



October
2017

GOVERNANCE FOR SOUTH AFRICA'S SUSTAINABILITY TRANSITION: A CRITICAL REVIEW

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About this publication

This policy paper reviews the governance of South Africa's sustainability transition. It forms part of a series of papers aimed at providing a barometer of South Africa's transition to sustainable development. It is a component of a global initiative spearheaded by the Green Economy Coalition (GEC).

The GEC is the largest global alliance of organisations working on a green economy. The membership spans Asia, Africa, South America, North America and Europe and represents a wide range of interests including the poor, the environment, business, the United Nations, research and government. Despite its diversity, the coalition is committed to accelerating the transition to green and fair economies. In South Africa, Trade & Industrial Policy Strategies (TIPS) and the African Centre for a Green Economy (African Centre) are active members of the coalition.

The author would like to thank:

- TIPS's colleagues Shakespear Mudombi and Thabo Thulare for their comments at various stages of the research lifecycle;
- Oliver Greenfield (GEC), Mao Amis (African Centre), Najma Mohamed (International Labour Organisation / United Nations Partnership for Action on Green Economy), Tasneem Essop (National Planning Commission, South Africa) and Samantha Ashman (University of Johannesburg, South Africa) for their reviews and feedback on earlier versions of the paper;
- Delegates who provided feedback on the draft paper presented at the 2017 TIPS Annual Forum hosted at the Development Bank of Southern Africa, in Midrand, South Africa, on 13-14 June 2017;
- Janet Wilhelm for the editing of the report; and
- Rozale Sewduth for the layout and design of the report.



This document has been produced with the financial assistance of the European Union (EU). The contents of this document are the sole responsibility of TIPS and can under no circumstances be regarded as reflecting the position of the EU.

Key findings

- The inclusion of sustainability considerations into South Africa's public policies signifies a massive and disruptive shift from traditional practices at all levels of policymaking and governance (i.e. the vision, plans and strategies, instruments and measures, and toolbox).
- While the National Development Plan: Vision 2030 defines a vision for South Africa up to 2030, there is a lack of strategic and coherent planning for the country's transition to sustainable development, defining the end state of the economy and society in the long term (2050), as well as roadmaps detailing the necessary short-, medium- and long-term steps.
- South Africa has multiple plans and strategies impacting on the transition to a sustainable development model. In addition to implementation challenges, their inconsistency and misalignment, from a policy and institutional perspective, however, remain problematic.
- Mirroring the multitude of plans and strategies, numerous measures have already been designed in South Africa to foster the transition. The implementation, clarity and coherence of the mix of measures requires improvement.
- Most of the essential tools required for the transition (data, guidelines, monitoring, reporting and verification (MRV) and Monitoring and evaluation (M&E) systems, co-development platforms) are not available or incomplete, jeopardising the design and implementation of the transition to a sustainable development pathway.

Key recommendations

- **Transition Planning:** Develop an analytical framework on the transition, considering economic, social and environmental elements in a holistic fashion; establish co-development channels within government and between government and social partners/stakeholders; and co-develop a vision for a sustainable South African economy and society and a roadmap for socio-economic transitions through to 2050.
- **State capacity:** Prioritise the development of the skills base for the transition and build internal capacity on sustainability transition within all government departments and entities; enhance inter-governmental coordination at the strategic as well as design and implementation levels; and operate a double mainstreaming of sustainability in economic policy and socio-economic considerations in climate change/environmental policy.
- **Transparent information systems:** Establish a robust and extensive public information system on firm- and household-level dynamics relevant for the transition; establish one-stop-shop platforms on sustainability for industry and households; foster inter-stakeholder dialogue on the management of the transition; and design a suitable platform, including joint knowledge and tools, for co-development of policy by government, the private sector, labour and communities.
- **Policy coherence and consistency:** Focus on operationalising existing policies and improving their coherence and coordination to increase compliance and unlock bottlenecks; provide long-term clarity and certainty to the economy and society on climate change, and more broadly environmental regulation; review and revise environmental, or at least climate change, measures from a socio-economic angle as well as economic policy, particularly industrial policy, programmes from a climate change (if not environmental) perspective.



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Abbreviations

DEA	Department of Environmental Affairs
dti (the)	Department of Trade and Industry
DPME	Department of Planning, Monitoring and Evaluation
EDD	Economic Development Department
FOSAD	Forum of South African Directors-General
IIP	Institute for Industrial Productivity
IPCC	Intergovernmental Panel on Climate Change
M&E	Monitoring and Evaluation
MRV	Monitoring, Reporting and Verification
NDP	National Development Plan: Vision 2030
NEDLAC	National Economic Development and Labour Council
NGP	New Growth Path
NPC	National Planning Commission
R&D	Research and Development
REIPPPP	Renewable Energy Independent Power Producers Procurement Programme
SDGs	Sustainable Development Goals
SEIAS	Socio-Economic Impact Assessment Systems
SMMEs	Small, Medium and Micro Enterprises
UNEP	United Nations Environment Programme

Introduction

South Africa, in line with global trends, has embarked on the necessary transition to a sustainable development pathway. The country's National Development Plan: Vision 2030 (NDP) sets the goal of "South Africa's transition to an environmentally sustainable, climate-change resilient, low-carbon economy and just society" (NPC, 2011, p. 199).

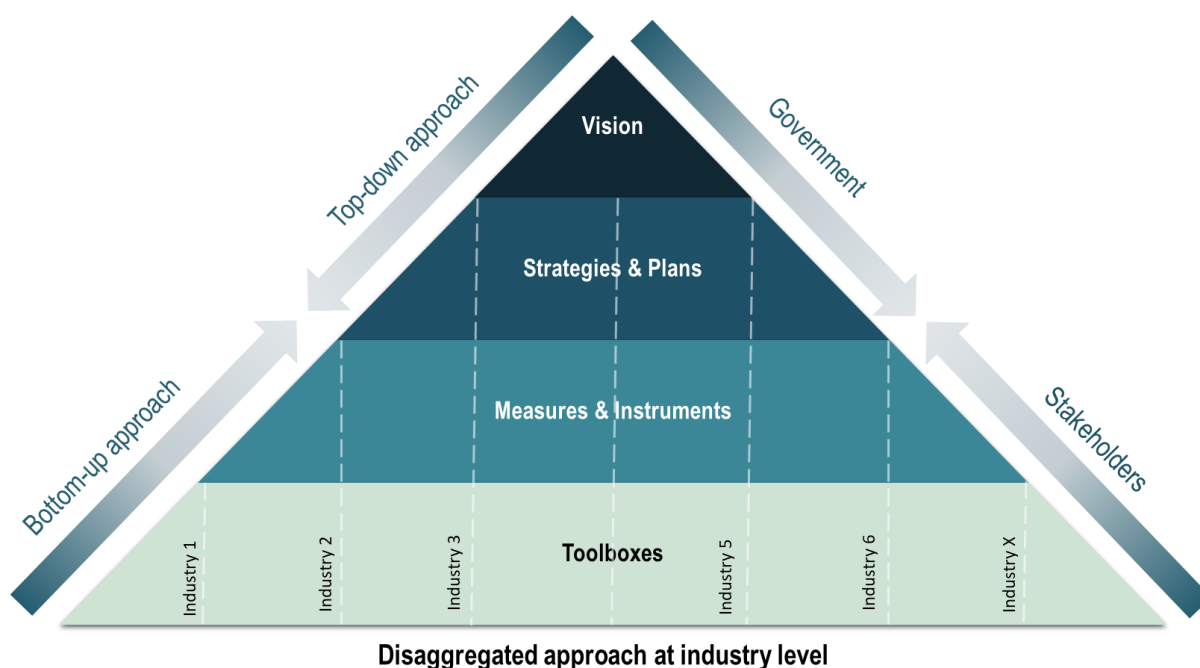
The country remains, however, entrenched on a highly unsustainable path. South Africa is one of the most carbon-intensive economies in the world, due to its reliance on fossil fuels (primarily coal) and energy-intensive value chains, leading to the established domination of coal-fired electricity generation, carbon-intensive transport systems, and energy-intensive industries. From a social perspective, in addition to severe levels of unemployment, the South African society is also one

of the most unequal in the world. For instance, the labour force participation stood at 59.1% in the third quarter of 2016 (Statistics South Africa, 2016) and the country had the highest Palma ratio¹ in the world over the 2005-2013 period (Palma, 2016).

