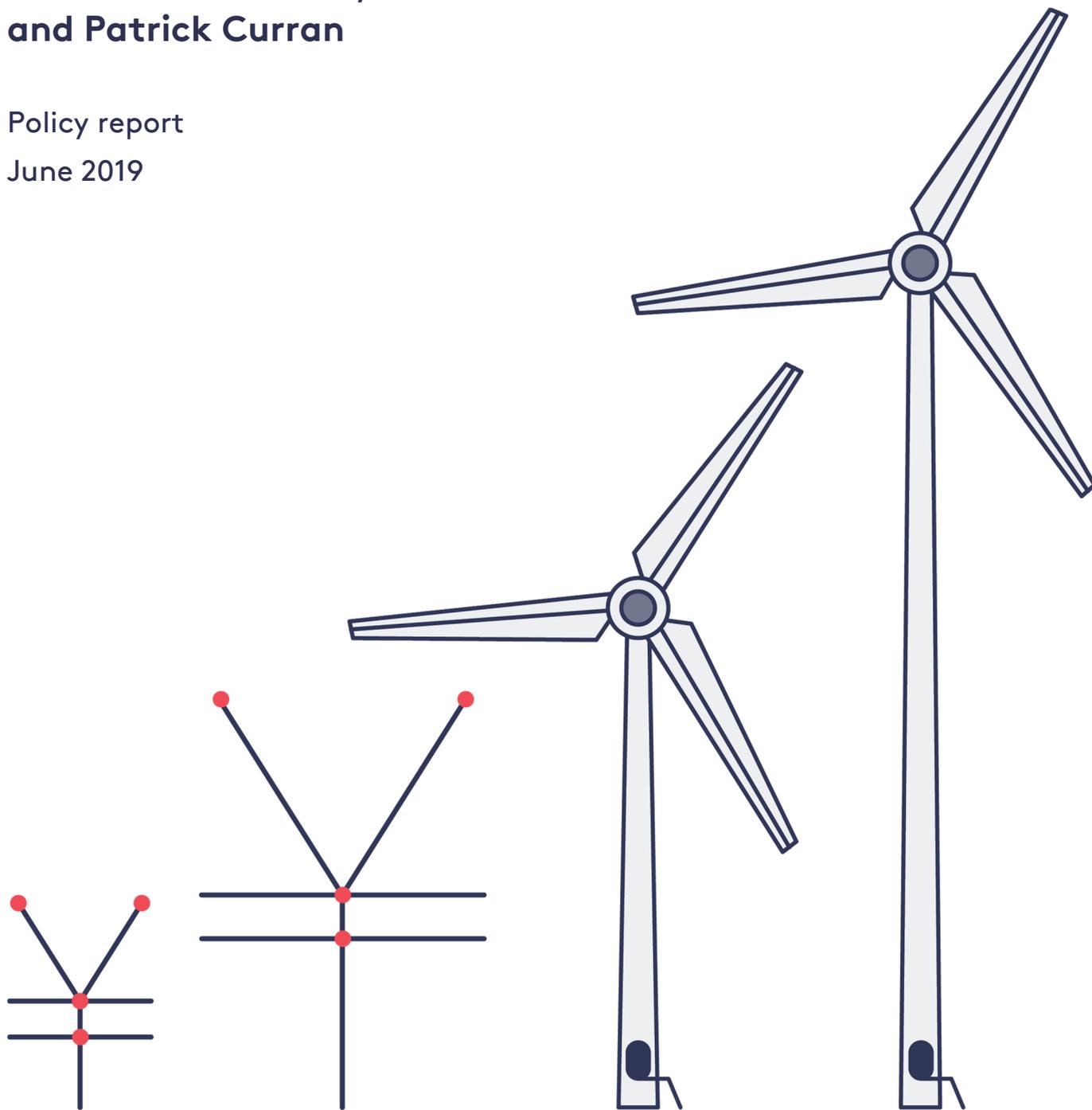


Governance of climate change policy: A case study of South Africa

Alina Averchenkova, Kate Elizabeth Gannon
and Patrick Curran

Policy report

June 2019



The Centre for Climate Change Economics and Policy (CCCEP) was established in 2008 to advance public and private action on climate change through rigorous, innovative research. The Centre is hosted jointly by the University of Leeds and the London School of Economics and Political Science. It is funded by the UK Economic and Social Research Council. www.cccep.ac.uk

The Grantham Research Institute on Climate Change and the Environment was established in 2008 at the London School of Economics and Political Science. The Institute brings together international expertise on economics, as well as finance, geography, the environment, international development and political economy to establish a world-leading centre for policy-relevant research, teaching and training in climate change and the environment. It is funded by the Grantham Foundation for the Protection of the Environment, which also funds the Grantham Institute – Climate Change and Environment at Imperial College London. www.lse.ac.uk/GranthamInstitute

About the authors and acknowledgements

Alina Averchenkova is a distinguished policy fellow and the lead for the Governance and Legislation research programme at the Grantham Research Institute and CCCEP. Kate Elizabeth Gannon is a research officer in the Sustainable Development research team at the Grantham Research Institute. Patrick Curran is a policy analyst and advisor to Professor Nicholas Stern at the Grantham Research Institute.

This research is supported by the British Academy's Sustainable Development Programme, SDP 2016. The authors further acknowledge financial support from the Grantham Foundation for the Protection of the Environment, and from the UK Economic and Social Research Council through its support of the Centre for Climate Change Economics and Policy.

The authors are grateful to the 30 government officials, politicians, industry stakeholders and policy experts who participated in the formal interviews for this study. Their insights inform the core of this report. We are also grateful for comments and feedback from Emma Archer, Jonathan Barnes, Declan Conway, Kathy Hochstetler, and Richard Perkins, as well as to Michal Nachmany and Joanna Pardoe at the Grantham Research Institute for their valuable logistical and technical support in the design of this study.

Georgina Kyriacou edited and designed the report.

The authors declare no financial relationships with any organisations that might have an interest in the submitted work in the previous three years and no other relationships or activities that could appear to have influenced the submitted work.

This report was first published by the Grantham Research Institute on Climate Change and the Environment and the Centre for Climate Change Economics and Policy in June 2019.

© The authors, 2019. All permissions requests should be directed to the Grantham Research Institute.

