of care, operational efficiency, health worker morale and leadership and innovation. (69)
- Address the social determinants that affect health and disease (335-336): collaboration across sectors; promote healthy diets and physical activity.

Implementing and monitoring health and safety regulations (134)

NCCRP Implementation Activities

South Africa will integrate climate change considerations into health sector plans to: (19-20)

- Recognising that the nutritional status of individuals is key to building resilience to environmental health threats, ensure that food security and sound nutritional policies form part of an integrated approach to health adaptation strategies. (19)
- Develop and roll-out public awareness campaigns on the health risks of high temperatures and appropriate responses including improved ventilation and promotion of behaviours that minimize exposure to high temperatures, namely “avoidance behavior” (19-20)
- Design and implement “Heat-Health” action plans including plans in respect of emergency medical services, improved climate-sensitive disease surveillance and control, safe water and improved sanitation. (19-20)
- Strengthen the awareness programme on malaria and cholera outbreaks. (20)

Access to basic services and provision of human rights – internet access

NDP Implementation Activities

Change the regulatory framework to ensure that internet broadband capacity improves, prices fall significantly and access improves (64)

- Make high-speed broadband internet universally available at competitive prices. (34) The high domestic cost of broadband internet connectivity is a major hindrance. All South Africans should be able to acquire and use knowledge effectively. To this end, the institutional arrangements to manage the information, communications and technology (ICT) environment need to be better structured to ensure that South Africa does not fall victim to a “digital divide”. (33)

Establish a national, regional and municipal fibre-optic network to provide the backbone for broadband access (64)
It’s the Economy, Stupid - NBI and KPMG Green Economy Research Phase Report

- driven by private investment (64)
- complemented by public funds required to meet social objectives (64)

In future, the state’s primary role in the ICT sector will be to facilitate competition and private investment, to ensure effective regulation where market failure is apparent, and to intervene directly to meet specific social goals. Direct involvement will be limited to interventions to ensure universal access and to help marginalised communities develop the capacity to use ICTs effectively. (191)

- Stimulate demand by promoting e-literacy: ICT rebates and incentives + health and education apps + supply-side infra and institutions

**Improve educational outcomes – Basic Education**

**NDP Implementation Activities**

**Universal access to 2 years of Early Childhood Development** (30, 43, 66)
- Extend early childhood development services for children under five. (28)
- Broaden the definition of early childhood development, taking into account all the development needs of a child. Use the expanded definition as the basis for all strategies. (301)
- Design and implement a nutrition programme for pregnant women and young children, followed by a childhood development and care programme for all children under the age of 3 (67) Proper nutrition and diet, especially for children under three, are essential for sound physical and mental development. The Commission makes recommendations on child nutrition, helping parents and families to break the cycle of poverty, and providing the best preparation for young children including a proposal that every child should have at least two years of preschool education. (49)
- Increase state funding and support to ensure universal access to two years of early childhood development exposure before grade 1. (67)
- Address the coordination weaknesses between the different sectors and departments responsible for early childhood development services in order to strengthen collaboration. The Commission will work with the respective departments to find a solution to the perennial coordination challenge in the delivery of early childhood development services. (301)
- Standardise the guidelines, norms and standards for early childhood development programmes. The Department of Basic Education has a set of guidelines for the planning of public schools, which also sets out requirements for Grade R facilities. (301)
- The Department of Social Development published regulations in 2009 that set out national norms and standards for drop-in centres in terms of the Children’s Act of 2005. These guidelines, norms and standards must be standardised and should take into account the needs of children with disabilities in all communities.
- Encourage innovation in the way early childhood development services are delivered. Home and community-based early childhood development interventions should be piloted in selected districts.

- Invest in training early childhood development practitioners, upgrading their qualifications and developing clear career paths.

- Provide governmental support for training, resource and other intermediary agencies so that they can support community-based programmes. (301)

- Define and phase in a comprehensive package of services for all young children. (300)

Make 2 years of quality preschool enrolment for 4 and 5 year olds compulsory before Grade 1. (301)

Develop School infrastructure: (303)

- High speed broadband readily available: greater use of technology and enhance experience for teachers and students (303)

- Explore use of mobile devices, phones and tablets for distributing learning content (303)

- We propose a campaign to improve infrastructure in poor schools, especially in rural areas. (50)

Develop school leadership skills and attract competent school principles (50)

- The common feature of all well-run schools is leadership. The Department of Basic Education has recently launched a programme to measure the competencies of principals and deputy principals. This survey will also help identify weak performers, based on learner scores, and allow for appropriate support for principals and teachers. Principals should be selected purely on merit, be given greater powers over school management and be held accountable for performance. (50)

- Change the appointment process to ensure that competent individuals are attracted to become school principals. (67)

- Candidates should undergo a competency assessment to determine their suitability and identify the areas in which they would need development and support. (67)

- Eliminate union influence in promoting or appointing principals. The Department of Basic Education and provincial departments of education must ensure that human resources management capacity is improved and recruitment undertaken correctly. (67)

- Implement an entry level qualification for principals. (67)

- Districts should help to develop the leadership and management capacity of principals and heads of departments. At a minimum, this development should cover training in the key responsibilities of principals and members of school senior management teams. (314-5)

- Proposals for improving school management: (309)

  - Appropriately qualified and competent principals: appointment process; vs union involvement; entry qualification
Develop and attract teaching skills

- **More and better qualified teachers**: 160 000 more teachers to reduce class sizes: Integrated Strategic Planning Framework for Teacher Education and Development in South Africa (2011-2025) and foreign recruitment: 7 year work permits for foreign SA university graduates (306)

- **Develop teachers’ skills and commitment**: (307)
  - Lesson structure and delivery: assistance (302)
  - Subject knowledge and method training (302)
  - Teachers identify areas of own need and approach department for training (fully subsidized by government) (302)
  - Points to meeting continuing Professional Teacher Development requirements of SACE (308) Continuing development and promotion of professional standards (SACE).
  - Promotion of professional standards (302)
  - Recognition of efforts and professionalism (302)
  - Bursary programme – new and existing teachers: attract, invest, retain Retain and attract new teachers: bursary programmes and pay structure (302)
  - Remove entry difficulties for teachers who have left; are foreign; are professionals from other sectors (307)
  - **Expand Funza Lushaka bursary scheme**: (67, 307) Strengthen and expand Funza Lushaka and ensure that graduates of the programme are immediately absorbed into schools. It should not be left to graduates to find placements in schools. (67)
  - Expose to use of technology (302)
  - Teacher development should include training on curriculum pacing and the subject content that teachers find difficult to teach. Given the large numbers of teachers, ICT should be used as one of the ways of delivering teacher development. (314-5)
  - Professional certification – tests for new teachers and 5 year renewable. (307) Newly qualified teachers would need to demonstrate certain competencies before they are employed in schools, and after that they would be offered preliminary or probationary certification, to be finalised based on demonstrated competence. The professional certification of all teachers would need to be renewed periodically. (67)

- **Professional associations**: (308) Support and provide updates
- **Teacher unions**: (308) Sponsor advanced studies for union leaders: constructive partnership, Assist with union capability development
- **Remuneration**: (308-9)
  - Change pay structure (bursaries not enough) vs flat wage: qualifications, experience, skills scarcity (subjects and areas)
- Link pay structure to career paths and reward good teachers
- Teacher remuneration linked to performance (302)

**Learner’s home language: used for longer in foundation phase** + English introduced earlier
(training and support materials for teachers and learners to facilitate transition to English as primary medium of instruction) (304)

**Improve career guidance in senior phase of primary school learners** aware of further education opportunities and make informed decisions and programmes to expose them to careers (will help reduce drop-outs if this is central to the curriculum) (304)

**Ensure that districts have the capacity to support curriculum delivery.** Each district should have a team that ensures that each school has the required material and the knowledge and skills to use it. (314-5)

**Different stakeholders should collaborate under a single national initiative to pool resources.** Many international donors, private companies, corporate foundations, charitable organisations, NGOs, faith-based organisations and individuals have initiatives under way or are willing to be part of a national initiative. The national initiative should provide a framework that gives direction to these individual efforts. (314-5)

- Work with communities to address socioeconomic factors like nutrition and safety that impact on learning. (314-5)

**Construct a results-oriented framework, with results oriented mutual accountability** (311)

- Provide all stakeholders with clear information on accountability measures
- Each school has plan for ANAs
- Reliable measures – externally administered and marked
- Community ownership
- Additional support to governing bodies and clear legal mandate
- Develop a strong sense of community ownership e.g. nutrition programme
- Introduce incentive schemes linked to the annual national assessments to reward schools for consistent improvements. (67)
  - Top performing schools in the public and private sectors must be recognised as national assets. They should be supported and not saddled with unnecessary burdens. (67) Issue of linking learner performance to remuneration (other factors) therefore this is directed at schools not teachers
  - Reward continuous improvements – Annual National Assessment (ANAs). 3 consecutive years to qualify (309)
NCCRP Implementation Activities