The inclusion of sustainability considerations into South Africa's public policies therefore signifies a massive and disruptive shift from traditional practices (policymaking and political settlements alike). The imperative of factoring sustainability into all levels of governance has reshuffled the cards of the game and calls for a new prism of analysis and renewed institutional arrangements. Indeed, the transition to a sustainable development model has not yet been integrated into South African public policy in any coherent and strategic manner.

¹ The Palma ratio is the ratio of the richest 10% of the population's share of gross national income divided by the poorest 40%'s share.

FIGURE 1: THE POLICY PYRAMID



SOURCE: MONTMASSON-CLAIR, 2016



a strategic, coherent vision and associated roadmaps should provide the guiding blueprint for government strategies and plans, as well as the design and implementation of instruments and measures

This policy paper assesses the state of play in South Africa at each level of policymaking, relying on a policy pyramid approach (Figure 1). The policy pyramid framework aims to merge both top-down and bottom-up approaches of policymaking in a dynamic and iterative fashion. At all levels, this method suggests a cooperative governance framework, gathering government and other social partners (business, labour and civil society), based on constant policy dialogue, engagement and co-development. Each level then plays a complementary role in the design and implementation of evidence-based, effective and ambitious policies.

Toolboxes, in the form of information and education systems, MRV and M&E frameworks, and implementation tools, should support these developments from the ground level.

Based on this approach, this paper proceeds as follows. Sections 2 to 5 conducts a diagnostic of the situation in South Africa and formulates targeted recommendations. Section 6 provides a conclusion.

Casting the Vision

The highest level of governance focusses on casting the vision for the transition to a sustainable development path. This overarching strategic level is designed to underpin and drive all other interventions at all levels. It provides the framework and the overall direction for the country's transition. Although it is meant as a master exercise, casting the vision is inherently based on feedback loops with the three other levels, particularly from information and data collection.

Establishing a long-term economy- and society-wide vision for the sustainability transition, along with a clear roadmap detailing the key steps to manage and achieve it, is a basic imperative for any country. Indeed, the transition to a sustainable development path is not only an environmental issue, but primarily a socio-economic question with core implications for all aspects of economic and social life.

2.1. Diagnostic: The need for an integrated vision

Numerous policy documents touch on the transition of the South African economy and society to a sustainable model of development. South Africa's NDP, approved in 2012, is the most advanced forward-looking document in the country, providing an overarching perspective on the future of the nation.

The NDP, however, falls short of integrating the sustainability transition in its vision, connecting the various elements of sustainable development, and addressing the inevitable trade-offs. While the NDP aims to provide a strategic vision and plan for the transition a sustainable, low-carbon and climate-resilient economy and society, it lacks a coherency and consistency across other elements, such as infrastructure investment. Furthermore, the timeframe of 2030 cannot be considered long term when planning for a transition, and a longer

timeframe would lend itself to more meaningful and effective transition planning. Clear roadmaps detailing the short-, medium- and long-term steps necessary to achieve the desired outcomes for sustainable development in South Africa are also needed. The lack thereof has hampered domestic efforts to shift to more sustainable development pathways.

Other examples, such as the New Growth Path (NGP), the Intended Nationally Determined Contribution to the global climate efforts (i.e. the Peak, Plateau, Decline trajectory) and the Long-Term Adaptation Scenarios, also represent starting points but do not constitute a strategic and coherent vision for South Africa. Similarly, the Medium-Term Strategic Framework, the Industrial Policy Action Plan, the Innovation Plan and the National Strategy for Sustainable Development and Action Plan flesh out a variety of short-term interventions but, mainly due to the absence of a long-term vision, fail to provide a coherent, detailed roadmap towards sustainable development for the country.

Admittedly, the task of providing an integrated vision, answering to the need to stimulate economic growth, and tackling the triple developmental challenge of poverty, inequality and unemployment, while managing environmental considerations, is not straightforward. Existing efforts remain off the mark, as all these documents tend to consider the transition to a sustainable pathway as an add-on to other developments in the country.

Most importantly, the linkages between the transition to sustainability and socio-economic considerations, such as poverty, employment, inequality, competitiveness, rural development and natural resource management largely remain to be unpacked. For example, both the New Growth Plan and the Industrial Policy Action Plan understand the green economy as a sector rather than an economy-wide transformation.

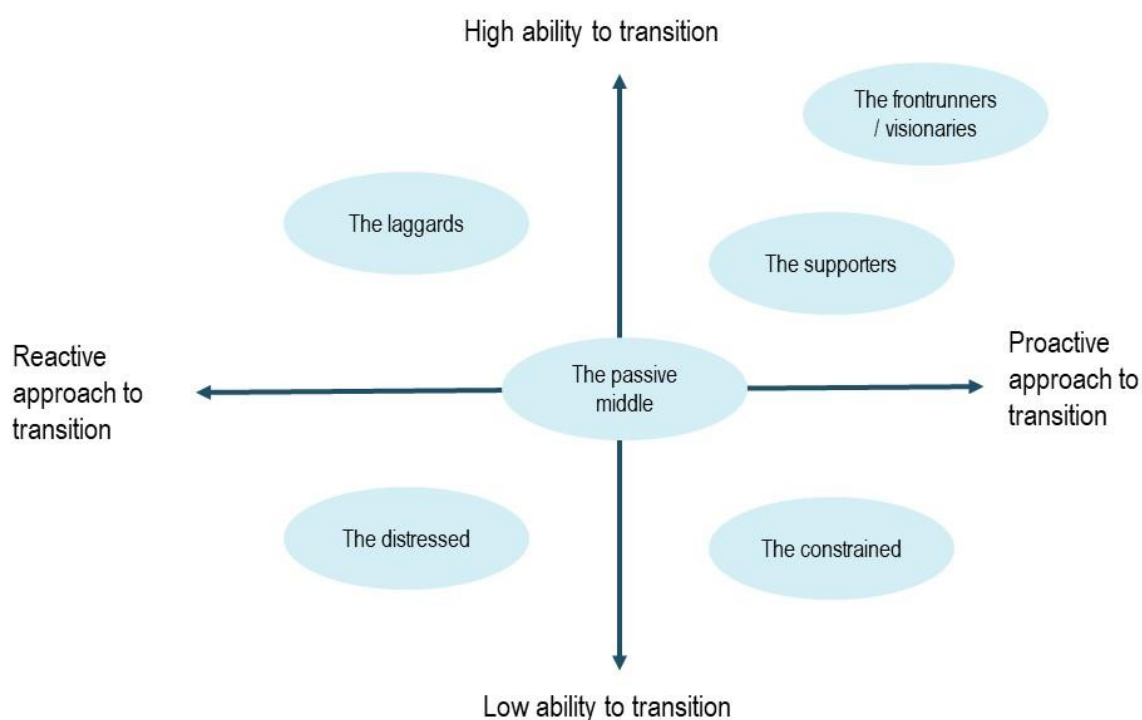
As policies are being implemented in South Africa, the absence of such a nuanced understanding carries notable risks for the economy. As stressed by the Davis Tax Committee (2015) in its carbon tax assessment, owing to the socio-economic challenges facing the country, the imperative of the transition must indeed be balanced with the need to foster economic growth, employment creation and empowerment.

“

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In addition, the transition to sustainable development involves a complex balancing act on multiple fronts, managing short-term trade-offs between economic, social and environmental outcomes. The transition is set to bring multiple long-term benefits, in the form of stronger, more resilient growth, increased competitiveness, higher and better employment, reduced inequality and increased welfare (UNEP and DEA, 2013). However, it remains paved with difficulties and trade-offs to be addressed in the short term, particularly to minimise the socio-economic costs of transitions (Cloete and Robb, 2010; Montmasson-Clair, 2015). Moreover, the benefits of sustainable development are not always automatic and have to be induced and directed through effective policies to fully materialise. This reality and the implications for governance have not been fleshed out in the South African context beyond generic, high-level considerations.