Suggested citation: Averchenkova A, Gannon KE, Patrick C (2019) *Governance of climate change policy: A case study of South Africa*. London: Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science



Contents

Executive summary	3
Abbreviations	7
Introduction	8
1. South Africa’s national climate change governance system	11
2. Challenges for climate governance	23
3. Maximising opportunities to strengthen climate governance	30
4. Recommendations	35
References	37
Appendix: interview respondents	39

Executive summary

South Africa has a sophisticated climate governance system but faces a range of challenges

South Africa has put in place one of the most elaborate and consultative climate governance systems observable among developing and emerging economies. As the country moves to implement its national climate goals and ramp ambition to meet the Paris Agreement it faces important domestic challenges that need to be addressed. These challenges are diverse in nature: some arise from overstretched human and technical capacity. Others result from structural issues, such as historical tensions between the main players, lack of clarity in the assignment of responsibilities, lack of ownership over implementation agendas, multiple ministries dealing with issues concurrently without sufficient coordination, and cumbersome and ineffective communication practices.

These challenges have been exacerbated by a wider political context of several years of political crisis and 'state capture' over the past 10 years, which resulted in uncertainty over the direction of climate change and energy policy, distracted leadership and low political will to act further.

Based on extensive expert interviews and the analysis of the key policy documents, the study examines the governance challenges and identifies opportunities for addressing them to enhance implementation of climate policy. While some of the governance challenges, such as those around tensions between the state and private sector, are relatively more important in South Africa than in some other countries owing to its history and recent political dynamics, most issues are also relevant to other emerging and developing economies

Key cross-cutting strategies on climate change are in place, but policies are not aligned and implementation has been delayed

National climate change governance in South Africa is the product of more than two decades of policy evolution and has been shaped by an elaborate landscape of executive policies, strategies, regulations and institutions. The 2004 National Climate Change Response Strategy, followed by the National Climate Change Response White Paper (NCCRWP), approved in 2011, form the foundation of national climate policy. In 2012 climate change became a key element of the National Development Plan, the overarching plan for the country.

While there are a number of policies that operate across multiple sectors, there are also those that are targeted at avoiding emissions or supporting more specific sectors. The development of these sectoral level policies in South Africa is skewed by the greenhouse gas emissions profile of the country, with high-emissions sectors such as energy having more developed climate policy landscapes. These strategies are cross-cutting and gave a start to several specific policy mechanisms, including the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) and the cross-sectoral carbon tax. However, since 2010/11 climate change policy overall and, in particular, mitigation policies in the energy sector, have been delayed.

Policies on adaptation and resilience have had little focus to date. A draft National Climate Change Adaptation strategy was released in 2017 for public comment but has not yet been approved.

A systemic issue that could become a roadblock for the implementation of South Africa's nationally determined contribution (NDC) to the Paris Agreement is the lack of alignment and policy coherence: in other words, the gap between climate change goals and the objectives set in other key strategies and policy documents that determine the trajectory of development. This lack of alignment was particularly important for the period 2010 to 2018 in the case of the Integrated Resource Plan (IRP), which determines South Africa's strategy for energy generation for the next 20 years. It is also relevant for other sectoral policies, including the Industrial Policy Action Plan and others.

Horizontal and vertical mechanisms for climate change governance are comprehensive but their effectiveness has varied

Technically, South Africa has a comprehensive system for vertical and horizontal coordination. The NCCRWP recognises that to ensure sustainable development and a just, managed transition to a low-carbon society, policies need to be aligned both vertically (from national to local levels) and horizontally (between national departments). It sets out an obligation for all government departments and state-owned enterprises to align their policies, strategies and regulations.

The Inter-Ministerial Committee on Climate Change, Intergovernmental Committee on Climate Change and the Forum of South African Directors General are the key mechanisms for coordination. Every climate change-related policy must further pass through a comprehensive stakeholder engagement process, including through the National Committee on Climate Change and the National Economic Development and Labour Council.

However, ensuring coherent policy formulation and implementation remains challenging due to the fragmented nature of responsibility for climate policy. Clear relationships between different governance elements are not well established and in some cases this has led to a lack of clarity surrounding how policies will be jointly implemented and aligned. The lack of aligned position impacts the effectiveness of the public sector in producing and implementing climate policies and also impedes engagement with and policy signalling to other stakeholders, especially the private sector and investment community.

Limited public sector capacity and dedicated financial resources hamper climate change governance

There is a shortage of capacity to deal with climate change and related policies within the Government that stems from limited human and financial resources, and a shortage of relevant expertise and skills. Several key agencies are generally understaffed. This situation is exacerbated by the growing complexity of work involved in designing and implementing sectoral and multi-sector decarbonisation and resilience policies. These challenges are more acute at provincial and municipal levels.

Also in short supply are the financial resources needed to augment governance capacities to work on climate change in the key agencies and for financing policy implementation and the underlying investments in the low-carbon and climate-resilient transition. One of the critical gaps underlying the shortage of finance is the lack of a comprehensive climate finance strategy to define the allocation of resources to support climate change work and to attract international funding and investment. Furthermore, there is a shortage of skills and capacity among the government departments, devolved administrations and private actors to prepare financeable project propositions.

Gaps and constraints in information and data

The need to improve the availability of credible data on current and projected greenhouse gas emissions and their mitigation potential is another challenge, and prompts wider concerns about the legitimacy of targets and policies. Addressing these challenges will require improvements to the collection of information and to the measurement of progress, including rigorous reporting and evaluation frameworks with clear common indicators.

Mistrust of public-private engagement

Fora to facilitate horizontal coordination between stakeholders have been established, including those to facilitate constructive engagement and discussion to build informal and personal relationships (for example by the National Business Initiative). However, tensions remain and are often accompanied by calls for policy proposals to be changed and delayed. These tensions arise due to mistrust, difficulties in historical relationships, and questions around the pace, scale and form of policies. They exist both between and within government departments, state-owned enterprises, academic research centres, civil society and trade unions.

While some issues are embedded in the general dynamics of the relationships between public sector and non-state actors in South Africa, many are related to the ways in which consultations are run: for example, concerns around continuity, and a lack of transparency on how feedback from stakeholders is dealt with. These issues are prevalent throughout South Africa's political discourse and economic structure – but climate is a policy area where constructive interaction between the public and private sector is particularly important for making progress.

Opportunities to overcome barriers to climate governance

South Africa is now moving from climate policy planning to implementation, further exposing the challenges around climate change governance and making the need to address them increasingly urgent. Change in the leadership of the country and a new momentum in the discourse towards giving greater importance to climate and energy policy make it an opportune moment. The process of consultation on the draft climate change legislation recently launched by the Government, as well as the new draft Integrated Resource Plan (IRP), offer opportunities for discussing and implementing some of these improvements.