Mainstream climate change knowledge into education and training curricula. Reorient society towards social, economic, ecological sustainability (45). Ensure that a holistic understanding of climate change and related issues (specifically the required response to climate change) is included in all relevant aspects of formal education curricula. This will prepare future generations for a rapidly changing planet and the transition to a lower-carbon society and economy. (45)

Improve educational outcomes – Tertiary Education

NDP Implementation Activities

Strengthen and expand the FET college system with a focus on improving quality. Better quality will build confidence in the college sector and attract more learners. The recommended participation rate of 25 percent would accommodate about 1.25 million enrolments. (30)

- Support the development of specialized programmes in universities focusing on training college lecturers and provide funding for universities to conduct research on the vocational education sector. (30)

- Build the capacity of FET institutions to become the preferred institutions for vocational education and training. Learners should be able to choose the vocational pathway before completing Grade 12. Expand the geographical spread of FET institutions. (30)

- Build a strong relationship between the college sector and industry. SETAs have a crucial role in building relationships between education institutions and the employers. (67-8) Industry should play a significant role in college curriculum development and provide opportunities for practical training. Through this partnership, the college sector will also be able to determine what skills are needed in the labour market.

- Provide funding certainty to ensure that colleges employ staff and give them job security. This will ensure that colleges attract and retain skilled and experienced college staff.

- There should be programmes to upgrade the skills of college lecturers, in partnership with industry. Industry experts should be encouraged and incentivised to spend time teaching in colleges, and college lecturers should be encouraged to spend time in the workplace updating their knowledge and skills. College teaching should be made attractive to good lecturers and students. (324)

Providing funding and bridging for university students from disadvantaged backgrounds

- Provide full funding assistance covering tuition, books, accommodation and living allowance to students from poor families. (30)

- Provide an option of a four-year university degree, combined with bridging courses and more support for universities to help students from disadvantaged backgrounds. (66)

- Provide all students who qualify for the National Student Financial Aid Scheme with access to full funding through loans and bursaries to cover the costs of tuition, books, accommodation and other living expenses. Students who do not qualify should have access to bank loans, backed by state sureties. Both the National Student Financial Aid Scheme and
bank loans should be recovered through arrangements with the South African Revenue Service. Service-linked scholarships should be available in areas such as nursing, teaching and social work. (66,68,325) Both the National Student Financial Aid Scheme and bank loans should be recovered through arrangements with the South African Revenue Service. Service-linked scholarships should be available in areas such as nursing, teaching and social work. (325)

- Consider extending the National Student Financial Aid Scheme to qualifying students in registered private colleges as an incentive for private sector expansion. (325)

- Offer extra support to underprepared learners to help them cope with the demands of higher education. Many individuals with poor schooling aspire to higher qualifications, but they are academically less prepared than their middle class counterparts. Support programmes should be offered and funded at all institutions. (319-20)

**Development of university lecturers and academics**

- Implement a National Programme to develop the Next Generation of Academics for South African Higher Education. (66) Improve the qualifications of higher education academic staff. South Africa needs to increase the percentage of PhD qualified staff in the higher education sector from the current 34 percent to over 75 percent by 2030. Higher Education South Africa (HESA) has developed a detailed proposal for a National Programme to develop the Next Generation of Academics for South African Higher Education. The proposal seeks to address the challenge of developing future academics and deserves to be implemented. (319-20)

- Relax immigration requirements for highly skilled science and mathematics teachers, technicians and researchers. All graduates from foreign countries should be granted 7-year work permits. (68)

- Improve the quality of teaching and learning. University lecturers should be recognised teachers. (319-20)

**Develop university infrastructure**

- Expand the infrastructure of existing institutions and complete the construction of two new universities in Mpumalanga and the Northern Cape; new medical schools in Limpopo and a number of academic hospitals; (66)

- University enrolments have almost doubled since 1994 and infrastructure has not kept up. This has a major impact on the quality of teaching and learning. Student accommodation in universities needs urgent attention. (319-20)

- Develop uniform standards for infrastructure and equipment to support learning (319-20)

**Expand access to tertiary education**

- Expand the infrastructure of existing institutions and allow all universities to use of distance education to reach more learners. (66) Identify an appropriate role for distance education in the college sector and develop a policy framework to guide institutions in developing distance education. (321-2) Expand the use of distance education. The advances in ICT can help overcome the infrastructure limits to further expansion of higher education. Upfront
investment is needed in technology, curriculum design, quality assurance and monitoring. The Department of Higher Education and Training has published a draft policy statement intended to provide a framework for expanding the use of distance education in higher education. The Commission supports this initiative. (319-20)

- Undertake a careful analysis of all further education and training colleges, other colleges and public adult learning centres to determine gaps in the post-school institutional network. Not all institutions can or should offer all types of training. A differentiated system is needed. Where there are gaps, new institutional types should be established. (321-2)

- Develop and support a coordinated system for providing a diverse range of further education and training opportunities, through a range of state and private providers. The starting point must be strengthening existing institutions, with a focus on the college sector, public adult learning centres and technical high schools. (321-2)

International exchange partnerships should be pursued and encouraged. (319-20)

Provide performance-based grants to build capacity and develop centres or networks of excellence within and across institutions. Given that performance-based grants, can entrench historical privilege and disadvantage, capacity-building grants should be provided with clear targets for improvement in five-year intervals. (319-20)

Ensuring quality and standards of tertiary education

- Ensure that learners doing similar programmes in different institutions receive a comparable education (319-20)

- Private providers will continue to be important partners in the delivery of education and training at all levels. Ensuring the quality of private provision requires enabling regulation, quality assurance, and monitoring and evaluation of programmes. (319-20)

- Supporting institutions in chronic distress: (325) The Department of Higher Education and Training should identify institutions that are in on-going crisis despite earlier interventions. Dedicated support should be provided for comprehensive renewal plans over five years. The plans should identify a viable and sustainable academic path for the institution, with an appropriate programme and qualification mix. If measurable progress towards achieving the objectives is not evident after five years, consideration should be given to reviewing the status of the institution.

- As the quality assurance and monitoring system matures, greater emphasis should be placed on incentivising graduate output. Such a shift would be in line with the international trend towards greater emphasis on output-based funding. The Department of Higher Education and Training would have to address the risk of discouraging universities from taking students from deprived backgrounds. (325)

Improve educational outcomes – Workplace-based and Adult Education

See Job Creation for Workplace-based activities
NDP Implementation Activities

The Department of Higher Education and Training proposes establishing Community Education and Training Centres which incorporate and transform the current public adult learning centres. The Commission welcomes this proposal. Community Education and Training Centres will contribute to creating alternative education and training pathways. The current public adult learning centres should be transformed into Community Education and Training Centres that offer a variety of courses ranging from adult basic education to secondary and non-formal education. Community Education and Training Centres, like all post-school institutions, must have a clear identity and purpose. (321-22) Provide 1 million learning opportunities through Community Education and Training Centres (30)

Workplace training providers as part of the education system (297)

The Kha Ri Gude Mass Literacy Campaign run by the Department of Basic Education caters for adult literacy learners and has been very successful. There is a need for relevant programmes and qualification for adults many of whom are Kha Ri Gude graduates. (322)

Redress measures in the workplace should focus on enterprise development, access to training, career mobility and mentoring. (36)

Short-term solutions, such as overpaying for scarce skills, are counterproductive to the long-term development of both the individual and the company. The government may need to review the present incentive structure embodied in the Skills Development Act to ensure higher spending on staff development. (138,467)

Reduce Income Inequality

NDP Implementation Activities

Develop proposals for an acceptable minimum standard of living and proposals on how to achieve this over time. (61) Commit to minimum standard of living: social floor: allowing all to meaningfully participate in the economy.