FIGURE 2: A TYPOLOGY OF STAKEHOLDERS VIS-À-VIS THE TRANSITION TO SUSTAINABILITY



SOURCE: MONTMASSON-CLAIR, 2016

This shortcoming is important considering the heterogeneity of the South African economy and society. The implications of the transition cannot be generalised and are nuanced and differentiated between socio-economic activities and stakeholders. The significant diversity of situations vis-à-vis the transition to sustainability (i.e. different starting points, cost and benefits, abilities and readiness levels), as illustrated by the taxonomy in Figure 2, has not been internalised by South Africa's governance systems. While some stakeholders (such as service companies or rich households) have the potential to quickly and cheaply transition to sustainable practices, other actors (such as poor households or industries in carbon-intensive activities) face inherent challenges. Indeed, without such a differentiated understanding, South Africa's sustainability transition runs the risk of deepening existing socio-economic challenges, rather than addressing them. Solely focusing on frontrunners and visionaries would leave the bulk of the economy and society, and primarily the most vulnerable groups, stranded.

A conscious alignment with the country's objective of socio-economic transformation is required to ensure a just and pro-poor transition (Montmasson-Clair, *forthcoming*). Figure 2 also highlights the contested nature of the exercise, with stakeholders resisting the transition because of favourable political settlements, contested social compacts, and difficult short-term economic trade-offs. For example, firms tend to be primarily concerned about the costs associated with the transition (TIPS et al., 2013) whereas trade unions focus on employment and poverty issues (Belén Sánchez et al., 2013; Montmasson-Clair, 2012).

The challenging nature of the transition, which cannot be managed through a one-size-fits-all framework, requires leadership from the highest levels of government. In South Africa, the Presidency, through the President's office, the National Planning Commission (NPC) and the Department of Planning, Monitoring and Evaluation (DPME), has not provided the necessary political clout at the domestic level to ensure a coordinated approach for the transition.

Political leadership has been mainly focused on international negotiations while the DPME has focused its efforts on the monitoring and evaluation of government action.

2.2. Recommendations

The initial step towards the definitive goal of designing a vision for South Africa's sustainability transition is the development of an analytical framework on the transition, considering economic, social and environmental elements in a holistic fashion. The NPC plans to commence a social partner-driven process for developing pathways for a just transition that maximises socio-economic outcomes as well as achieves a sustainable, low-carbon, climate-resilient economy and society. The aim is to build an understanding of the transition from a South African perspective, to define and contextualise the transition accordingly, and to map the South African way forward, in line with the country's socio-economic conditions. This process involves translating the consensus reached by social partners into a social compact through the National Economic Development and Labour Council (NEDLAC).

This exercise will require a structured and evidence-based policy narrative on the socio-economic implications of the transition (both qualitative and quantitative), including trade-offs and co-benefits (i.e. risks and opportunities), for each segment of the economy and society. This requires paying particular attention to the heterogeneity of the country vis-à-vis the transition.

It is also imperative for the success of the NPC process that adequate governance systems are established, as a foundation to the development (and later, implementation) of the vision and transition plans. Establishing co-development channels within government (under the leadership of the Presidency) and between government, organised labour, business and communities (under the auspice of a rejuvenated NEDLAC) is imperative to ensure the emergence of a national consensus on the transition. (Giordano et al., 2011).

Ultimately, the work should culminate in the co-development of a vision for a sustainable South African economy and society and a roadmap for socio-economic transitions. It should give substance to the constitutional mandate (Section 24 of the Bill

of Rights recognises "sustainable development" as a human right), the principles of the National Environmental Management Act No. 107 of 1998 (see Chapter 1), and South Africa's international commitments. These documents, each coming from a specific angle and therefore not constituting a coherent, strategic picture as such, should further inform such a vision and roadmaps. Several possible pathways could be developed for discussion, clearly highlighting the objectives of the transition, including short-term (< 5 years), medium-term (5-15 years) and long-term (15-50 years) goals, steps and mechanisms to achieve them.



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The African Union's Agenda 2063 also provides an opportunity to align the national vision with that of the continent. Given the rapidly changing socio-economic and global environments, such pathways should be regularly updated to remain relevant. Acknowledging the contested nature of the debates, this forward-looking exercise should lay the foundation for specific plans and strategies aimed at maximising the benefits and mitigating the trade-offs, particularly for the most vulnerable segments of society and the economy.

Setting the policy framework

The first level of action is characterised by the plans and strategies necessary for the transition to sustainable development, as informed by the overarching vision. They provide the sectoral and thematic underpinnings to operationalise the vision and its roadmaps. The formulation of these plans and strategies in a coherent and complementary fashion is fundamental to an effective transition.

Plans and strategies sit between the vision, i.e. a high-level policy document providing a national blueprint reflecting a top-down prism of analysis, and instruments and tools, i.e. the embodiment of the bottom-up approach. They ought to flesh out the vision by bringing a ground-level perspective, detailing goals, interventions and indicators, in a coherent, coordinated and integrated fashion. In essence, plans and strategies aim to bridge the gap between the top-down and bottom-up approaches and mechanisms, laying the ground for implementation.

3.1. Diagnostic: The need for mainstreaming, coherence and clarity

South Africa has multiple plans and strategies impacting on the transition to a sustainable development model. In addition to implementation challenges, detailed in Section 4, their inconsistency and misalignment, from a policy and institutional perspective, remain problematic, hindering the effectiveness of the policy framework.

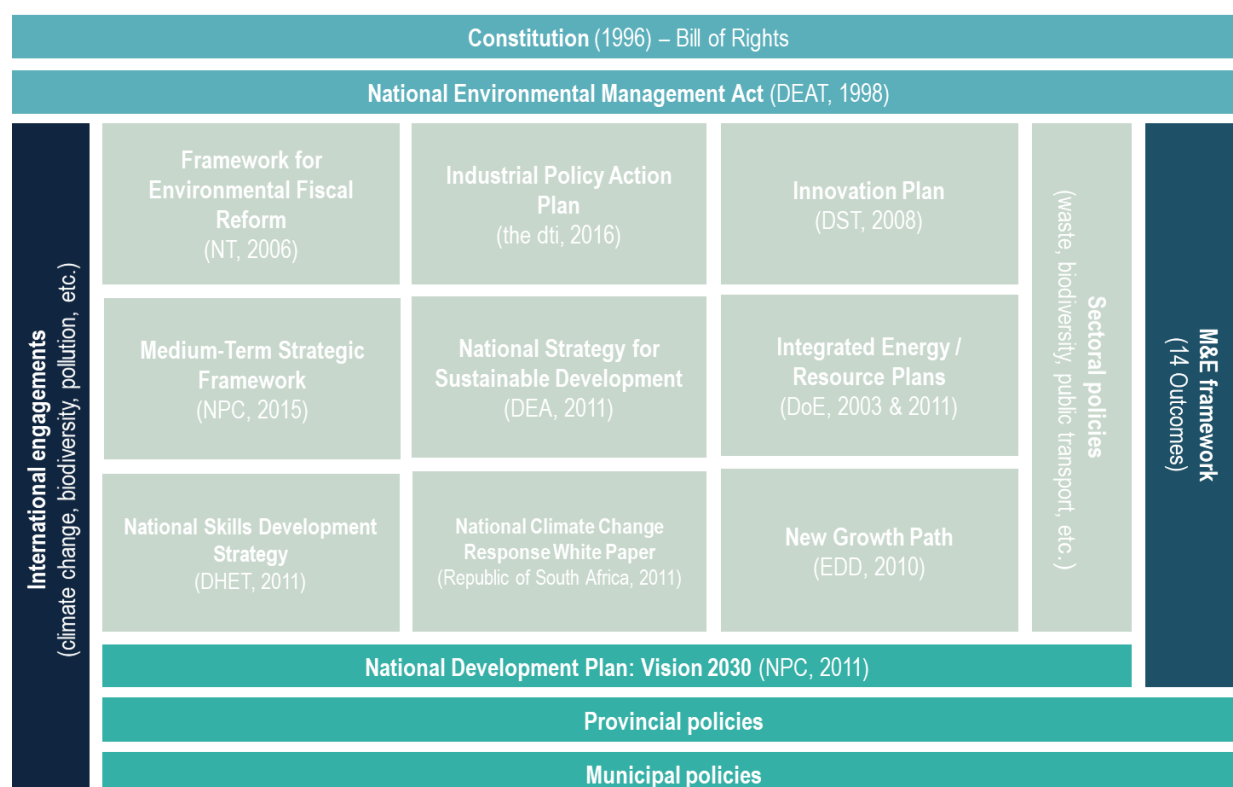
Core plans and strategies having a fundamental impact on the transition to sustainable development constitute a complex mosaic of general documents. These core documents incorporate the transition in their holistic or sectoral view of the country, alongside policies directly focused on, and targeted at, promoting sustainable development. They are complemented by a myriad of sector-, issue- and time-specific policies. In addition, sub-national initiatives, at both the municipal and provincial levels, are increasingly emerging. The DPME has also implemented a comprehensive monitoring system,