Recommendation 1: Align development of policies and strategies with the objectives of the nationally determined contribution (NDC)

Successful implementation of South Africa's NDC requires that its objectives are strongly anchored in the National Development Plan, the Medium-Term Strategic Framework and developmental and management plans at provincial and city levels. It could be useful to include a requirement to mainstream climate change and to cooperate with other agencies in the performance goals and monitoring frameworks for each ministry and into the budget planning cycle, and for the performance metrics to include policy coordination and integration. The draft 2018 Integrated Resources Plan, which sets the future energy strategy (currently under consultation), is an important step in the right direction, having integrated the NDC objectives in its scenarios and included a clear target for renewable capacity. Similarly, the reinstatement of the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) in 2018 was a welcome step. It is important that the Government's commitment to these programmes and objectives is sustained and integrated into other sectoral policies.

Recommendation 2: Renew high-level commitment and empower key agencies through clear mandates

Successful implementation of climate policy requires renewed political commitment and leadership from the highest level and a unified approach from the Government. There needs to be a clear mandate for a lead agency entrusted with coordinating implementation and for each of the sectoral agencies to designate staff and resources and to implement policies, based on the existing work and lessons learnt from past experiences. A consideration should also be given to which agency is best suited to lead on the coordination of the implementation of the national climate change objectives, taking into account their technical expertise, political standing and availability of resources.

Recommendation 3: Launch a forum focused on implementing the NDC

Moving to implementation requires a transparent and continuous process focused on policy alignment and coordination, led by a strong government agency that has a clear mandate from the highest political level to coordinate this process. A system of common planning and monitoring indicators or outcome templates could help facilitate coordination, backed up by an iterative process of reflection, learning and integration of lessons. Provincial and city governments should have strong representation in this process. This forum should be chaired and convened at a high level (for example, ministerial), and include senior representatives from the private sector and civil society to discuss issues, challenges and coordination.

Recommendation 4: Develop a comprehensive finance strategy

Effective implementation of the NDC and the transition to low-carbon and climate-resilient development requires allocation of resources and strategic realignment of budgets.

Development of the national climate finance strategy, as mandated by the White Paper, should be among the priority actions. Establishing a designated coordination mechanism on finance for NDC implementation could help align existing – and mobilise new – sources of funding. National government should also assist the provincial and municipal levels by providing guidelines and capacity-building on how to prepare projects. It should also make targeted funding available.

Recommendation 5: Frame the climate change discussion around developmental benefits and opportunities

Linking climate policy to poverty reduction objectives, clean energy access for communities and stimulation of new low-carbon industrial growth and innovation is key to leveraging buy-in and effective engagement across levels of governance, horizontally and vertically. In order to engage the relevant sectoral agencies in implementing the NDC, it is important to demonstrate the co-benefits of the interventions and opportunities, and positive synergies for advancing sectoral agendas, while addressing climate change.

Recommendation 6: Improve existing consultation and engagement fora

The effectiveness of the existing mechanisms for engaging stakeholders could be improved by expanding their membership (for example, by inviting the Inter-Ministerial Committee on Climate Change to meet with company CEOs), by engaging with the relevant sectors more consistently, and by making their participation in the main fora mandatory through direct, high-level mandates. Changing the mode and tone of engagement, and emphasising transparency in the Government's methods of dealing with stakeholder feedback, would aid communication with stakeholders. It is also important that senior experts with a good understanding of business perspectives lead the engagement on the Government's side.

Recommendation 7: Invest in strengthening relationships between stakeholders and the processes of interaction

Providing opportunities for all stakeholders to engage informally in non-governmental fora is key for breaking down the current barriers inhibiting public-private engagement. Spaces are needed where all parties can collaborate outside bureaucratic processes without being entrenched into formal positions of the constituencies they represent. This effort should be facilitated by a neutral broker who is trusted by both the Government and private sector. It should build on past experiences and focus on concrete implementation challenges.

National government and municipalities should also look for and cultivate 'climate champions' that could catalyse action. Furthermore, developing personal relationships that move away from 'political lines' to interactions as individuals, and investing in improving interaction processes, should be considered as part of key measures to improve the effectiveness of climate governance. This would help overcome obstacles in horizontal and vertical coordination and stakeholder engagement. Practically, this could be done through participatory training or pilot projects that bring together experts from different sectors and stakeholder groups.

Recommendation 8: Improve data, information and public awareness

Developing and implementing the NDC and climate policies more broadly requires improving the data and information base. Continuing to strengthen public engagement to build awareness of climate change and related actions and policies, alongside the facilitation of climate activism, should form an important part of the NDC implementation strategy. Consideration should be given to improving ways of sharing expert information and research relevant for the low-carbon and climate-resilient transition, making it more accessible to the public sector and other stakeholders.

Abbreviations

ANC	African National Congress
BAU	Business as usual
BUSA	Business Unity South Africa
COP	Conference of the Parties to the United Nations Framework Convention on Climate Change
Cosatu	Congress of South African Trade Unions
CSR	Corporate social responsibility
DEA	Department of Environmental Affairs
DEROs	Desired emission reduction outcomes
DPME	Department of Planning, Monitoring and Evaluation
DoE	Department of Energy
FOSAD	Forum of South African Directors General
G20	Group of 20
GDP	Gross domestic product
GIZ	Gesellschaft für Internationale Zusammenarbeit (German Society for International Cooperation)
GW	gigawatt
IDP	Integrated Development Plan
IGCCC	Intergovernmental Committee on Climate Change
IMCCC	Inter-Ministerial Committee on Climate Change
IPAP	Industrial Policy Action Plan
IRP	Integrated Resource Plan
ISMO	Independent System Market Operator
LTAS	Long-term adaptation scenario
LTMS	Long-term mitigation scenario
LULUCF	Land use, land use change and forestry
MDSF	Medium-Term Strategic Framework
MPA	Mitigation Potential Analysis
MtCO ₂ e	Million metric tonnes of carbon dioxide equivalent
MW	megawatt
NBI	National Business Initiative
NCCA	National Climate Change Adaptation
NCCC	National Committee on Climate Change
NCCRP	National Climate Change Response Policy
NCCRWP	National Climate Change Response White Paper
NDC	Nationally determined contribution
NDP	National Development Plan
NEDLAC	National Economic Development and Labour Council
NERSA	National Energy Regulator of South Africa
NGO	Non-governmental organisation
OECD	Organisation for Economic Co-operation and Development
PPA	Power purchasing agreement
REIPPPP	Renewable Energy Independent Power Producers Procurement Plan
SALGA	South African Local Government Association
SAFTU	South African Federation of Trade Unions
SoE	State-owned enterprise
UNFCCC	United Nations Framework Convention on Climate Change

Introduction

In order to implement the Paris Agreement on climate change, a rapid shift to decarbonising economies and improving climate resilience is required. This brings new challenges to national climate governance, which is the ways in which decisions on climate change are taken and implemented in a country. While there are many dimensions to climate governance that are important, in this study we focus on the central question of how the state (as opposed to non-state actors) governs climate change and on the associated institutional arrangements and governance processes.