Strengthening the social wage to raise living standards of those out of work or in low paying jobs. (115)

Monitoring compliance to statutory sectoral minimum wages (134)

Wage determination in private sector: (132)

- fair; affordable; social floor

Create tenure security for communal farmers, especially women: investigate different forms of financing and vesting of property rights to land reform beneficiaries that doesn’t hamper them with high debt burden (65)

Lowering cost of living: (109)

- For poor (109) (116)
- For low-income and working class (40)
- Addresses overarching goals of eliminating poverty and reducing inequality
- Reduce costs of: food, commuter transport, housing

NGP Implementation Activities

Greater utilisation of the mineral resource base of the country for developmental purposes, potentially through a sovereign wealth fund (30)

A broad development pact on wages, prices and executive bonuses, based on agreements:
- On wages, to moderate wage settlements for workers earning between R3000 and R20 000 a month, possibly to inflation plus a modest real increase, with inflation-level increases for those earning over R20 000 a month.
- On bonuses, prices and employment, to cap pay and bonuses for senior managers and executives earning over R550 000 a year; to moderate price increases, especially on inputs and wage goods; and to ensure that wage moderation and measures to support competitiveness lead to a measurable increase in employment creation.
- As government, (i) to maintain the real value of social grants and improve the “social wage” in poor communities, including housing, healthcare and education, (ii) to reduce wage inequalities through efforts to improve pay, conditions and organisation for vulnerable workers (including those earning below the threshold set out above), and (iii) to ensure any increases in industrial financing creates large-scale employment.

To improve levels of private savings in the economy and to respond to an initiative of organised labour, government will build on existing progress in discussions with both social partners to conclude a comprehensive social security system. Personal savings will be improved through proposed changes in the structure and regulation of retirement funds, including affordable compulsory membership for all employees. In addition, rules to limit withdrawals from contractual savings during a member’s working life, linked to increased investment in DFIs to finance employment-creating projects, will be pursued. (58)

NSSD Implementation Activities

Gini coefficient (reduce income inequality) [2008: 0.66]
Job creation

*Increase the number of available jobs - Economic Growth*

Note the economic growth category here is limited to those economic growth initiatives that are specifically mentioned in the context of job creation. See ‘Economic Growth’ principle for broader coverage.

**NDP Implementation activities**

Broaden the expanded public works programme to cover 2 million fulltime equivalent jobs by 2020. (61)

- **EPWP** should be targeted at low skilled adults who are unemployed—the programme serves as unemployment assistance and protects this group from the risk associated with job losses or long term unemployment. (3)

- Rapid expansion of PEPs (Public Employment Programmes) (157)

- Extend the non-state-sector Expanded Public Works Programme’s employment incentive, aimed at increasing employment in non-profit organisations. (134)

- **Expand PEPs to 1 million by 2015 and 2 million by 2020** (28) (53) (61) + as number of formal and informal sector jobs increase, PWPs can be scaled down (28) Expanded with a specific focus on *youth* and *women* (43)

- Department of Arts and Culture: *employment of graduates as facilitators for clusters of schools* (153)

- **Special Employment Programmes**: focus on persons with disability (sic.) + training (280=380)

- **CWHs (Community Health Workers)**: in addition to making health care more accessible and equitable, this primary health care system will create more jobs and thus indirectly improve health by reducing the prevalence and depth of poverty (346)

Creating jobs through *increased economic activity in Maputo and along the corridor*, with the ability to shift to higher value-added industry sectors (246)

The *development of environmentally sustainable green products and services*, including renewable energy technologies, will contribute to the creation of jobs in niche markets where SA has/can develop a competitive advantage (197):

- Domestic manufacturing of renewable energy technologies (199)
- New high quality job opportunities (216)
- Shale gas: job creation potential (212)
- Northern Cape: solar and wind energy (281)

**SMMEs will be stimulated through**: (140) Public and private procurement, Improved access to debt and equity finance, Simplified regulatory environment (140) Create a *job investment fund* targeted at investing in small, micro and medium enterprise development. There are already discussions on this with the PIC (372 pp)
- **Strengthened financial services to bring down their cost and improve access** for small- and medium-sized businesses. (40)

- **A commitment to public and private procurement approaches that stimulate domestic industry and job creation.** (40)

- Reduced cost of regulatory compliance, coupled with support for SMME’s: **review regulations and standards for SMME’s** (40)

- **Public and private procurement** (142-3) Leverage the Local Procurement Accord to promote stronger buyer-supplier relations and deeper localisation to support small business development

- Implement **commitments to 30-day payments to smaller suppliers** (142-3)

- Make government procurement opportunities more accessible to small businesses, streamline tender processes, improve transparency and get rid of corruption (142-3)

- Simplify the regulatory environment. The first step would be to appoint an expert panel to prepare a comprehensive regulatory review for small- and medium-sized companies to assess whether special conditions are required. This includes regulations in relation to business registration, tax, labour and local government. Regulatory Impact Assessments will be done on new regulations. (143)

- **Examine a role for the state in easing access to finance by start-ups and emerging businesses.** The government and the private sector should collaborate in creating financial instruments for small, medium and micro enterprises. A risk-sharing agreement should be created as start-ups are particularly in need of financial support and are least able to access it. (143)

- **Explore the role of venture capital** (143)

- **Reform mandates and operations of DFI’s:** Urgently consider measures to reform the mandates and operations of development finance institutions in line with initiatives already being undertaken, and upgrade the skills of those providing business advice and services.

- Build research capacity to address the paucity of data currently available on small businesses and scale up public communication on available opportunities.

- **Consolidate and strengthen small business support services** (143-4). Action has already been taken to create a unified small business service delivery agency. Public-private partnership can be considered, where the private sector is incentivised to provide small businesses with support, with increased payment contingent on success.

- **Support and grow franchising associations and get involved in commercialising models of this nature.** Franchising has been globally successful in reducing risk and failure rate. (143-4)

- **Public-private partnership can be considered,** where the private sector is incentivised to provide small businesses with support, with increased payment contingent on success. (143-4)

- The public sector should establish programmes run by well-trained ex-entrepreneurs who have first-hand experience of the sector; (143-4)
- The government should incentivise the private sector through tax breaks to set up mentoring programmes;

- Established small enterprises should be offered wage subsidies to take on apprentices and to offer youth placements. (143-4)

- Increase credit access – especially for those with a proven track record of successful entrepreneurship (141)

Community-based house building (innovative local inputs) (122) Expand public funding for alternative types of low-income housing that would generate more demand directly and in supplier industries. (149)

NGP Implementation activities

Government spending initiatives:

- Maintain infrastructure spending plans (71) Substantial public investment in infrastructure both to create employment directly, in construction, operation and maintenance as well as the production of inputs, and indirectly by improving efficiency across the economy

- Encourage state procurement from and service delivery through organisations in the social economy (75)

- New youth employment scheme to complement existing EPWP and CWP; (75)

- Substantial expansion in CWP (75) Explore possibility of expanding CWP to poorest 40% of wards. Expanded CWP in rural areas (76)

- Public works to drive environmental programmes, including recycling and community cleaning; (74) Construction, operations and maintenance of new enviro friendly infra (31) Additional jobs: expand existing public employment schemes to protect enviro: e.g. biofuel production (31)

- Support for Square Kilometre Array (74)

Localisation and domestic production of inputs:

- Increase local procurement through capacity development and regulatory change (Infrastructure) (71) to maximise multiplier effect (28)

- Strategies to encourage domestic production of inputs, starting with solar water heaters (74)(32)

Growth sectors identified:

- Pursue existing plans for aquaculture, fisheries and agro-processing; (72-3)

- Reduce delays in water licensing and EIAs for forestry; (72-3)

- New Tourism Sector Strategy to benchmark pricing, extend quality assurance and address logistics; (72-3)

- EDD, dti and DAC to develop comprehensive proposal to support employment growth in cultural industries, including crafts, film, music and drama (72-3)
- Comprehensive support for energy efficiency and use of renewable energy; (74) IRP to identify options for renewable energy generation, with appropriate regulatory changes to follow; (74) IRP2: targets for renewable energy: major new opportunities for investment and employment in manufacturing new energy technologies as well as in construction (31)

- Development of green industrial support package with IDC as champion and special measures for SMEs and co-ops; (74)

- Promote beneficiation (30) Refocusing beneficiation strategy: support fabrication (stage 4) (vs smelting and refining only: capital and energy intensive)

- High-level services: tourism and business services (29) Promote targeted tourism marketing campaigns, manage costs, quality assurance and logistics (30)

- Knowledge-intensive sectors of ICT, higher education, healthcare, mining-related tech, pharmaceuticals, biotechnology (32) sustaining development of more knowledge-intensive industries for long-run growth (30)

IPAP Implementation Activities

Special Economic Zones (SEZ) and Industrial Development (63) Designation of SEZs across the country to promote industrial development, export of value-added goods and job creation.

- 2014/15 Q1-Q4: Rollout of Saldanha Bay IDZ (SBIDZ): Infrastructure support provided within the IDZ
- 2014/15 Q1-Q4 Establish SBIDZ Board
- 2014/15 Q3: Sign MOU between the dti and Indonesia to facilitate collaboration on the establishment of Oil and Gas industry at Saldanha Bay
- 2014/15 Q1-Q4: Secure 8 Investments into Saldanha Bay IDZ within Oil & Gas and Marine Repair Cluster.