the 14 Outcomes Framework, to track the operationalisation of policies. Figure 3 illustrates this complex framework. This set of policies is meant to provide the instruments for implementation, monitoring and evaluation, and balancing the trade-offs associated with the transition.

While, in theory, a general coherence seems to emerge from national policy documents, in practice, a lack of unity and a number of problematic areas persist. The development of renewable energy, the improvement of energy efficiency and the promotion of green buildings appear as the key focuses of the

South African government's policy. Besides these focus areas, sustainable waste management and sustainable transport are also high on the governmental agenda. Unlike these priorities, other areas still lack consensus or clarity. This is the case for key decisions on technological choices in the energy space, with substantial implications for the transition. The development of carbon capture and storage, the expansion of nuclear energy, the rollout of a gas industrialisation programme, and the development of a hydrogen economy are few examples of initiatives that do not garner unanimous support.

FIGURE 3: A REPRESENTATION OF THE KEY POLICY DOCUMENTS DRIVING THE TRANSITION TO SUSTAINABLE DEVELOPMENT IN SOUTH AFRICA



SOURCE: AUTHOR'S COMPOSITION

In addition, a broader misalignment persists between the South African sustainability objectives and the country's other policies and priorities. Substantial effort is still being unconditionally directed at carbon-intensive sectors, most importantly through fossil fuel subsidies. Even though the transition away from fossil fuel-based (particularly coal-based) energy systems (for electricity generation but also transportation) underpins the transition to sustainable development, support for coal-fired electricity production has remained unshaken (Montmasson-Clair, 2017).

Institutionally, despite the existence of official channels aimed at facilitating coordination and alignment (such as the Forum of South African Directors-General (known as FOSAD), and ministerial political (known as MINMEC) and technical (known as MINTECH) structures, management of the transition to a sustainable model of development also remains a key challenge. Minimal translation of the political impetus shown at international negotiations into a fundamental domestic transformation has been witnessed.

The Department of Environmental Affairs (DEA) is vested with the responsibility of driving the sustainability transition for the country, but the implementation is conducted by a wide array of stakeholders. The Economic Development Department (EDD) supervises the Industrial Development Corporation, one of the two main state-run development finance institutions instrumental in financing the shift to a sustainable economy. The National Treasury governs the other main development finance institution, the Development Bank of Southern Africa.

Direct support for industries falls under the Department of Trade and Industry (the dti), but fiscal incentives, i.e. taxes and subsidies aimed at promoting behavioural and technological change, are under the mandate of the National Treasury. The Department of Science and Technology is responsible for technology policy and fostering research and development (R&D) in all sectors of the green economy. The development of the Water and Waste Research, Development and Innovation Roadmaps for South Africa (2015-2025) are two notable examples. The Departments of Rural Development and Land Reform and Agriculture, Forestry and Fisheries manage the transition in the rural (generally impoverished) areas of the country. Last, but not least, developing the necessary skills force is spearheaded by the Departments of Labour and Higher Education and Training.

The transition to sustainable development adds a new factor shaping all plans and strategies in the country. While it is essential for government (at all levels) to design dedicated plans and strategies for climate change and other aspects of the transition to sustainable development, the mainstreaming of these sustainability policies into all other plans and strategies (such as the Industrial Policy Action Plan and the Integrated Energy Plan) is equally important. Despite numerous climate change strategies at national and sub-national levels, climate change considerations have not yet been integrated in other policies and remain largely considered as a stand-alone. At the sub-national level, significant gaps in climate policy readiness exist between provinces and municipalities.



successful implementation is vested in multiple stakeholders, sometimes with conflicting priorities and interests, including within government

In turn, sustainability-focused policies (such as the National Strategy for Sustainable Development and the National Climate Change Response White Paper), to be truly sustainable, ought to take stock of the economic and social challenges and design objectives that address these. Climate change policy, particularly, fails too often to consider the short-term socio-economic trade-offs associated with its implementation, as well as the heterogeneity of situations (see Section 2.1).

Indeed, ultimately, successful implementation is vested in multiple stakeholders, sometimes with conflicting priorities and interests, including within government. Recent events linked to the Renewable Energy Independent Power Producers Procurement Programme (REIPPPP), which has been openly challenged by the national utility, and the heated debates on the introduction of a carbon tax, highly contested by parts of government, the private sector and organised labour, illustrate the lack of coordination and consensus at the national level.

3.2. Recommendations

Efforts should be directed towards building internal capacity on a sustainability transition within all government departments and entities. On the one hand, from the perspective of economic departments (such as the dti, EDD and the Department of Mineral Resources), the issue of climate change (and sustainability more broadly) must be mainstreamed beyond dedicated green teams so that departments can internalise sustainability considerations. On the other hand, non-core economic departments, such as DEA, also need to build their internal capacity in adopting a broader socio-economic framework when tackling climate change (and more broadly environmental) issues.

The inter-disciplinary nature of the transition indeed requires a broadened analytical scope for all stakeholders, facilitating collaboration and the development of a shared understanding. The recent introduction of the Socio-Economic Impact Assessment Systems (SEIAS) (see Box 2 on page 22) as part of government policy development processes should be leveraged to improve the understanding of cross-cutting issues (DPME, 2015a). This could be achieved through training, capacity building and technical assistance (notably secondments). The sustainability of these actions is crucial given the versatility of the international and domestic climate change regimes, staff turnover and the seminal nature of the work.

Inter-governmental coordination at the strategic as well as design and implementation levels should be meaningfully enhanced, in line with the aim of encouraging co-development (at governmental level) of policies and strengthening coherence of the policy framework. DPME's leadership, to monitor implementation, foster accountability and improve cooperative governance, is key to achieving this. This could be achieved through the enhancement of the Intergovernmental Committee on Climate Change, as recommend by Giordano et al. (2011), or the re-establishment of the Green Growth Task Team, under the leadership of the Presidency (DPME).

Mainstreaming sustainability in economic policy as well as the inclusion of socio-economic considerations in climate change/environmental policy, preceding the full alignment of policies, should take place. Economic policy should be reviewed and revised to include sustainability (or as a start, at least climate change-related considerations) in all strategies with the aim of moving each segment of the country towards a sustainable development pathway. Similarly, the socio-economic realities of the country should be taken into account in all climate change-related policies and strategies. This means factoring socio-economic considerations, such as competitiveness, business cycles, infrastructure lock-ins, technology development and implementation, trade dynamics, employment, poverty, inequality and skills development, into climate change-related plans and strategies. Such mainstreaming should moreover happen at all levels of government, from municipal Integrated Development Plans and provincial growth strategies to national policy. The process of domesticating the Sustainable Development Goals (SDGs), led by the DPME with support from the DEA, provides a valuable platform to carry out the alignment.