State climate governance arrangements and practices impact the ability of governments to set the overall direction for actions, coordinate implementation of those objectives, and mobilise other actors through incentives, constraints and normative influences. To implement the overall goals of the Paris Agreement and the specific objectives set in countries' nationally determined contributions (NDCs), national climate governance mechanisms and practices need to be assessed and strengthened, with a clear understanding of existing weaknesses.

The objective of this policy report is to examine some of the emerging challenges in climate governance in South Africa and potential solutions, drawing out lessons for South Africa and for other countries facing similar challenges.

South Africa's record in international and domestic climate change action

South Africa has often been at the forefront of international efforts to address climate change. South Africa acceded to the United Nations Framework Convention on Climate Change (UNFCCC) in 1997 and ratified the Kyoto Protocol in 2002. In 2010, it was among the first emerging economies and developing countries to come forward with a voluntary emissions reduction pledge for 2020 under the Copenhagen Accord. The following year South Africa hosted the 17th Conference of the Parties (COP 17), which resulted in the launch of the Durban Platform for Enhanced Action. In 2015 South Africa submitted an intended NDC in the lead-up to the negotiations of the Paris Agreement.

Over the past two decades, South Africa has also adopted a range of national and sectoral policies, plans and strategies that aim at decarbonising the economy while meeting broad developmental objectives. To enable development and implementation of these policies the country created an elaborate system of climate governance, with several new institutions and consultative and decision-making processes (Figure 1 in Chapter 1 provides a timeline of climate-related policy by sector).

During the same period, South Africa has been through fundamental political and economic changes that have caused turbulence at times and have impacted all policy spheres, including climate change. Since the early 1990s, post-Apartheid South Africa's economy has more than tripled in size and there has been large-scale investment in basic services (for example education, electricity and water), increased provision of social services for the most vulnerable, and the establishment of important constitutional institutions, including the judiciary (OECD, 2017). However, since around 2013 South Africa has experienced a period of stagnant economic growth, persistent unemployment, reduced investment, and continued widespread poverty and inequality.

These challenges have been compounded by the policy uncertainty and turmoil created during the period 2009 to 2018, when Jacob Zuma and the African National Congress (ANC) were in power. Towards the end of these nine-years, evidence emerged of widespread corruption and 'state capture'¹ (see Public Protector of South Africa, 2016 and Bhorat et al., 2017). Cabinet

¹ Transparency International defines state capture as "a situation where powerful individuals, institutions, companies or groups within or outside a country use corruption to shape a nation's policies, legal environment and economy to benefit their own private interests" (Transparency International, 2014).

reshuffles of ministers took place almost annually and there were frequent changes to the senior management of critical state-owned enterprises (SoEs). In many cases, these changes were intended to enable and facilitate access to resources with the aim of inserting facilitators into positions of influence to overcome barriers to corruption or to support specific private sector companies to gain access to lucrative procurement contracts (Bhorat et al., 2017). Current President, Cyril Ramaphosa, has referred to the 'nine lost years' (Hogg, 2019) while others call them the 'Zuma years' (for example, Grootes, 2019).

In 2018, Cyril Ramaphosa (previously Deputy President of South Africa) was elected President of the ANC and a few months later Jacob Zuma resigned as President of South Africa following pressure from the new ANC national executive committee. Subsequently Ramaphosa was elected President for the remainder of the term, and was re-elected in May 2019 for the start of his first official term.

The political turbulence and turmoil of the past 10 years caused by 'state capture' has impacted the design and implementation of many of South Africa's climate change policies. While President Zuma publicly supported climate action in international fora, action in the country was less evident during his last few years in office, which were characterised by delays in the development and implementation of policies designed to reduce greenhouse gas emissions or adapt to climate change impacts: there were last-minute changes to the Renewable Energy Independent Power Producers Procurement Programme (REIPPPP), and delays to prominent climate change policies such as the carbon tax and carbon budgets.

In South Africa's NDC submitted under the Paris Agreement in 2015, the country committed to reducing greenhouse gas emissions when compared with business-as-usual (BAU) by 34 per cent in 2020 and 42 per cent in 2025.² According to Climate Action Tracker, this target is equivalent to a 19–82 per cent increase on 1990 levels in 2025 (when emissions from land use, land use change and forestry [LULUCF] are excluded).

The NDC is consistent with South Africa's pledge under the 2009 Copenhagen Accord, which proposed emissions reductions below BAU levels, including LULUCF. But that target was developed in the early 2010s, a number of years before the Paris Agreement, and has not been updated since then. The target is not considered to be in line with the Paris Agreement (Climate Action Tracker, 2018).

Aims and importance of this study

As countries around the world move forward with implementing the Paris Agreement, many are reviewing their domestic governance frameworks and developing mechanisms that seek to enable their domestic transition to low-carbon and climate-resilient development (Averchenkova et al., 2017). Strong national governance is also essential in the context of ratcheting up ambition on climate change under the Paris Agreement after 2020. This study undertakes an empirical analysis of national climate governance and policy implementation in a specific emerging economy, aiming to generate lessons for wider learning. While recognising the importance of overall political economy and policy uncertainty in South Africa, as discussed above, the purpose of the analysis is to aid policymakers and key stakeholders in South Africa in the identification of barriers and opportunities in existing governance structures to enhance implementation of climate policy. The lessons we identify are also relevant for other developing economies as they set out on the path to implement the Paris Agreement domestically.