Facilitate technological upgrading within the ‘White Goods’ Industry through MCEP financial elements (pg140) The programme will seek to ensure adequate provision of industrial financing support to the industry, including the working capital to ensure plant recapitalisation and technological upgrading. Targeted funding streams will be aimed at:

- Increased productivity, product diversification and industry competitiveness;
- Expansion of production and export volumes;
- Creation and retention of new sustainable jobs.

NCCRP Implementation activities

Progress on the implementation of the nine green economy programmes (26)

- The identification of economic sectors that may provide increasing job opportunities and, where practical, sector-based strategies for migrating jobs from carbon-intensive sectors of the economy to lower-carbon sectors to offset possible climate change and climate change response-related job losses. See section 9 for details. (41)
Expanded Public Works Programme, National Youth Service, Community Works Programme and ‘Working For’ programmes

- Expanding existing poverty alleviation job creation programmes, such as the Expanded Public Works Programme and the National Youth Service. (34) Consolidation of the EPWP (31)
- Non-State Sector’s Community Works Programme (31)

Small-scale agriculture

- The appropriate use of small-scale labour intensive agriculture techniques and models could reverse the present decrease in agricultural jobs; contribute to empowerment goals; promote food security; conserve soil quality and structure; and contribute to biodiversity. (18)
- Integrate agriculture and forestry into climate-resilient rural development planning to address job creation, food security and livelihoods with a particular emphasis on building climate resilience through leveraging synergies between adaptation and mitigation. (18)

Waste-to-energy opportunities + generation, capture, conversion and/or use of methane emissions (32)

Implementation of greening legacy interventions (2010 Soccer World Cup, COP 17 flagship, major events and tourism projects) Implementation of green cities and towns, event greening and tourism (26)

NSSD Implementation activities

Manufacturing aspects of the green economy within social, economic and environmental criteria: interventions in green industries, industrial energy efficiency and the South African Renewables Initiative (SARI) (27)

Implementation of regulatory instruments to stimulate the Environmental Goods and Services (EGS) Sector (27)

Interventions to promote greater localisation and manufacturing (27)

Increase the number of available jobs - Labour Intensity of Growth

NDP Implementation activities

Promoting employment in labour-absorbing industries (119)

South Africa will find it difficult to compete with low-income economies on the basis of labour cost, unless it focuses simultaneously on lowering the cost of living and logistics costs for certain products, and considers subsidising some low-skill sectors. (128)
Create **employee retention schemes to offer short-time work during periods of low demand.** (134)

Offer a **tax incentive to employers** to reduce the initial cost of hiring young labour market entrants. (61,134)

**Mandatory targets for socioeconomic development and job creation** for all tenders above R10 million should be introduced (140) + local procurement (469)

**Home insulation and the installation of solar water heaters** are labour-intensive activities that have strong backward linkages to supplier industries. (149)

Most jobs are found in **domestically oriented services** such as retail, personal services, security, domestic work and office cleaning (BUT: productivity and wage growth lower) (112) (114) (115) (119) (151) + over 40% of all new jobs will be here (123)

**Constructing and maintaining communications network** will generate both unskilled opportunities (short to medium) – digging trenches, spanning cables (expanding networks) + skilled work (long-term): networks maintained, upgraded and refurbished (192)

**Growth in employment opportunities in the retail sector:**
- The retail sector will be encouraged to **procure goods and services aimed at stimulating local producers**, and especially small and expanding firms. (152)
- **Further investigation will be conducted on opportunities** to stimulate sustainable small-scale retail and cooperative buying, with the aim of **reducing costs** in townships and rural areas, and stimulating related employment. (152)
- South African retail operations in the region will be encouraged to supply stores with **South African products**, and also be supported to develop suppliers within the region in support of regional industrialisation objectives. (152)
- **Rising consumption** of the lower-income groups in South Africa and the region should **stimulate retail employment and demand** for supplier industries. (152)

**Information technology-enabled service exports will be promoted,** with the aim of attracting United States, United Kingdom and Indian business-process outsourcing. South Africa should become a leading provider of **information technology-enabled services** globally, with services integrated into the region. (152)

**Labour intensive agriculture**
- **Greater water use efficiency to enable the expansion of irrigated agriculture** which has a high job creation potential (179) (182)
- It is possible to raise employment in rural areas through a **rural development strategy that raises agricultural output; provides basic services; supports small farmers; broadens land ownership; and invests in water, transport and other network infrastructure.** (124)
- In areas with greater economic potential, **industries such as agro-processing, tourism, fisheries (in coastal areas) and small enterprise development should be developed with market support.** Special focus to enhance skills and capabilities of rural women entrepreneurs with access to land and finance. (219)
- Labour-intensive agriculture: areas with high growth and employment potential (222-223)
  - Citrus
  - Table and dried grapes (raisins)
  - Pecan nuts
  - Avocados
  - Vegetables
  - Mangoes
  - Bananas
  - Litchis
  - Olives
  - Macadamia nuts
  - Nectarines
  - plums, prunes
  - Apples, pears
  - Cotton
  - Sugarcane

- **Agro-processing:** (228)
  - Maize
  - Wheat
  - Sugar
  - Sunflower oil
  - Tea
  - Flour
  - Peanut butter
  - Cigarettes
  - Beer
  - Fruit juices
  - Canned goods
NGP Implementation activities:

Work with union and community investment companies to develop a Charter with commitments to job creation; (75)

Strategy to grow public-service employment to meet public needs, including lower-skilled auxiliary support; particularly in health, education and crime prevention (75) (34)

Use labour-based production methods (28)

Increased support for small-scale agriculture including community food gardens and support for marketing and service co-ops; Measures to upgrade existing smallholders through provision of infrastructure, marketing support, extension, financial services etc.; (76) (35) Programme to step up support for community gardens, including urban and peri-urban sites;

- Review land reform to ensure maximize creation of livelihoods through smallholder schemes based on stepped up integration with economic and social programmes; (72-3)
- Restructuring land reform: support smallholder schemes: comprehensive support: infra, marketing, finance, extension services (29)
- Strengthen AgriBEE support for rural coops; (72-3)
- Fast track land claims on commercial farms; (72-3) Acceleration of land claims processes and better support to new farmers following land-claims settlements (29)
- Address import pricing on farming inputs and improve logistics infrastructure; (72-3) Programmes to ensure competitive pricing of inputs, especially fertiliser (29)
- Measures to support growth in commercial farming and to help address price fluctuations in maize and wheat while supporting national food security

Setting up a state-owned mining company: co-exist with private mining sector (30)

Support for small and micro-businesses: (49)

- A one-stop and single funding agency for small and micro business established through consolidation of Khula, SAMAF and IDC funding, amongst others, to both improve access and reduce the overhead costs of government in order to make more resources available to end-users. (49)
- To fully implement government’s long-standing commitment to pay small business suppliers within 30 days, with clear consequences for non-compliance by public entities. In addition to existing measures, government will consider a policy of “name and shame” and fiscal penalties for departments that do not pay small suppliers on time. (49)
- To integrate small and micro enterprise support systematically into all sector strategies. This is critical to ensure a space for smaller enterprise in the value chains of major industries and to support the development of clusters and sectoral regulations and market institutions that meet the needs of smaller producers. (49)
- To initiate a red-tape elimination campaign to simplify regulated procedures and forms and remove any bias against smaller producers, for instance in zoning requirements, with results reported to Cabinet on a quarterly basis. (49)
To strengthen access to microfinance for small enterprises in order to bring more citizens into economic activities and thus widen the enterprise pool in the country as one key step to promote the growth of new enterprises. (49)

To address smaller businesses’ concerns about access to and the cost of space in shopping malls. (49)

**NCCRP Implementation activities**

**National Employment Vulnerability Assessment (NEVA):** establish a baseline (NEVB): to inform the prioritisation of mitigation and adaptation interventions and establish timeframes for addressing potentially vulnerable sectors (34) The NEVA will assess the impact on jobs of climate change and climate change responses by sector and location to understand what job-related interventions may be required and where they may be required + regular review

- Establish links with business and industry, research bodies, institutions, NGOs and local communities that can provide relevant data and methodologies for the establishment of the NEVB.
- Develop a cooperative governance framework for establishing the capability to assess employment vulnerability, including how to determine the cost of reducing vulnerability.