Box I: The Green Economy Accord: A missed opportunity to build an effective national partnership



NGP targets

300 000

additional direct jobs
by 2020

more than

400 000

by 2030

including

80 000

in manufacturing

The New Growth Path, developed by the EDD in 2009, lays out avenues to create five million new jobs in South Africa by 2020. It is part of a broader policy to shift the country towards a more labour-intensive trajectory, in turn contributing to a more cohesive and equitable economy and society. It targets the green economy (natural resource management, waste management and recycling, renewable energy and energy efficiency) as one of the key sectors for job creation in South Africa and aims at creating 300 000 additional direct jobs by 2020 (and more than 400 000 by 2030), including 80 000 in manufacturing.

As part of a set of multi-stakeholder initiatives in support of the NGP and an attempt to cement a national partnership, the South African government and social partners (organised labour, business and community constituents) signed a Green Economy Accord in November 2011. The Accord was characterised as “one of the most comprehensive social partnerships on the green economy anywhere in the world” by South African President Jacob Zuma and “groundbreaking” by leading trade unionist Zwelinzima Vavi. The Accord identifies points of agreement as well as specific tasks to be carried out by each constituency for a series of 12 commitments covering *inter alia* renewable energy, energy efficiency, solar water heaters, green investment, recycling, public transportation and rail freight, biofuels, clean-coal initiatives, the promotion of localisation and green jobs, and access to electricity for all.

Importantly, commitments are diverse in scope and specificity, with some containing targets and deadlines, while others are broad statements of intent. Ten of them are also not new but merely reiterated (and sometimes enhanced) in a more public-facing exercise ahead of the COP17 in Durban South Africa in 2011. Unfortunately, in the spirit of consensus, while the NGP recognises the need to consider trade-offs between the present costs and future benefits of a green economy, the Accord considers the green economy as an add-on to the rest of the economy, focusing only on co-benefits and avoiding controversial topics. This makes the ambition of the Accord relatively modest and a missed opportunity for meaningful inter-stakeholder dialogue on an economic transition to a sustainable development pathway. Commitments are also heavily focused on energy- and technology-related issues, neglecting other dimensions, such as water, waste, biodiversity and ecosystems.

As part of monitoring and evaluation, all parties should meet regularly (at least twice a year), under the auspices of the EDD, to review progress and to assess what changes and additions are required. The lack of capacity, expertise and clout of the EDD, the absence of implementation plans and the failure of some departments (responsible for implementation) to take ownership of the commitments, have, however, undermined the Accord. Progress towards the targets and other commitments is inadequately monitored and no enforcement mechanism exists at present, resulting in the Accord being more a voluntary measure than a regulatory requirement. As a result, progress has been extremely uneven and essentially linked to other dynamics, specific to each sector. Some areas which have gained momentum of their own have progressed well, while the Green Economy Accord has not helped unlock change in areas which were needed. In the end, the Green Economy Accord was more a public relations exercise than the creation of a social compact on the transition.

SOURCES: EDD, 2011; MONTMASSON-CLAIR, 2012; AND SEELIGER AND TUROK, 2016



4

Implementing policies through a mix of measures

Instruments and measures constitute the principal implementing arm of the governance system and give legs to the vision as well as the plans and strategies. As no single measure can optimally lead to sustainable development, a mix of measures, i.e. a comprehensive, complimentary and efficient set of instruments, is required (Hood, 2013; Hood and Guelff, 2013; Montmasson-Clair et al., 2014).

The adequate implementation of policies and the complementarity of existing interventions (in line with policy alignment detailed in Section 3) are crucial for a successful transition. Indeed, the combination of instruments can either run the risk of undermining policy goals (also known as adverse side-effects) or, if designed and implemented in an optimal, or best possible way, reinforce and achieve various objectives (as known as co-benefits) (IPCC, 2014).

4.1. Diagnostic: The need for effective implementation and further coordination

In South Africa, mirroring the multitude of plans and strategies, numerous measures have been designed to foster the transition. The implementation, clarity and coherence of the mix of measures, however, needs to be improved.

Table 1 provides a snapshot of the most prominent instruments in the country. Numerous regulatory measures are in place, from standards to licensing and/or operating requirements. Economic measures consist of subsidies and tax incentives aimed at stimulating resource-efficient behaviours and technologies.

TABLE 1: EXAMPLES OF INSTRUMENTS TARGETED AT ACHIEVING SUSTAINABLE DEVELOPMENT IN SOUTH AFRICA

Category	Sub-Categories	Examples
Regulatory measures	Legislation	Standards for specific technologies or processes; mandatory energy efficiency standards from new buildings; environmental management regulations (water use licences, environmental impact assessments), fuel blending requirements
	Plans	
	Standards	
Economic measures	Taxes	Tax incentives for energy efficiency and for R&D; carbon tax on new vehicles, levy of plastic bags, levy on non-renewable sources of electricity, Eskom's demand-side management programmes; grant programmes for energy efficient investment (Manufacturing Competitiveness Enhancement Programme)
	Offsets or tradable allowances	
	Subsidies	
Direct government action	Government procurement of public goods or services	Procurement and investment in the transport sector (e.g. freight modal shift and mass public transit); Renewable Energy Independent Power Producer Procurement Programme; Industrial Symbiosis programmes
	Direct infrastructure investment	
Support measures	Government support for voluntary actions	Concessional finance (Industrial Development Corporation and Development Bank of Southern Africa); Green Economy Accord; Direct funding for R&D centres
	Support for research and development	
Information programmes	Public/private programmes	Labelling programmes, National Cleaner Production Centre's support programmes; Resource efficiency campaigns (Eskom's 49M, Rand Water's Water Wise)

SOURCE: AUTHOR'S COMPOSITION, INSPIRED BY DEA, 2015

In addition, government has been instrumental in procuring or providing the platform for several initiatives, such as utility-scale renewable energy generation capacity, the rollout of Bus Rapid Transit systems, and establishing industrial symbiosis programmes. Government provides further support in favour of voluntary actions (through concessionary loan facilities) and R&D investments. Last but not least, government runs information and training programmes targeted at raising awareness in industries and households.

The implementation of numerous instruments is unfortunately marred by problems. Environmental standards are erratically upheld, particularly in the mining sector (Montmasson-Clair et al., 2015).

Lack of implementation frameworks, such as for biofuels, makes official targets and/or requirements null and void (Mukonza and Nhamo, 2016). Tax incentives and grant programmes remain difficult to access, particularly for small, medium and micro enterprises (SMMEs). In addition, concessional finance appears to be competing, rather than

complementing commercial funding in some cases, like the latest rounds of the REIPPPP. Voluntary targets, such as the Green Economy Accord (see Box 1 on page 15), are not adequately monitored and sparsely implemented.

Additional measures are being considered by government. Most notably, a new economic measure in the form of a carbon tax is being planned. Several additional regulatory instruments are also in the pipeline, such as a carbon budget scheme, mandatory energy management plans, pollution prevention plans, and an extended producer responsibility scheme. Given the problematic implementation of existing interventions and the contested nature of the space, a phased approach and collective buy-in will be needed to introduce and implement these measures in an efficient and adequate pattern.