Research method

Our analysis is based on perceptions of climate governance explored through 30 interviews encompassing the views of 32 of South Africa's leading experts, from national and subnational government and sectoral agencies, the private sector, civil society and academia, who have been actively engaged in the national climate change debate and policy. The interviews were conducted between September 2017 and March 2018. Inputs from these key informants were

² See <https://climateactiontracker.org/countries/south-africa/>

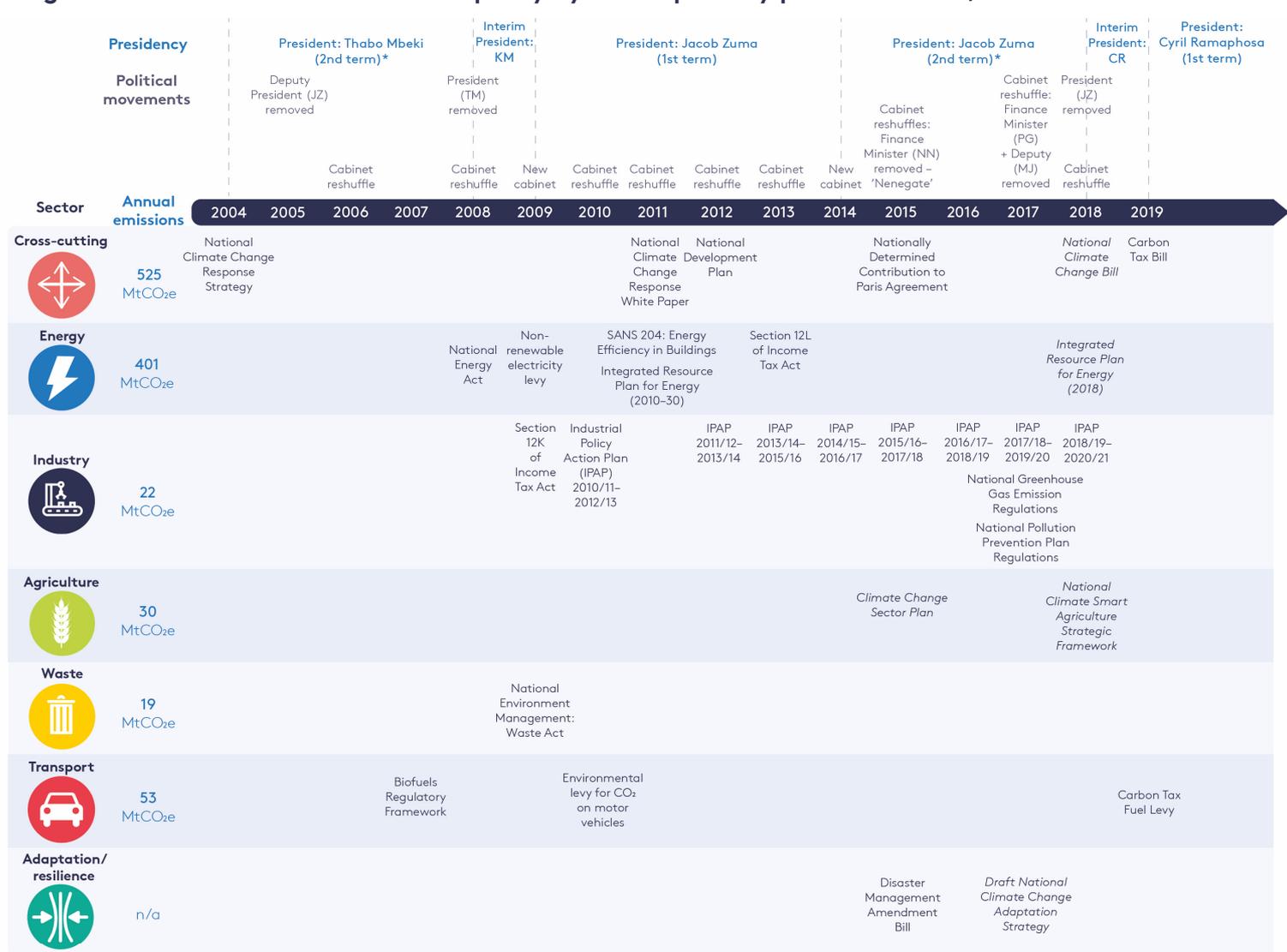
complemented by a review of previous studies on South Africa's climate policy. The interviews were complemented by analysis of the academic literature on climate change policy in South Africa, of the key national policy documents adopted or proposed for adoption, and of the main political developments up to May 2019. The Appendix provides more detail on the interviews.

Structure of the report

- **Chapter 1** outlines the principal elements of South Africa's national climate governance system.
- **Chapter 2** reviews the main challenges facing climate governance in South Africa.
- **Chapter 3** highlights opportunities for strengthening climate governance in South Africa in the future.
- **Chapter 4** outlines recommendations for the future, aimed at South Africa primarily but applicable to other developing country economies.

1. South Africa's national climate change governance system

Figure 1. Timeline of climate-related policy by sector plus key political events, 2004–19



Notes: *Full term not completed due to resignation. Only policies related to climate change or specifically targeted at supporting initiatives aimed at climate change action are included. *Italics* denote policies that are in preparation or undergoing consultation but have not yet been formally approved (either by Parliament or Cabinet). Year signifies when draft was first published for consultation. CR – Cyril Ramaphosa JZ – Jacob Zuma KM – Kgalema Motlanthe MJ – Mcebisi Jonas NN – Nhlanhla Nene PG – Pravin Gordhan TM – Thabo Mbeki. MtCO_{2e} = million tonnes of carbon dioxide equivalent

Source: Authors

This chapter provides an overview of the key features of national climate governance in South Africa, including the main institutions, mechanisms for their interaction, and relevant policy frameworks.

National climate change governance in South Africa is the product of more than two decades of policy evolution and has been shaped by an elaborate landscape of executive policies, strategies, regulations and institutions (see Figure 1).

The first document guiding climate change policy was the 2004 National Climate Change Response Strategy, which was followed by a comprehensive process of developing ‘long-term mitigation scenarios’ (LTMS). The LTMS process, which set out to formulate strategic options around South Africa’s mitigation potential, laid the basis for the content of South Africa’s pledge

to the Copenhagen Accord in 2008 and later for its mitigation commitments in the NDC to the Paris Agreement. South Africa also prepared and submitted three national communications to the United Nations Framework Convention on Climate Change (UNFCCC), in 2003, 2011 and 2018, two national inventory reports, in 2014 and 2018, and two biennial update reports, in 2014 and 2018.³

The overarching national climate change framework, as well as the latest version of the objectives pledged under the NDC, including the 'Peak, Plateau, Decline' (PDD) emission trajectory, is set through the National Climate Change Response White Paper (NCCRWP) (Department of Environmental Affairs [DEA], 2011). It is also influenced by several pieces of legislation with specific provision for climate change (e.g. the Disaster Management Amendment Bill, 2015) or implied provision (e.g. the National Greenhouse Gas Reporting Regulations and Pollution Prevention Plans issued by the DEA under the National Environmental Management and Air Quality Act).