**Sector Jobs Resilience Plans (SJRPs):** Informed by sectoral work carried out by, for example the Departments of Mineral Resources, Economic Development and Trade and Industry, SJRPs will explore the synergy between mitigation and adaptation strategies and the potential for sustainable net job creation in each sector. (34) (6)

- Design a SJRP framework for a pro-jobs approach to implementing climate change response strategies. (35)
- Develop SJRPs in consultation with stakeholders from all NEDLAC constituencies. (35)
- Establish links with responsible Ministries to integrate the outcomes of the NEVA and SJRPs into their sector plans. (35)
- Establish a system to monitor jobs resilience. (35)

**NSSD Implementation Activities**

**Implementation of the recommendations of the fishing harbour study** (29)

Promotion of land stewardship and food growing programmes (urban and rural) (29)

Implementation of local tourism projects (29)

Implementation of sustainable production of traditional medicines (29)

Implementation of local waste collection/recycling initiatives (29)
Increase the number of available jobs - Existing jobs becoming available

No relevant implementation activities identified

Enhance job seekers’ suitability for jobs – Skills

NDP Implementation activities

Re Youth Unemployment - the skills development programmes can be used to target young people and encourage them to acquire additional educational qualifications and skills. A large number of the unemployed young people have less than senior secondary education level. Unless this improves, their labour market prospects will remain poor. This group should be reengaged through proper education and training programmes. (382)

- Provide training for school leavers and unemployed youth with a focus on skills development. The public sector should establish programmes run by well-trained ex-entrepreneurs who have first-hand experience of the sector; the government should incentivise the private sector through tax breaks to set up mentoring programmes; established small enterprises should be offered wage subsidies to take on apprentices and to offer youth placements. (143)

- Provide driver training for school leavers

Adopt a more open immigration approach to expand supply of high-level skills. (61) Students from abroad who graduate from South African universities should qualify for a seven-year work permit to encourage them to stay and work here. (50)

Expand the role of SOEs in training artisans and technical professionals (30)

Expand learnerships and make training vouchers directly available to job seekers (30)

Entrepreneurship skills development

- Strengthen youth science programmes and introduce new, community-based programmes to offer young people life-skills training, entrepreneurship training and opportunities to participate in community development programmes (CDPs) (30)

- Creating an enabling environment for small, micro and medium enterprises and entrepreneurs to thrive. This includes inculcating the spirit of entrepreneurship in schools, lowering the cost of doing business in the economy, and reducing barriers to entry in various value chains. (139,468-9)

- Provide skills development for students currently in school with a focus on grooming an entrepreneurial attitude. This should include reviewing the curriculum with a view to encouraging entrepreneurial thinking and creating the skills necessary for start-ups. The review should consider focusing education into technical and academic streams after grade 8, and establishing vocational and technical training for students in grades 9 and 11. (143-4)

- Promote skills development for new sectors with a focus on high-technology skills advancement. This will include improving the Further Education and Training (FET) colleges
to ensure that they are producing better-quality students with skills identified as lacking in the small enterprise sectors. (143-4)

- **Colleges should introduce entrepreneurship programmes.**
- **Provide small-business advisory and support services,** financed partly by the state. (151)

**Strengthen and expand number of FET colleges** to increase participation rate to 25% and increase graduation rate to 75% (30)

**Improve and extend skills development in the agricultural sector, including entrepreneurship training.** This should include training a new cadre of extension officers to respond to the needs of smallholding farmers and contribute to their integration into the food value chain. Farmer-to-farmer skills transfer must be encouraged to help develop a new generation of farmers. Every effort must be made to deracialise the agricultural sector. (226)

- Ensure sustainable production on transferred land by making sure that human capabilities precede land transfer through incubators, learnerships, mentoring, apprenticeships and accelerated training in agricultural sciences (226-7)
- Offer white commercial farmers and organized industry bodies the opportunity to significantly contribute to the success of black farmers through mentorships, chain integration, preferential procurement and meaningful skills transfer (226-7)

**Clarify the mission, purpose and mode of operation of the SETAs.** The current system largely excludes public providers (further education and training colleges and universities) from providing training funded by SETAs and the National Skills Fund.

- **Improve relationships between education institutions and employers.** SETAs have a crucial role in building relationships between education institutions and the employers.
- **Resolve the role of the skills development levy.**
  - A related issue is whether SETA funds can be used to fund new and potential employees or whether they are solely for the currently employed in levy-paying firms. The focus on existing employees makes it harder to build a strong relationship between SETAs and colleges and universities, which would be best placed to train potential employees.
  - Social partners at the National Economic and Labour Development Council (NEDLAC) need to debate whether the government, as a large employer, should contribute to the skills levy. (323)

**NGP Implementation activities**

**Finalise the National Skills Development Strategy** taking into account the needs emerging from the growth path. (48)

In addition, the overall supply of highly skilled labour should be increased by continued efforts to **streamline the immigration system in ways conducive to the inflow of skills,** linked to a skills
transfer programme and an on-going commitment to upgrade domestic education on a broad basis. (48)

**Improved output of relevant skills**, especially engineers, designers and artisans (72-3), Targeted skills development for new industries (74)

- **Engineers**: Target at least 30 000 additional engineers by 2014, changing subsidy formulae for universities as appropriate. Strengthen measures to ensure greater and more equitable access to science and maths education at secondary level and expand bridging programmes to tertiary courses. (46)

- **Artisans**: Target at least 50 000 additional artisans by 2015, with annual targets for state-owned enterprises. SETA s must agree to numerical targets for completed apprenticeships, with systems to track progress, particularly in construction, mining, manufacturing and new industries such as in the green economy. Apprenticeship systems must be reviewed to support broader access. (47)

- **Workplace skills**: Improve skills in every job and target 1,2 million workers for certified on-the-job skills improvement programmes annually from 2013. Every SETA should aim to facilitate and co-finance training for 10% of the workforce annually. Improve SETA performance by strengthening governance, accountability and administrative systems. SETA s must prioritise identifying and funding the main sector skill needs based on the New Growth Path. (47)

- **Further education and training (FET)** colleges have a central role in providing important middle-level skills for young people. An immediate goal is to expand enrolment at FET colleges, targeting a million students in FET colleges by 2014. To be effective, however, their graduation rates must also rise significantly. This target will require appropriate resourcing of the FET system. (47)

- **Information and communications technology (ICT) skills**: The departments of education should ensure that computer skills are taught in all secondary schools and form part of the standard adult basic education and training (ABET ) curriculum by 2015. All public servants should also receive ICT training. Achieving this aim urgently requires a plan to train educators, access relevant teaching skills elsewhere and establish computer centres for learners and communities. (48)

**Stronger co-op support agency and possibly a training academy** (33)

Development of a strategy to support social-economy organisations amongst others in obtaining marketing, bookkeeping, technological and financial services and training, and in developing linkages within the social economy to encourage learning and mutual support; (75) (33)

**IPAP Implementation Activities**

**Special Economic Zones (SEZ) and Industrial Development Capacity Building Programme (65)** SEZ-related skills and capacity development programme. Increase in the quality and quantity of skilled professionals, across the three spheres of government, required for the planning, development and management of SEZs.
- 2014/15 Q1: Planning and finalisation of logistical arrangements with the Chinese government on the training of South African officials on SEZ in China
- 2014/15 Q2: Recruitment of 30 candidates, across the country, to be trained in China on special economic zones planning, development and management
- 2014/15 Q3: Training of 30 officials in China on the planning, development and management of special economic zones

**Clothing, Textiles, Leather & Footwear Skills development programme (72)** The programme will engage with the Department of Higher Education and Training, through the Fibre Processing and Manufacturing (FPM) SETA. Further Education and Training Colleges (FETs) will be identified to undertake skills development training for the sectors, in collaboration with the National Clusters. More students will be taken through the dti-PR China training programmes, beginning with a further 30 students in the new financial year. Enhanced training and graduation of technicians, technologists, engineers, production managers and scientists for the CTLF sector.