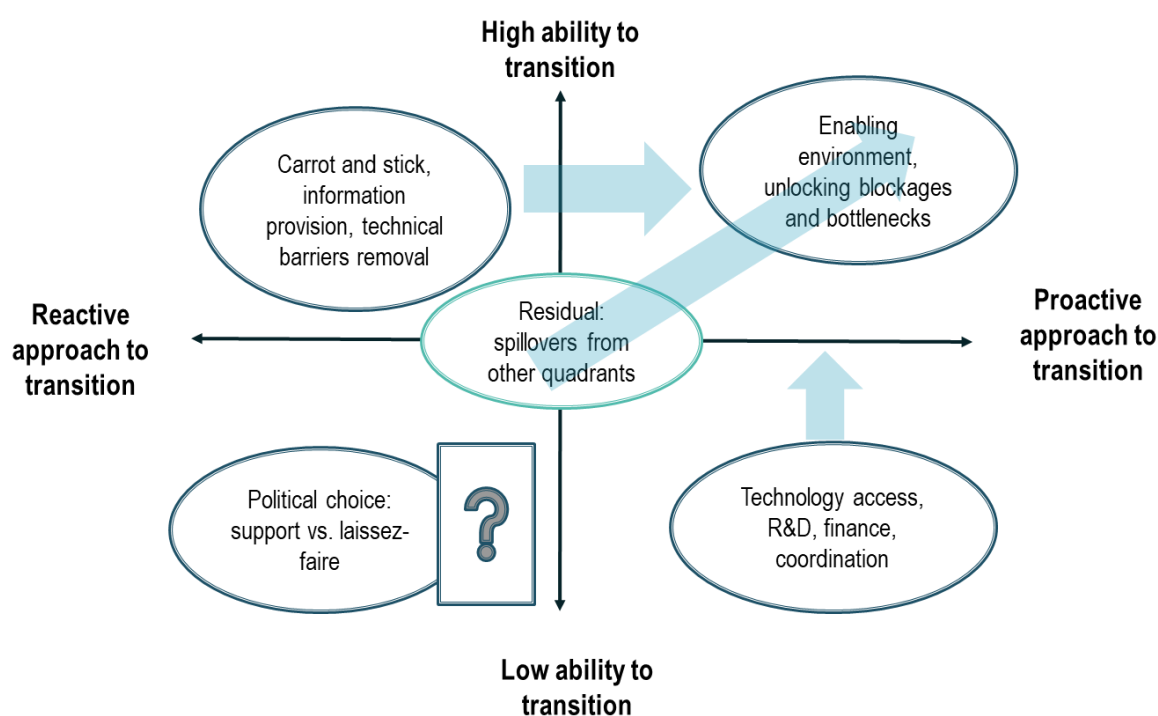
Altogether, the mix of measures lacks implementation, clarity, coherence and certainty. As of August 2017, there is no agreement in South Africa on the preferred instruments and their design, as the debates around the implementation of a carbon tax

and a carbon budget approach illustrate.² Existing and planned instruments are not mutually exclusive and potentially complementary, but the lack of implementation and the absence of long-term clarity on the instruments to be used and their interface create policy uncertainty and hamper economic development. Overall, clarity on the role, scope and impact of the mix of measures and the interaction of its many components is also absent. This mainly reflects the lack of a long-term vision and of coherence of the policy objectives. For example, with financial support, a lack of clarity persists on the support available, its adequacy with the requirements of stakeholders (such as industries and

households) and the ambition of the transition, and its complementarity (or even compatibility) with other instruments.

In addition, policies do not adequately capture the diversity of socio-economic situations and political settlements vis-à-vis the transition to a sustainable development model and fail to propose tailored solutions. Particularly, the industrial development component of the mix of measures, which has to deal with the firms/sectors that will directly benefit from the transition (the “winners”) as well as those that will face constraints and difficulties (“the losers”) remains largely unexplored (Montmasson-Clair, 2016).

FIGURE 4: DIFFERENT MIXES OF MEASURES FOR DIFFERENT SITUATIONS



SOURCE: MONTMASSON-CLAIR, 2016

² Importantly, what complementarity means is context-specific and delimited by specific criteria, priorities and realities. No international criteria have been developed to define an optimal policy mix (Gorlach, 2013).

Similarly, the impacts of the transition on employment and the country's most vulnerable populations, particularly the informal economy, are yet to be fully understood and addressed in a coherent fashion by the South African government (Smit, 2015; Smit and Musango, 2015).

Building on the matrix presented in Figure 2 (page 9), a conceptual framework can be used to understand the role of these complementary policy frameworks (see Figure 4). Targeted responses are required to cater for various situations. For example, stakeholders which have the capacity to transition have to be further enabled (if they are proactive) or pushed (if they are reactive) by government policy, whereas stakeholders that have limited capacity to transition ought to be pulled up through government interventions to prevent the risk of socio-economic marginalisation. Differentiated action is crucial to ensure that the transition addresses the country's socio-economic issues, contributing to the agenda of socio-economic transformation and empowering the marginalised groups of society (Montmasson-Clair, *forthcoming*).

4.2. Recommendations

More focus should be placed on operationalising existing policies and improving their coordination. This endeavour should be used to unlock regulatory bottlenecks to enable the economy and society to move towards more sustainable practices (e.g. installation of solar-based systems, biofuels, recycling and re-use of materials).

The next step should be to provide long-term clarity and certainty to the economy and society on climate change, and more broadly environmental, regulation. This means working towards a consolidation of existing (and upcoming) regulations into one coherent and integrated system. Establishing the One Environmental System for the mining sector, although imperfect, is a step in the right direction (Montmasson-Clair et al., 2015). Together with streamlining reporting requirements (notably the creation of one integrated information system), such a consolidation should contribute to

enhanced implementation, and in turn sustainability performance.

Reflecting on the proposed alignment between economic and sustainability policies detailed in the previous sections, a similar exercise should be conducted on the level of the mix of measures to ensure the complementarity of the interventions. Environmental, or at least climate change, measures should be reviewed (and revised) from a socio-economic angle to gain a nuanced understanding (both quantitative and qualitative) of the implications of specific measures as well as the whole regulatory framework on the economy and society.

At the same time, an assessment of economic policy, particularly industrial policy, programmes should be conducted from a climate change (if not environmental) perspective. A review (and revision) of existing, upcoming and other possible measures, focusing on their contribution to a sustainability transition should be conducted. In addition to economic growth, social cohesion and job creation/preservation, such an assessment should consider environmental sustainability/climate compatibility with the aim of moving economic policy support to sustainable activities. More broadly, such a review should include a complementary analysis, taking into account incompatibilities with measures (such as fossil fuel subsidies) which may hamper the benefits achieved by these support mechanisms.

Last, the development of the skills base in the country should be prioritised. Skills development should take two complementary directions in the short term. On the one side, awareness raising programmes about sustainability at firm level as well as community level should be enhanced. On the other side, developing skills at the professional level should be structured and promoted in a coherent fashion, through for example establishing dedicated curriculum and professional bodies for relevant professions. Both the promotion of core technical skills development as well as re-skilling and upskilling programmes is necessary to ensure an inclusive transition (Montmasson-Clair, *forthcoming*).



5

Building the toolbox for decision-making, implementation and monitoring

The bottom level of governance, which lays the foundation for evidence-based policy- and decision-making, effective and enforced implementation, and monitoring, consists of the tools necessary for policy design and implementation. In many ways, this ground level is the most critical as it underpins all other aspects of governance.

At the ground level of intervention, an adequate toolbox aims at supporting the design, implementation, enforcement and monitoring of the policy. Effective and relevant tools are at the crux of joint and integrated action. These need to be based on cross-pollination and the merger of both top-down and bottom-up methodologies, notably through constant incremental improvement and feedback loops between stakeholders and the different levels of action. A toolbox has different complementary purposes, namely information and education provision, monitoring and evaluation, and facilitated and enforced implementation. Tools encompass data, guidelines, manuals, templates, models and underlying modelling assumptions, and information platforms and repositories.

5.1. Diagnostic: The need to prioritise the building of tools

In South Africa, most of the essential tools are not available or incomplete, jeopardising the design and implementation of the transition to a sustainable development pathway. Despite multiple initiatives, the available tools are too often insufficient or unreliable to reduce information asymmetries, design evidence-based policies and instruments, and ensure implementation.

Tools are first designed to increase knowledge, awareness and capacity among relevant stakeholders and the public. They are aimed at overcoming a lack of information and/or awareness or information asymmetry between producers and consumers or between government and the private sector, as well as split incentives issues. Such tools (such as research reports and websites), which can be economy-wide or sector/issue specific, are aimed at shedding light on government actions (laws and regulations, incentives and support programmes), market dynamics (market trends, production and consumption pattern, technological developments), knowledge advancement (analytical tools and

methodologies, standards and methodologies) (IEA & IIP, 2012; IPCC, 2014; Reinaud and Goldberg, 2012).