South Africa's National Climate Change Response Policy

A key policy setting out the vision and overall policy framework is the National Climate Change Response Policy (NCCRP), which was set out in the National Climate Change Response White Paper (NCCRWP) and approved by Cabinet in 2011. The NCCRP arose from an extended participatory policy development process based on the country's recent history of democratic engagement. This involved modelling and research activities as well as a suite of stakeholder engagements, reviews and parliamentary hearings. Its goals were informed by other national and international commitments, including the South African Constitution, the Bill of Rights, the National Environmental Management Act, the Millennium Declaration and commitments made under the UNFCCC. The NCCRP is supported by the overall strategic policy of the country, the National Development Plan (NDP) (2012).

In June 2018, South Africa launched public consultations on a draft National Climate Change Bill, which intends to put the key strategic climate change objectives, governance elements and policies into law (Government Gazette, 2018).

Long-term mitigation scenarios

The NCCRP built on the Cabinet-mandated long-term mitigation scenarios (LTMS) process, which took place between 2005 and 2008 and which identified packages of mitigation measures forming strategic options for the national mitigation potential. The LTMS was the first initiative in South Africa to develop a national view on mitigation potential and inform the position in the international negotiations (Trollip and Boule, 2017).

The LTMS involved an inclusive stakeholder and technical process (e.g. Winkler, 2011) and, according to a recent study (Tyler and Gunfus, 2015), was perceived by many participants as having achieved its objectives. However, in 2010, some stakeholders started to push back, after the LTMS results were used as the basis for South Africa's Copenhagen pledge and the concept of the 'Peak, Plateau, Decline' trajectory (Trollip and Boule, 2017; Tyler and Gunfaus, 2015). The LTMS were meant to be an initial analysis to be updated later and were criticised for their lack of reliable data; some stakeholders felt that they were misled by the Government over the purpose of the process, which was not expected to lead to mandatory commitments (Tyler and Gunfaus, 2015). This discussion is still relevant in the context of the implementation of the NDC, and is considered in more detail in Chapter 3 below.

Flagship programmes

The NCCRP also established eight 'Near-term Priority Flagship Programmes', capturing the leading adaptation and mitigation actions and which serve as mechanisms for the DEA to work with other government departments. These 'flagships', as they are known, target climate change response public works; water conservation and demand management; renewable

³ See <https://unfccc.int/BURs>

energy; energy efficiency and energy demand management; transportation; waste management; carbon capture and sequestration; and adaptation research. They are designed, among other things, to target major emitting sectors and to test, develop and scale up a range of policy mechanisms and methods of implementation.

From these flagships, a number of key adaptation and mitigation policy mechanisms in South Africa have been developed, targeting different sectors. The Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), for example, was scaled up as part of the renewable energy flagship programme.

Mitigation and adaptation

The NCCRP set out national priorities for climate change and was intended to build on existing mechanisms and policy proposals in relation to mitigation and adaptation. It names numerous strategies in relation to adaptation (e.g. identifying priority sectors and addressing adaptation interventions in sector plans) and mitigation (e.g. defining 'desired emission reduction outcomes' – or DEROs – for each sector and adopting a carbon budget agenda, as well as a carbon tax). It also provides for a Climate Change Response Monitoring and Evaluation System under the DEA.

Climate change policies at sectoral level

While there are a number of policies that operate across multiple sectors, there are also those that are targeted at avoiding emissions or supporting more specific sectors. The development of these sectoral level policies in South Africa is skewed by the greenhouse gas emissions profile of the country, with high-emissions sectors having more developed climate policy landscapes (see Figure 1).

A focus on the energy sector

The majority of substantive national-level policies to date have been focussed on the energy sector and were developed between 2004 and 2010. This includes the introduction of an overall energy efficiency strategy in 2005, the introduction of a non-renewable electricity levy in 2009, and the inclusion of a carbon constraint for the first time in the 2010 Integrated Resource Plan (IRP 2010) for energy.

However, since 2010/11 some of the key climate change and low-carbon energy policies have stalled. This includes updates to the IRP, delays in approval of the carbon tax and development of policies targeting other renewable energy (such as small-scale generators). This situation is partly due to the political obstruction during the 'state capture' years (see Introduction). An example of this influence can be seen in the IRP process and its impact on the uptake of renewable energy (see Box 1 below).

More variation in industry, waste, agriculture and transport

In other sectors too (industry, waste, agriculture and transport), the policy development process relating to climate change-specific policies has been varied and sporadic. For example, even though industry has received more attention than other sectors from policymakers, it has taken a while to develop and implement policies. The substantive policy developments for industry since the NCCRP and NDP have been related to the National Greenhouse Gas Emission Reporting Regulations and the National Pollution Prevention Plan Regulations, both promulgated in 2017. These require covered sectors to report greenhouse gas emissions through the national system and develop mitigation plans, with the first compliance periods in 2018. The Emission Reporting Regulations and the Pollution Prevention Plan Regulations are both key elements of the national climate change mitigation system developed by the Department of Environmental Affairs and approved in 2015. They feed into the broader climate change policies under the NCCRP, including the development of the carbon budgets and the management of the carbon tax (see Box 2), which are also targeted at industry.