- 2014/15 Q1-Q4: Ongoing roll-out of skills development programmes through CSIR Textiles and Clothing Centre of Excellence (TCCoE) based in Port Elizabeth, the FPM SETA, and ongoing collaboration with China in technical training programmes

**Metal Fabrication, Capital & Rail Transport Equipment - National Tooling Initiative (pg80)**

- 2014/2015 Q1: Master Toolmaker Trade Test developed
- 2014/2015 Q4: Tooling Engineer Modules and Curriculum developed
- 2014/2015 Q2: Launch of NECSA Tooling Centre of Excellence
- 2014/2015 Q3: Launch of Western Cape Tooling Centre of Excellence
- 2014/2015 Q4: 50 tooling engineering students enrolled on Level I
- 2014/2015 Q3: Launch of Tshwane Tooling Centre of Excellence
- 2014/2015 Q2: Launch of KZN Tooling Centre of Excellence
- 2015/2016 Q4: 40 tooling engineering students enrolled on Level II
- 2016/2017 Q4: dti-NTI Artisan skills development partnership programme project closeout report

**National Foundry Technology Network (80)**

- 2014/15 Q1-Q4: 15 young foundry men/women enrolled on the New Foundry Generation Forum programme aimed at developing future managers and address the aging skills challenge in the sector
- 2014/15 Q1-Q4: 250 workers trained on the formal foundry qualifications (NQF 2–4)
- 2015/16 Q1-Q4: 15 young foundry men/women enrolled on the New Foundry Generation Forum programme aimed at developing future managers and address the aging skills challenge in the sector
- 2015/16 Q1-Q4: 250 workers trained on the formal foundry qualifications (NQF 2-4)
- 2016/17 Q1-Q4: 250 workers trained on the formal foundry qualifications (NQF 4)
Agro-Processing: Development of a small-scale dry and wet milling industry (pg86) 2014/15 Q3: the dti, FoodBev Seta and the NMC to develop a milling skills programme.

Food-processing sector skills programme (87) Establishment of an apprenticeship programme that will skill and prepare the youth for participation in the food-processing labour market. Enhancing skills development amongst the youth in order to grow employment in the food-processing sub-sector.

- 2014/15 Q1: the dti, FoodBev Seta and DHE to develop a proposal for a skills programme to be implemented by food processing companies.
- 2014/15 Q2: the dti, to recruit, select youth and participating companies for the food skills programme.
- 2014/15 Q3-Q4: Implementation of the food skills programme

Forestry, Timber, Paper, Pulp and Furniture - Furniture Design Program (90) The program seeks to support skills development in the sector - especially high-level design skills - that will help address market failures, encourage specialisation and improve productivity. Improved competitiveness of the industry through higher design content in domestically produced furniture.

- 2014/15 Q1: To develop a roadmap for furniture design workshops
- 2014/15 Q2: the dti, SABS Design Institute and FPM Seta to collaborate on implementing the design workshop
- 2014/15 Q3/4: Design program rolled out in the industry

Plastics, pharmaceuticals, chemicals and cosmetics - Cosmetics Products Safety Assessment (98) In the absence of an accredited Cosmetics Safety Assessment Course, South Africa is currently unable to train the required number of scientists to become recognised safety assessors. In partnership with the Toxicology Association of South Africa (TOXA) and DST, therefore, the dti is in the process of developing a two year safety assessment course that will include a learnership programme. At the same time (in partnership with the University of Cape Town) the sector desk is facilitating the establishment of a Hair Testing and Cosmetics Testing Laboratory. This laboratory will focus on new product development, testing of hair care products and cosmetics products that are both imported and locally manufactured. Training will be offered at MSc and PhD level. To create an internationally-recognised database of locally trained and registered cosmetics toxicologists capable of routine, day-to-day testing and certification of cosmetic products, which will then become much more readily acceptable globally. Cosmetics products produced in SA will be tested and certified locally by SA toxicologists to meet EU safety standards and thereby grow the sector’s export base.

- 2014/2015: Work with University of Pretoria, TOXSA and DST to develop the two-year Safety Assessment Course; establish the Hair Testing and Cosmetics Testing Laboratory at UCT.
- 2015-2017: Two-year Safety Assessment Course commences, targeted at 75% South Africans and 25% from other African countries
**Business Process Services - Talent development for the BPS sector (103)**

The Monyetla Work-Readiness Programme™ is a dedicated sector-specific, demand driven work readiness programme which bridges the divide between unemployment and the opportunity for sustainable employment. It provides the industry with requisite skills from entry level to supervisory levels in order to position South Africa as a preferred off-shore location for BPS operations. At inception, the Programme was offered at NQF level 2. From 2013 onwards it has been offered at two additional levels - NQF level 3 (which targets entry level agents) and NQF level 4 and above (which seeks to address the shortage of higher level skills). With some adaptation, this programme could be replicated in other growth sectors with similar results. A readily available pool of labour for investors to draw upon. Improved career-pathing across the industry, providing scope for increasing the proportion of local middle and senior managers.

- 2014/15 Q2-Q4: Training of 3,000 unemployed youth at NQF Level 3.
- 2014/15 Q3: Training of 500 supervisors, team leaders and provision of other industry-specific skills.
- 2014/15 Q4: Minimum of 11% targeted for tier 2 and tier 3 towns, townships and rural areas is achieved.

**Boatbuilding and Associated Services Industry - Boatbuilding Skills Development Programme (122)**

The skills challenge in the ship/boatbuilding industry demonstrates the need to develop a specialised skills training programme aimed at addressing skills deficits across the entire value chain nationwide in support of the growth potential of the industry. The Boatbuilding Skills Development Programme seeks to establish a centralised, centrally funded, industry-driven training initiative that includes an apprenticeship system and an effective industry support mechanism, for the enhancement of the global competitiveness of the industry. Creation of a pool of skilled workers to address the skills deficit in the core boatbuilding industry and wider value chain; consolidation of industrial placements and enhancement of innovation and technology-use in the sector; enhanced international competitiveness.

- 2014/15 Q1 - Q2: Development of a skills strategy with options that will inform the development of demand-led skills programme
- 2014/15 Q3: Industry consultations on the architecture of the skills programme
- 2014/15 Q4 - 2015/16 Q1: Development of the institutional arrangements that will govern the implementation of the skills plan
- 2015/16 Q2: Implementation of the skills development programme
- 2015/16 Q3 - Q4: Monitoring and evaluation; feedback translated into adjustment of the implementation process through the establishment of a Technical Working Group (TWG) on skills strategy that includes industry, the dti and the training institutions

**The South African software industry - Software Development Process Improvement Programme (136)**

To improve the quality of South African software through process improvement training using Capability Maturity Model Integration (CMMI) and Team Software Process (TSP) methods and through alignment of product development with domestic and global requirements. This will include widening participation of unemployed graduates as part of a skills development and capacity
building programme for better performance. This initiative will enhance the competitiveness of local SA software companies and create a significant breakthrough in market access for SA software developers. It will also result in large-scale creation of high-skilled employment opportunities.

- 2014/2015 Q1: Agreement on alignment of the SA Electro-technical Export Council mandate, EMIA and the Joint Action Group for the Software Industry to support export-ready companies. Performance Review of the first four software development entities; refinements made to Operations Manual and training curriculum
- 2014/2015 Q2: Two additional software development entities identified and participating in the process improvement programme
- 2014/2015 Q3: Establishment of an Advisory Council, comprised of government and private sector representatives, to oversee the roll-out
- 2015/2016 Q1: Further review of performance of all software development entities; refinements to Operations Manual & training curriculum; Add four more software development entities as part of the roll-out

**NCCRP Implementation activities**

**Tapping Sector Education and Training Authorities (SETAs) to aggressively develop and fund mentorship (including learnerships and internships) programmes.** (35)

Ensure that the building of knowledge and expertise in new and emerging economic sectors is considered in all tertiary education curricula and relevant formal and informal training. (45)

Establish a robust research agenda that, amongst others, focuses on quantitative research on the labour requirements for the green transition as well as on other societal adaptation strategies and needs.

**NSSD Implementation activities**

Implement skills development, in particular the youth, in the green economy sector (green industries) (26)

Ensuring a well-maintained and resourced training academy that produces quality graduates with skills relevant to the green economy through relevant stakeholders, for example, the National Youth Development Agency (NYDA)

Increasing the graduate output in natural and physical sciences (27)

*Enhance job seekers’ suitability for jobs – Experience*

**NDP Implementation activities**

(Re Youth Unemployment) After a year or two in a subsidised job that is complemented by relevant training, they will gain experience and their wages will increase, enabling them to graduate from the subsidised programme. (382)
NGP Implementation activities

**Rural literacy, green and HIV education youth brigades:** engage 1 million youth + expose them to work experience through internships in private and public sector (34)

*Enhance job seekers’ suitability for jobs – Behavioural characteristics*

No specific implementation activities identified

**Match job-seekers with available jobs – Access to information on available jobs**

NDP Implementation activities

Give a subsidy to the placement sector to identify and prepare matric graduates, and place them in work opportunities. **The placement company would be paid upon successful placement.** (134)

This should be complemented by strengthening the ability of the Department of Labour’s labour centres to match supply and demand in the labour market. (134)

**Employment Services should assist the unemployed in finding work and skills development opportunities, and help employers recruit new employees.** This is particularly important for low skilled workers who form the majority of the unemployed as well as for groups who have special needs or face a particular disadvantage in the labour market. (280 actually: 380)