In South Africa, no central information repository gathering all relevant information for stakeholders (primarily industries and households) exists. Much of the information is held by specific institutions (such as government departments and companies) and not accessible. When available, the information is scattered around multiple platforms (government entities, government websites, independent websites, company websites, reports, studies), making it hard to locate and use. In addition to being often outdated, the information is frequently incomplete or not detailed enough to be useful to interested parties. For example, information about funding opportunities is not available in a single portal for relevant stakeholders to access. Information is solely accessible on each finance provider's websites. This makes identifying such providers difficult and accessing funding a great challenge for SMMEs and households. When aggregated, such as the booklet produced by the Private Sector Energy Efficiency initiative, the information is partial, too superficial and static, which reduces its relevance (particularly as time passes).

Tools are also fundamental for effective monitoring and evaluation purposes. Monitoring, reporting and verification systems contribute to gathering necessary data and information about firm- and household-level activities as well as market responses to policies and instruments. Without detailed information that is based on data which is policy relevant, analytically sound and measurable, it is extremely difficult to design policies that will attain the set objectives with limited or no unintended negative consequences. Indeed, such systems are required at all stages of policymaking, from issue identification and agenda setting, to policy formulation and assessment, to decision-making, to policy implementation, monitoring and evaluation.

At the monitoring and evaluation level, the knowledge necessary for evidence-based decision-making and effective implementation is largely incomplete in South Africa. Comprehensive, reliable and up-to-date data and information on market trends, production and consumption patterns, resource use, waste streams, and financial flows are not available.

The South African government, led by the DEA, is working to establish a Climate Change Response Monitoring and Evaluation System, which is expected to fill some of the information gaps. This system is being designed with the aim of being operationalised in 2017-2018 (Letete, 2015). It aims at combining top-down and bottom-up monitoring, by gathering information from both source or implementing agencies and project implementers. The success and long-term sustainability of this instrumental initiative remains, however, conditional on the support of all government departments and entities as well as relevant stakeholders. The failed experience of the online National Climate Change Response Database, developed in 2008-2009 by the then Department of Environmental Affairs and Tourism, carries numerous lessons. The database was unfortunately left in disarray and abandoned due to lack of funding and institutional capacity (Montmasson-Clair, 2013).

Similarly, while the GHG Inventories and the Mitigation Potential Analysis conducted by the South African government were crucial steps towards better information, the knowledge in these areas is still largely imperfect. More comprehensive and disaggregated coverage of socio-economic activities is still required. In addition, data beyond climate change, covering other aspects of sustainability, are largely missing in the country, despite some efforts from Statistics South Africa and other partners to fill some gaps by building a System of Environmental and Economic Accounts and Experimental Ecosystem Accounts (Mudombi, 2017). Last, tools are useful to facilitate the implementation and enforcement of policies. Templates, guidelines, methodologies, forms, manuals and other tools form the basis of an effective implementation strategy. By providing all the information to stakeholders, particularly the private sector, a toolbox enables the transition to sustainable practices.

Various guidelines (such as on mining and biodiversity) and reporting procedures (such as the Technical Guidelines for Monitoring, Reporting and Verification of Greenhouse Gas Emissions by Industry) are in place. However, more efforts must be directed towards streamlining and standardising reporting procedures, facilitating the access (through application procedures) to support mechanisms, and spreading methodologies (such as the SEIAS or energy/carbon benchmarking) and tools across agencies and stakeholders.

Box 2: The SEIAS methodology, a valuable initiative to improve the policymaking process

To manage the shift to a sustainable development pathway, policy and regulatory interventions to facilitate the transition must be carefully weighed. The Socio-Economic Impact Assessment System (SEIAS) approved by Cabinet in February 2015 replaced the Regulatory Impact Assessment system from 1 June 2015, with the objective of strengthening policymaking processes.

The SEIAS provides the framework to assess new policies and regulations in South Africa with the aim of improving the formulation of prescripts, minimising unintended consequences and easing implementation. It requires that the impacts of a proposed legislation and its alternatives on different stakeholders (government, business, society) are considered, through five broad criteria, namely social cohesion, security, economic inclusion (employment creation and equity), economic growth and investment, and environmental sustainability. The SEIAS methodology aims to ensure that the proposal tackles the roots of a problem and constitute the most appropriate action, taking into account the repartition of risks and benefits and the interactions with other policy and regulations.

The new assessment methodology has already enhanced the policymaking process, with more than 300 policy and regulatory proposals having undergone the SEIAS process over the 2015-2017 period. The process ensures proposed legislation supports national aims. It also makes officials develop and understand alternative proposals, leading to innovative thinking. By providing the (mandatory) framework for policymakers to analyse and evaluate likely social and economic costs and benefits for different groups (both intended or unintended) and identify and mitigate against risks, the SEIAS has helped the drafting process anticipate and address criticism and opposition. The methodology has moreover been adopted by some departments beyond legislative processes, further improving policy- and regulation-making. In addition, the drafting of SEIAs, which is interdisciplinary in nature, has made the policy processes within and between departments more open and inclusive. SEIAs, produced by government departments, are also reviewed by the DPME through an iterative process, triggering a valuable learning process.

The rollout of the SEIAS has not, however, been without challenges, as the framework is being developed and government departments adapt to a new methodology. This is particularly important as assessments are meant to be conducted by policy drafters (with technical and policy support if required) and not external consultants. The implementation of the SEIAS has highlighted the lack of internal capacity in some departments. Capacity building activities are underway at national level to familiarise government officials with the methodology and ease its rollout, with already more than 140 officials trained in formal sessions (by March 2017). The SEIAS templates, while useful and well-designed overall, have proven to be unclear, burdensome and/or somehow limited (such as broad policy documents). A review process, led by the DPME, was conducted in 2017, resulting in proposed revised templates. The SEIAS process remains, however, at this stage, an internal government process, with no stakeholder involvement. Although the debate remains open on how to best include stakeholders in the process, it appears important that key stakeholders are provided a platform to engage with the SEIAS process.

Altogether, the SEIAS represents a valuable initiative and, although the framework cannot perfect the policy-making process, it has already triggered noteworthy improvements. The continual review of the methodology and the ongoing capacity building programme moreover ensure that benefits are sustained and enhanced over time.

SOURCES: AUTHOR'S COMPOSITION, BASED ON DPME (2015A, 2015B) AND TIPS (2017)

5.2 Recommendations

Information and data creation, collection and management should be at the forefront of policymaking. Establishing a robust and extensive information base underpins evidence-based policymaking and should be prioritised. Data on firm- and household-level dynamics relevant for the transition should be systematically collected, collated and analysed by Statistics South Africa, supported by all organs of the state. A review of the available information should be conducted with the goal of identifying data holders and reporting formats. This should constitute a first step towards establishing a central, public repository of all useful firm-level, country-level and administrative data. It will also provide an opportunity to streamline data gathering (and reporting) processes by standardising and systematising information systems (i.e. institutionalising data collection in the long term) and identify data and information gaps to be filled.

One-stop-shop platforms on sustainability should also be established in the country (at least for industry and households), similarly to the United States or British models.³ Such free and easily accessible platforms would gather all relevant information related to the transition to sustainable practices, such as available products and technologies per sector, available finance, incentives and support programmes, and current and upcoming laws, regulations and standards. In addition, the platforms could be used to promote initiatives (such as events, programmes of work) and companies (through numerous case studies and business cases) engaged in sustainability and enhanced resource management (energy, water, waste, carbon).

Complementarily, further initiatives are required to foster inter-stakeholder dialogue on the management of the transition. Existing consultation platforms tend towards a negotiation focused on specific regulations or policy proposals (such as the carbon tax or carbon budgets), and therefore are not conducive to constructive discussion and co-development. Other dialogue forums between government, business, labour and civil society on the management of the transition and its implications on the economy are crucial.

An enhanced understanding of the transition by all stakeholders, through a deeper and wider knowledge of relevant data and information, would also contribute to improved dialogue processes and policy co-development.

The medium-term emphasis should be to design a suitable platform, including joint knowledge and tools, for co-development of policy (in its broad sense) by government, the private sector, labour and communities. Establishing a pool of instruments and tools to be used by all stakeholders could contribute greatly to this work. This could include the SEIAS methodology (see Box 2 on page 23), analytical frameworks (such as National Business Initiative's and KPMG's Principles Framework⁴ or TIPS's Transition Matrix⁵), analytical templates (for sectoral/value chain analysis), guidelines, methodologies, common national repository of relevant data and information (such as an enhanced and updated mitigation potential analysis) and a transparent common economic model.