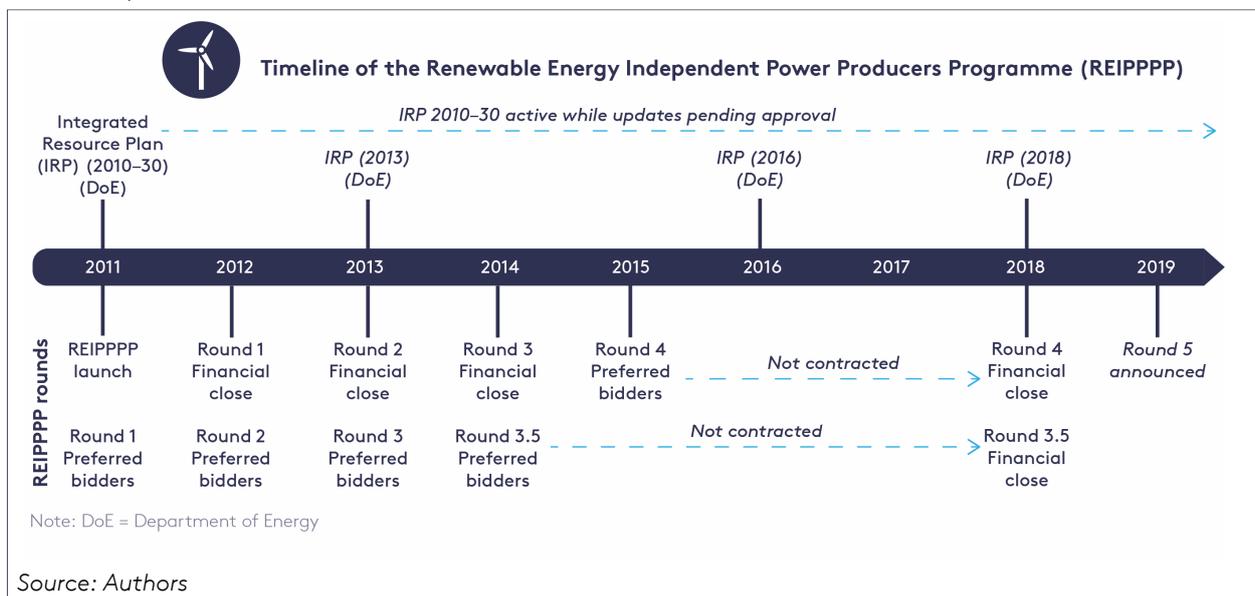
For the sectors with lower greenhouse gas emissions, policy development and implementation has been slower despite there being flagship programmes allocated to each. For example, there

is not yet an approved overarching climate change strategy for agriculture, with both the sector plan and the climate-smart agriculture strategic framework still in draft form and undergoing consultation. The waste sector has also not seen any major climate change-specific policies developed, with only a reference included in the overall Waste Strategy since 2009. Neither the waste nor agriculture sector is currently covered by the carbon tax (introduced in 2019). To support mitigation, these sectors are eligible to generate and sell carbon offsets under the mechanism introduced by the Carbon Tax Bill, potentially raising a new finance source for mitigation action.

Transport, which is the fourth largest sector in terms of greenhouse gas emissions, also does not have an overarching national strategy focusing on mitigation actions. Policies in the sector to date have focussed on using fiscal instruments from the National Treasury, including an environmental levy on new car sales (2010) and the addition of a carbon tax component to the fuel levy (2019), but the effectiveness of these without supporting policies is questionable (for example see Curran, 2019). Broader national policies to support public transport, extend electrification to vehicles or support modal shifts from road to rail do not currently exist. The Biofuels Regulatory Framework from the Department of Transport (introduced in 2014) is still in draft form, and it is not clear if it will be approved in 2019.

Box 1. The REIPPPP, IRP, Eskom and political interference

The Renewable Energy Independent Power Producers Procurement Programme (REIPPPP) is widely acclaimed as one of the most successful cases of competitive tenders for grid-connected renewable energy by independent power producers. The design of the programme managed to attract extensive private investment and engender large falls in the energy tariffs (Eberhard and Naude, 2017). To date, it is the largest and most successful greenhouse gas mitigation measure implemented in South Africa (Trollip and Boulle, 2017). From 2015 to 2018, however, it stalled, creating policy uncertainty and harming South Africa’s climate change policy credibility.



Following widespread electricity supply disruptions in South Africa in 2007 and 2008, a process of investment in new generation capacity was started. This new capacity was guided by the Integrated Resource Plan for Energy (IRP), approved in 2011 (IRP 2010). The IRP identified a mix of generating technologies, including 6 gigawatts (GW) of new coal, 18 GW of renewables (solar and wind), and 9.6 GW of nuclear.

To build the renewables capacity a public–private partnership initiated by the National Treasury, Department of Energy, National Energy Regulator of South Africa (NERSA) and Eskom, the vertically integrated state-owned electricity sector monopoly, was established. This was known as the REIPPPP and was a first for South Africa in the electricity sector.

The initial rounds of the REIPPPP went mostly according to design, with some learning and improvements. The first round of bidders reached financial close in 2012. Prices were expectedly high due to technology and transaction costs in a new system. Subsequently in rounds 2 to 4 (which closed in 2015), the bidding costs fell steeply to eventually be competitive with other generation technologies (see Eberhard and Naude, 2017).

At the same time, the IRP process was scheduled to be updated every two years. This was done in both 2013 and 2016. While IRPs were produced at both times, the outputs were contradictory with each other. The IRP 2013 update called for greater allocation to renewable energy than did the IRP 2010, while the IRP update in 2016 prioritised investment in nuclear energy. Over the IRP update periods there was high-level support from President Zuma and senior ministers (e.g. the Minister of Energy) for a large-scale nuclear development based on the IRP 2010 (Rennkamp and Bhuyan, 2016). Due to political wrangling neither of these updates was approved, leaving the IRP 2010 as the official energy policy guiding the sector (Yelland, 2016).

The political influence over this period is also evident at Eskom. From 2007 to 2018, Eskom had 10 chief executive officers, six chairpersons, and multiple changes at senior management levels (Kazeem, 2019). The senior management team (CEO and CFO) active between 2015 and 2018 consistently championed nuclear and refused to sign purchase agreements with renewable energy providers (Baker, 2017).

Furthermore, Eskom itself had been in a crisis, with a combination of mismanagement, corruption and lack of investment; both the CEO and CFO were implicated in 'state capture' (Public Protector, 2017). This crisis resulted in a doubling of production costs and falling revenues due to slower economic growth, creating the need to borrow extensively (BBC, 2019). As of early 2019, Eskom owes nearly R420bn (US\$30bn) (nearly 15 per cent of South Africa's national debt). To be eligible to continue to operate, Eskom requires frequent bailouts from the Government, which, as its sole shareholder, is guaranteeing more than half the debt. As evidence of the crisis in 2018 and 2019, South Africa experienced widespread electricity supply disruptions ('load shedding'), with nearly 4 GW needing to be shed at certain points.

Following the inauguration of a new President of South Africa and a change in management at Eskom, the outstanding agreements were signed. The next IRP update (IRP 2018) has undergone public consultation but it has not yet been approved.

Adaptation and resilience

Policies on adaptation and resilience have had little focus to date, with priorities skewed towards mitigation action, but some have been put in place latterly following publication of the National Climate Change Response Policy. The Long Term Adaptation Scenarios (LTAS) were released in 2013 and have subsequently been used to inform the policy planning process across different sectors, including water, agriculture and forestry, health, fisheries and biodiversity.