**UIF: increase labour market reactivation measures, such as training and job search assistance, which will be accessible to group outside scope of UIF** (371, pp)

**Responsive labour market**: Improving labour market matching and transitions (131-2) (40)

Strengthen active labour market policies and labour matching (40)

**Match job-seekers with available jobs – Location and transport**

NDP Implementation activities

**Reduce administered prices (particularly transport costs) that raise the reservation wage.** (409)

**Densifying cities**

**Fixing housing market gaps** (34)

**More jobs in or close to dense, urban townships** (65) (66), locating jobs where people live (34)

Accrediting municipalities with the housing delivery function to effect improved integrated settlement development; and **linking job opportunities and work creation with housing development processes** (269)

**Match job-seekers with available jobs – Ability to apply**

NDP Implementation activities
**Match job-seekers with available jobs – Ability to signal fit**

NDP Implementation activities

**Labour market function – Legislation and regulation**

NDP Implementation activities

**Improving performance of labour market**: reduce tension + ease access to young, unskilled work seekers (109)

- Adopt an **approach to handling probationary periods** that reflects the intention of probation. (61)
- **Simplifies dismissal procedures for non-performance or misconduct, especially for smaller firms.** (61) **Clarifying dismissal and retrenchment provisions** in the Labour Relations Act (1995) Code of Good Practice and its management (132) An approach that **simplifies dismissal procedures for poor performance or misconduct** (134)

- Strengthen **dispute resolutions mechanisms** in the labour market with a view to reducing tension and violence. (61) Strengthen dispute resolution institutions (40)

- **Limiting the access of senior managers who earn above R300 000 to the CCMA**, given that their employment contracts better regulate dismissal procedures. (134)

- **Strengthening the labour courts, bargaining councils and resourcing the Commission for Conciliation, Mediation and Arbitration (CCMA)** (132)

- An effective approach to **regulating temporary employment services** (134)

- Strengthen application of minimum standards among employers, recruitment agencies and brokers (40)

**NGP Implementation Activities**

- **Legislative amendments to reduce workers’ vulnerability by addressing problems experienced in contract work, subcontracting, outsourcing and labour broking and by including decent work considerations in the procurement process**, consistent with the electoral mandate.

- Ways to **limit abuse of the CCMA by senior managers and professionals who have access to other dispute-settlement systems** but tie up the process with procedural points, and generally to further improve cost-effective services to workers and employers.

- Expanding the **role of the Unemployment Insurance Fund (UIF) in funding DFI efforts to create employment and extending employment services to assist unemployed people to find jobs.**

- Improvements to the **functioning of labour centres** in order to improve information about employment and training opportunities.
Labour market function – Labour union activity

NDP Implementation activities
To deal with this [labour relation issues], the CCMA is introducing negotiating training forums and mediation capacity building for parties. The operational efficiencies of this institution are important for the effective operation of the labour market. The Commission recommends additional support for the CCMA. (136)

Strengthening the CCMA and the Labour Court in dispute resolution and to support trade unions and employers in managing shop-floor relations (134)

Facilitate agreement between employers and unions on entry-level wages. (61)

Address public sector relations with labour (40)

NGP Implementation Activities
Measures to support the organisation of the unorganised, in particular farmworkers. (52-3)
Governance

Building a more effective state: Individual and institutional capability

NDP implementation activities

Strengthening the role of the state and improving institutional capability (154-5)

Specific proposals: (154-5)

- Strengthening the role of the state as service provider, as the core provider of public goods (such as infrastructure and other public services), as an economic regulator, as a consumer, and as a critical player in giving leadership to economic development and addressing market failures
- Creating a clear system of hierarchy and decision-making across economic line-function departments and spheres of government. The Presidency will act as the strategic centre of power to resolve key points of disagreement and ensure policy alignment. (154)
- Responsiveness on the part of the state to anticipate possible crises and respond to them rapidly and appropriately (154)
- Establishing significant consequences for not reaching targets, whether in social or economic areas of delivery
- Measuring performance in economic services departments on the basis of success, or otherwise in facilitating investment and building partnerships among the economic actors
- Improving trust between the public and private sectors. The government must treat private actors as partners in policy design and implementation, and the private sector in turn must respond to and facilitate the realisation of national objectives
- Urgently addressing constraints to public-private partnerships – including the institutional arrangements for regulating and executing such partnerships as well as relevant capacity in government departments and spheres
- That any direct state involvement in productive sectors should be informed by the “balance of evidence” in relation to stimulating economic growth and competitiveness, creating jobs and reducing inequality, as well as availability and optimal deployment of public resources (155)

Strengthen the capabilities of people in the public service through recruitment and career progression

- An administrative head of the public service should be created, with responsibility for managing the career progression of heads of department, including convening panels for recruitment, performance assessment and disciplinary procedures. (55) At provincial level, the same role should be played by the director-general in the Office of the Premier (415)
- A hybrid system for appointing heads of departments should be introduced, incorporating both political and administrative elements (55)
- A formal graduate recruitment programme for the public service and a local government skills development strategy should be introduced to attract high quality candidates. (55) (416-418) Parallel scheme for local government makes provision for mentoring, training and reflection
- A purely administrative approach should be adopted for lower-level appointments, with senior officials given full authority to appoint staff in their departments (55, 414)
- Use a selection panel convened by the chair of the Public Service Commission and the administrative head of the public service to draw up a shortlist of suitable candidates for top posts (415)

- The selection panel should make use of competency tests and other assessment mechanisms. (415) Such as exams, group exercises and competency tests (422)

- Move towards more long-term contracts for heads of department and reduce the use of three year contracts (415)

- Amend the Public Service Act to locate responsibility for human-resources management with the head of department (415)

- Use placements and secondments to enable staff to develop experience of working in other spheres of government (422)

- To professionalise the public service and local government, the state needs to address weaknesses in recruitment, training, management and human resources. This requires a more coherent and long-term approach to ensure workplaces provide a conducive environment for skills development (422)

- Consider including the director-general of a national department on the selection panel when a new head of department is selected for the equivalent provincial department (436)

- (SOEs): Improve coordination between policy and shareholder ministries by making them jointly responsible for appointing the board (72)

- **Career paths for technical specialists** (424)
  - Use apprenticeships and bursaries to ensure the reproduction of technical skills (426)
  - Use experienced professionals including from professional associations, SOEs and the private sector to mentor trainees (426)
  - Develop technical career paths that allow technical specialists to focus on project work and training less experienced staff (426)

- **Consideration should be given to repositioning PALAMA within the DPSA or developing mechanisms to enable the DPSA to exercise a degree of oversight so that PALAMA’s [training institute: public sector] work can be better aligned with the wider objectives of professionalising the public service. It would then be easier to redesign PALAMA’s funding and training model so that it receives core funding for training provided by in-house staff (422)**

**Create a citizen service mindset and drive accountability**

- When entering a public building, citizens should be able to see what service they can expect, and where to go and who to talk to if they are not satisfied (55)
  - Ensure all service-delivery points provide clear information on where citizens can go and who they can talk to if they are dissatisfied (429)
  - Require frontline staff to wear name tags to make it easier for citizens to provide feedback on the standard of service they receive (429)
- Developing **public-interest mandates** that set out how each state-owned enterprise serves the public interest (55)

- The Commission also calls for **shareholder compacts** with state-owned enterprises and performance agreements with Cabinet ministers to be made public (61)

- Reforms are needed (government) that will enable people to do their jobs by strengthening skills, enhancing morale, clarifying lines of accountability and building an ethos of public service (409)

**Empower local government**

- A coherent set of powers for metropolitan Municipalities. (434) Large cities should be given greater fiscal and political powers to coordinate human settlement upgrading, transport and spatial planning (56)

- **Strengthen planning capabilities** within local government (291)

**Support and incentivise active citizens** (291)

**NSSD Implementation Activities**

- **Enhancing the current qualification accreditation system** to ensure that appointees have the skills and experience required for their work

**Building a more effective state: Individual and institutional capacity**

**NDP implementation activities**

**Regional service delivery where local municipalities are stretched**

- Regional utilities could provide services on behalf of less well-resourced municipalities, but this must be led by municipalities to avoid undermining democratic accountability for service delivery (56)

- Develop regional utilities to deliver some local government services on an agency basis, where municipalities or districts lack capacity

- Many municipalities lack technical capacity to build and manage wastewater treatment systems and so a regional approach may be required (180)

- Many small and rural municipalities lack the financial and technical capacity to manage water services adequately. Some flexibility in approach is recommended, which could include the **use of regional utilities and community management of franchise arrangements**, provided municipalities retain their role as the political authority responsible for service oversight (180)