³ See <https://energy.gov> and <https://www.carbontrust.com> for more details.

⁴ See Nicholls and Vermaak (2015) for a detailed presentation.

⁵ See Figures 2 and 4 and Montmasson-Clair (2016) for more details.



6

Conclusion

Tremendous opportunities exist for improving the governance of the transition to a sustainable development pathway in South Africa. Governance must be enhanced at all levels of policymaking in both a top-down and bottom-up framework. Clarity and consensus must be reached on the end goal (i.e. the vision) for the country and the approaches to achieve it. Policy alignment and implementation must be promoted from a socio-economic and an environmental perspective, with a clear priority given to South Africa's triple challenge of poverty, unemployment and inequality. The mix of measures must be grounded in the socio-economic realities of the country, domestically and internationally, and the adequate tools, particularly information and data, must be established.

These processes are aimed at managing a balancing act, consisting of transitioning enough to maximise the benefits of the transition and minimise the risks associated with not transitioning; but in line with South Africa's capabilities to minimise the short-term trade-offs and threats.

Ultimately, the transition to sustainability is a long-term endeavour that will take several decades and the planning of which has to urgently commence now. From a governance perspective, it is therefore clear that designing and implementing the framework for the transition is not a once-off exercise. Regular reviews and updates (every 3-5 years) should be conducted at all levels of policy. This is the underlying condition *sine qua non* to ensuring the long-term sustainability (in all its meanings) of government action, and by extension the transition to sustainable development in South Africa.

Bibliography

Belén Sánchez, A., Martín, L., Montmasson-Clair, G., Du Plooy, P., 2013. Green Jobs and Related Policy Frameworks: An overview of South Africa. Sustainlabour, Madrid.

Cloete, B., Robb, G., 2010. Carbon Pricing and Industrial Policy in South Africa, in: Winkler, H., Marguard, A., Jooste, M. (Eds.). Presented at the Putting a price on carbon: Economic instruments to mitigate climate change in South Africa and other developing countries, Cape Town.

Davis Tax Committee, 2015. First Interim Report on Carbon Tax for the Minister of Finance. Davis Tax Committee, Pretoria.

DEA, 2015. DEROS Explanatory Note No. 2: Development of Mix of Measures for Sectors and Subsectors of the Economy. Department of Environmental Affairs, Pretoria.

DPME, 2015a. Guidelines for the Socio-Economic Impact Assessment System. The Presidency of the Republic of South Africa, Pretoria.

DPME, 2015b. Implementation of the Social Economic Impact Assessment System. The Presidency of the Republic of South Africa, Pretoria.

EDD, 2011. Green Economy Accord. Economic Development Department, Pretoria.

Giordano, T., Hall, L., Gilder, A., Parramon, M., 2011. Governance of Climate Change in South Africa. Department of Environmental Affairs, Pretoria.

Gorlach, B., 2013. What constitutes an optimal climate policy mix? Ecologic Institute.

Hood, C., 2013. Managing interactions between carbon pricing and existing energy policies. International Energy Agency, Paris.

Montmasson-Clair, G., 2017. Electricity supply in South Africa: Path dependency or decarbonisation? Trade & Industrial Policy Strategies, Pretoria.

Hood, C., Guelff, C., 2013. Integrating Carbon Pricing with Existing Energy Policies: Issues for South Africa. International Energy Agency.

IEA & IIP, 2012. Energy Management Programme for Industry. International Energy Agency and Institute for Industrial Productivity, Paris and Washington, D.C.

IPCC, 2014. IPCC Working Group III - Mitigation of Climate Change. Chapter 15: National and Sub-national Policies and Institutions. Intergovernmental Panel on Climate Change, Geneva.

Letete, T., 2015. South Africa's Climate change Response M&E System Framework: High-Level Summary. Department of Environmental Affairs, Pretoria.

Montmasson-Clair, G., 2016. Designing Policy Frameworks for a Climate-Compatible Industrial Development Transition in South Africa. Trade & Industrial Policy Strategies and the Department of Trade and Industry, Pretoria.

Montmasson-Clair, G., 2015. The Two Shall Become One: Overcoming the Stalemate Between Industrial and Climate Change Policies. Trade & Industrial Policy Strategies, Pretoria.

Montmasson-Clair, G., 2013. Tracking Climate Finance Inflows to South Africa (Prepared for the Climate Change Expert Group (CCXG) Global Forum). Organisation for Economic Co-operation and Development, Paris.

Montmasson-Clair, G., 2012. Green Economy Policy Framework and Employment Opportunity: A South African Case Study (Working Paper No. 2012-02). Trade and Industrial Policy Strategies (TIPS), Pretoria.

Montmasson-Clair, G., forthcoming. Sustainability Transition and Employment in South Africa: A Multi-Dimensional Approach, in: Mohamed, N. (Ed.), Sustainability Transitions in South Africa. Taylor & Francis, London.

Montmasson-Clair, G., Ryan, G., Gulati, M., Davies, E., 2015. Mining and the environment: Understanding the impacts to prioritise the efforts (Mining Phakisa Research Report). Trade & Industrial Policy Strategies, Pretoria.

Montmasson-Clair, G., Ryan, G., Smith, L., Schoon, F., 2014. Setting South Africa on a Green Growth Path: A Benchmarking Exercise on Climate Change Mitigation Measures and Industrial Development. Department of Trade and Industry and Trade and Industrial Policy Strategies, Pretoria.

Mudombi, S., 2017. Nature in South Africa's transition to sustainability: A stocktake. Trade & Industrial Policy Strategies and Green Economy Coalition, Pretoria and London.

Mukonza, C., Nhamo, G., 2016. Institutional and regulatory framework for biodiesel production: International perspectives and lessons for South Africa. African Journal of Science, Technology, Innovation and Development 8, 1–11.

Nicholls, S., Vermaak, M., 2015. It's the Economy, Stupid: Framing a Conversation on the Green Economy. National Business Initiative, Johannesburg.

NPC, 2011. The National Development Plan: Vision 2030. National Planning Commission.

Palma, J.G., 2016. Do nations just get the inequality they deserve? The "Palma Ratio" re-examined. University of Cambridge, Cambridge, United Kingdom.

Reinaud, J., Goldberg, A., 2012. Ten Key Messages for Effective Policy Packages: Sharing best practices in industrial energy efficiency policies. Institute for Industrial Productivity, Washington, D.C.

Seeliger, L., Turok, I., 2016. The Green Economy Accord: Launchpad for a Green Transition?, in: Swilling, M., Musango, J., Wakeford, J. (Eds.), Greening the South African Economy: Scoping the Issues, Challenges and Opportunities. UCT Press, Cape Town.

Smit, S., 2015. Towards an "inclusive green economy" for South Africa: Engaging with the informal economy. Stellenbosch University, Stellenbosch.

Smit, S., Musango, J.K., 2015. Exploring the connections between green economy and informal economy in South Africa. South African Journal of Science 111.

Statistics South Africa, 2016. Quarterly Labour Force Survey - Quarter 3: 2016. Statistics South Africa, Pretoria. TIPS, 2017. SEIAS Review (Draft Report). Trade & Industrial Policy Strategies, Pretoria.

TIPS, the dti, IDC, 2013. Trade and Climate Change: Exploring the Impact on South African Business (Summary of Roundtable Discussion). Trade and Industrial Policy Strategies. Department of Trade and Industry and Industrial Development Corporation, Pretoria and Johannesburg.

UNEP, DEA, 2013. Green Economy Modelling Report of South Africa - Focus on Natural Resource Management, Agriculture, Transport and Energy Sectors. United Nations Environment Programme and Department of Environmental Affairs.

This policy paper reviews the governance of South Africa's sustainability transition.

It forms part of a series of papers aimed at providing a barometer of South Africa's transition to sustainable development.

It is a component of a global initiative spearheaded by the Green Economy Coalition (GEC).

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