- A flexible institutional model should allow continued political oversight of local service provision by municipalities, while taking advantage of other delivery models such as regional service providers or community management (180)

Extend **compulsory community service to law graduates** (453)

**NCCRP implementation activities**

**Empowering and incentivising local government**
- South African local government association: lobby for necessary regulation and resources to support local government in implementing the NCCRP (38)
- National Treasury will lead a process to re-examine the current fiscal measures and the appropriate incentives for adaptation and mitigation measures by local government (38)
- Local government: particularly important role: implementing adaptation and mitigation actions ... and so particular attention will be paid to local government legislation, and the Department of Cooperative Governance and Traditional Affairs will lead a review of local government legislation in this regard (40)

NSSD Implementation activities

**Enhancing systems for integrated planning and implementation:**

- Establish an effective National Committee on Sustainable Development (NCSD) [established by March 2012] (15)

**Establish a monitoring and evaluation system to facilitate the ongoing assessment of progress towards sustainability** (17)

- Development and adoption of a set of national sustainability indicators
- Tracking and reporting of sustainability indicators by government entities and the private sector
- Establishment of an information management system linked to the sustainability indicators

**Fighting Corruption: Prevention**

**NDP Implementation activities**

**Code of conduct:**

- An accountability framework should be developed linking the liability of individual public servants to their responsibilities in proportion to their seniority (72, 451)
- **Clear rules restricting business interests of public servants** should be developed (72) making it illegal for public servants to operate certain types of businesses (57)
- Restraint-of-trade agreements for senior civil servants and politicians at all levels of government. (72) Exit interviews and proper record-keeping would enable the restraint of trade agreements and prevent corrupt officials from moving around the public service (451)

**Centralise oversight of tenders of long duration or above a certain amount** (72) and greater central oversight over large and long-term tenders (57)

- More “open data” should be made available. Open data is information that is made actively available without a request from an individual. This is provided for in the Promotion of Access to Information Act, but generally not implemented due to lack of expertise. Examples of information that should be made available would be tender information, environmental impact assessments and mineral licences (452)
- There could be a requirement that tender review committees have one external representative, perhaps from a different sphere of government (425)
NSSD Implementation activities
Provision of training on integrated ethics management (18)

Addressing Batho Pele service delivery improvement plans (SDIPs) in departments’ annual reports in order to promote their implementation (18)

Fighting Corruption: Detection

NDP Implementation activities
Creating and strengthening institutions

- The National Anti-Corruption Forum should be strengthened and resourced (72)
- Corruption in the private sector is reported on and monitored by an agency similar to the Public Protector (72)
- Empower tender compliance monitoring office to investigate corruption and the value for money of tenders (450)
- The Protection of Personal Information Bill seeks to establish an information regulator covering certain aspects of information and personal data. This regulator should be equipped with the necessary resources to do its job properly and independently. The body should strike a balance between its responsibilities to protect personal data and providing recourse to those claiming their right of access to information (452)
- Accelerate reforms to implement a judiciary led independent court administration. Establish clear criteria for appointment of judges, with emphasis on the candidates’ progressive credentials and transformative judicial philosophy and expertise. The SAJEI must be given all the support it requires and be well-resourced to fulfil its mandate effectively. Consider whether the current structure of the JSC is adequate to fulfil its expanding mandate (453)

Safeguarding whistleblowers

- Expand the scope of whistle-blower protection to include disclosure to bodies other than the Public Protector and the Auditor-General. Strengthen measures to ensure the security of whistle-blowers

IPAP Implementation activities
Detecting customs fraud:

- Extend application of the Indicative Reference Price System to other vulnerable sectors to provide an increasingly effective early warning system (53)
- Conduct continuous targeted investigations and raids on non-compliant products; confiscation of substandard and illegal products in the possession of individuals and companies (53)

Monitoring and evaluation of the performance of designated sectors in public procurement (44)

- Establishment of an M&E system with a framework for monitoring year-to-date procurement in line with local content levels as set out in SATS 2011:1286 and tracking procurement expenditure against outcomes through in-year monitoring reports; Developing
clear indicators of procurement performance aimed at providing early indication of progress (or lack thereof) in designated sectors.

**Fighting Corruption: Enforcement**

**NDP Implementation activities**
All corrupt officials should be made *individually liable* for all losses incurred as a result of their corrupt actions. (72, 452)

Competent, skilled institutions like the Public Protector and Special Investigating Unit need to be adequately funded and staffed and free from external interference. Specialised teams of prosecutors and special courts should be established

**IPAP Implementation activities**

Clampdown on customs fraud, illegal imports and sub-standard products:

- Ongoing interventions in customs fraud-related issues, illegal imports and sub-standard products, including the roll-out of the Customs Modernisation Programme aimed at curbing customs fraud, illegal imports and sub-standard products (53)

Illegal imports programme on Clothing, Textiles, Leather & Footwear (71)

- Scale up the policing of country-of-origin labelling and SADC rules of origin. Ongoing and targeted campaigns against under-invoicing and other illegal activities in the sector

**Inter-stakeholder relations: Government – labour – business – civil society**

**NDP Implementation activities**

Establishing effective public-private partnerships

- Urgently addressing constraints to public-private partnerships – including the institutional arrangements for regulating and executing such partnerships as well as relevant capacity in government departments and spheres. (154) The state should play a much larger role in the provision of social welfare services, including establishing effective partnerships with the private and community sectors (377)

**Development of a social compact**

- The National Planning Commission can use its convening power to bring stakeholders together to **facilitate dialogue and develop solutions.** (59) National Development Plan serves as a basis for developing a *broad social compact among critical role-players and society at large* [See chapter 15]

- The compact should offer attractive (indeed compelling) benefits to each party and all parties should believe that the necessary sacrifices are relatively equitably shared amongst all participants (475)
NGP Implementation activities
**Nedlac monitoring system to engage key stakeholders**

- A monitoring system of regular reports on key developments in the economy and achievement of core economic aims to be established at Nedlac so that key stakeholders understand government programmes, help strengthen them, and assist in improving economic management. They must include early-warning systems to indicate unforeseen economic difficulties, shortfalls in the anticipated employment creation and undesirable trends in overall equality (67)

NCCRP Implementation activities
**Form a National Committee on Climate Change (NCCC). (39)**

- The committee will consult with stakeholders, advise on implementation, consider proposals
- Formalise status as advisory council: statutory powers and responsibilities

**Climate change as a key agenda item for Nedlac. (39)**

- Government, business, labour, community groupings: national level
- Ensure policy implementation balanced and meets needs of all sectors of economy (39)

*International Relations: Global*

NDP Implementation activities
**Strengthening international relations institutions**

- The NPC submits that the **Department of International Relations and Cooperation** should focus on **organisational transformation** to make the department more efficient and effective in its operations abroad, internally and domestically. The NPC recommends that the department’s **research capabilities** be strengthened, and that it works in **collaboration** with South Africa’s research, business and academic institutions and with epistemic communities to develop the country’s foreign policies (235)
- **Review training of foreign service officers**: study IBP on economic diplomacy and international negotiations
- **Enhance research capabilities and cooperation among vital state institutions that deal with cross-border issues**: Department of International Relations and Cooperation, DTI, Department of Home Affairs, Customs and international trade division of Department of Agriculture, Forestry and Fisheries + private sector reps

NGP Implementation activities
- Developing proposals to **improve telecommunications and internet connectivity** across the region and from the region to Europe, Asia and the Americas (57)

NCCRP Implementation activities
**Participation and cooperation in international climate efforts**

- Government will continue to proactively contribute to the technical and institutional reform debates of the UNFCCC financing measures to ensure that developing and least-developed
countries such as those in the Southern African Development Community region can access the additional and necessary resources in a fair, transparent and timely manner (44)

- Monitor and periodically report to the international community the country’s GHG inventory; steps taken and envisaged to implement the UNFCCC; and any other information relevant to the achievement of the objective of the UNFCCC, including information relevant for the calculation of global emission trends

**International relations: Regional**

NDP Implementation activities

**Strengthen relationships with regional trade partners**

- The impending Tripartite Free Trade Area is a significant step towards improved African integration and should be a priority in South Africa’s foreign policies. (235) Start with immediate consultation on greater financial integration (237)

NGP Implementation activities

- Developing and implementing proposals to improve the road/rail/ports system serving southern and central Africa (56)
- Strengthening regional integration on energy, including the Southern African Power Pool, linked to urgent improvements in electricity interconnectors, and exploring other opportunities for enhancing clean energy across central and southern Africa, including gas (56-7)