While production of the LTAS was a comprehensive process in terms of the stakeholders it included, these scenarios and findings have yet to be translated into an overall adaptation strategy. A draft National Climate Change Adaptation (NCCA) strategy was released in 2017 for public comment, but has not yet been approved by the Cabinet.

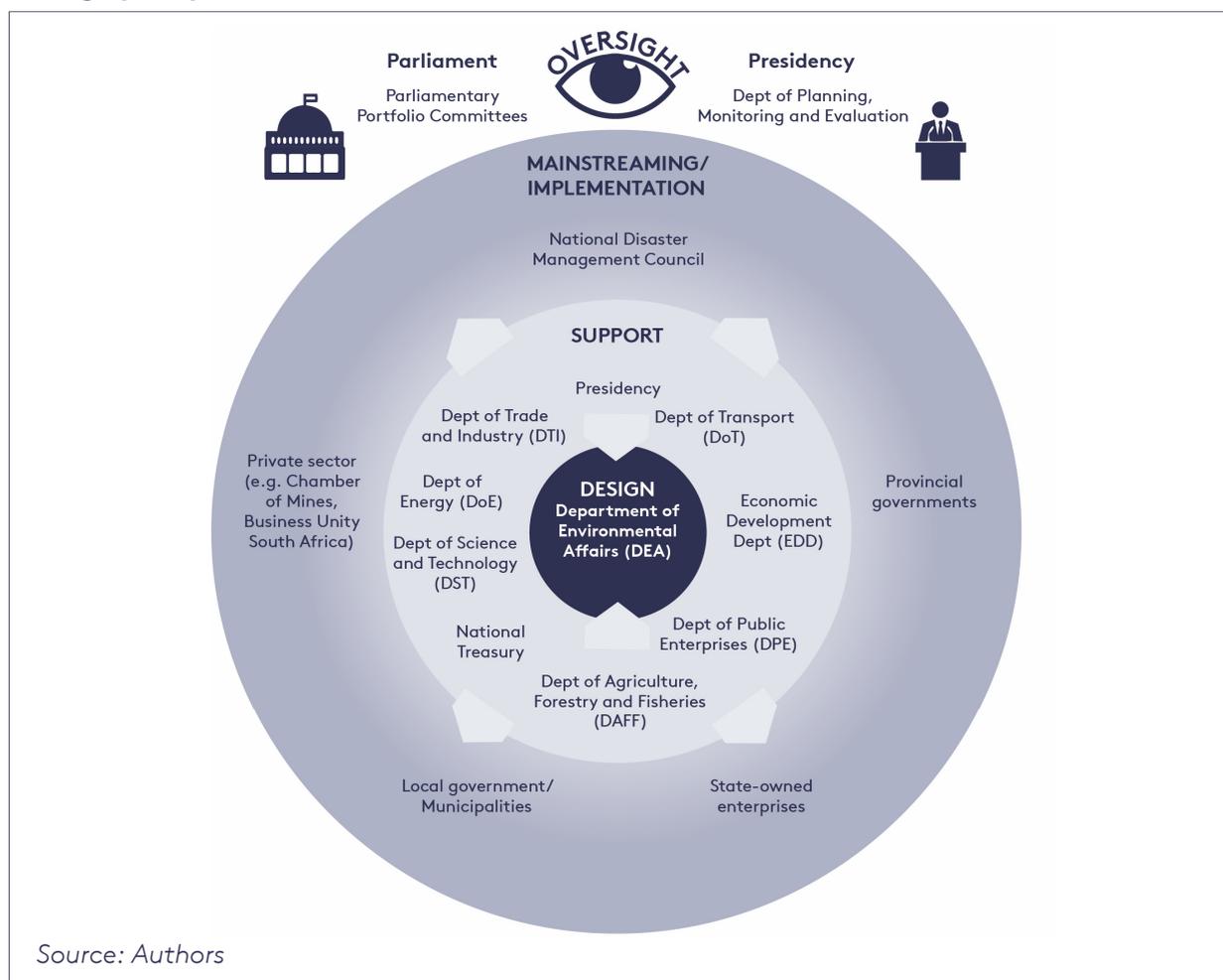
Horizontal and vertical dimensions of climate change governance

To provide a comprehensive response to governing climate change it is important that a range of supporting policies be developed for action in each sector. Policies alone are, however, not enough. As the National Climate Change Response White Paper (NCCRWP) recognises, to ensure sustainable development and a just, managed transition to a low-carbon economy and society these policies need to be aligned both vertically (from national to local levels) and horizontally (between national departments) to achieve common goals. This section discusses the approach South Africa has adopted to manage this coordination.

The NCCRWP sets out an obligation for all government departments and state-owned enterprises to align their policies, strategies and regulations with the content of the White Paper.

The design and development of domestic climate change policy in South Africa is led by the national government with the Department of Environmental Affairs (DEA) (see Figure 2).

Figure 2. Responsibilities for design, support and implementation of domestic climate change policy in South Africa



The DEA is the main coordinating agency responsible for establishing overall targets and frameworks for policy implementation. The DEA is also responsible for representing South Africa in the UNFCCC process, for coordinating climate change policy and action, and for tracking interventions and progress for the achievement of South Africa’s NDC. The DEA has led on the development of overarching climate change policies and draft legislation (including the Draft Climate Change Act and the National Greenhouse Gas Emission Reporting Regulations).

The development and implementation of the policies required to meet the targets set out in the NCCRP intersect with, and crosscut, many of the priorities and responsibilities of other government departments.⁴ These departments play key roles in the governance of climate change and are essential stakeholders in supporting the DEA in designing, and mainstreaming/implementing climate change-relevant policies.

For example, the Department of Energy (DoE) is responsible for long-term energy policy and planning, including through the Integrated Resource Plan (IRP), which was most recently revised in August 2018, as discussed in Box 1 above. Since the energy sector is responsible for the largest share of South Africa’s carbon emissions (National Treasury, 2013), the IRP has a fundamental role in determining the country’s emissions trajectory.

⁴ For example, the Department of Energy (DoE), Department of Transport (DoT), Department of Agriculture, Forestry and Fisheries (DAFF), National Treasury (NT), Department of Economic Development (EDD), Department of Trade and Industry (DTI), Department of Science and Technology (DST), and Department of Public Enterprises (DPE) – see Figure 2. Department names correct as of 5 June 2019.

The National Treasury, meanwhile, has led on the development of the economy-wide carbon tax proposal provided for under the NCCRP with the intention to “create the necessary price signals and change relative prices so as to encourage behavioural changes in producers and consumers over time” (National Treasury, 2013).

Institutions given an explicit role in mainstreaming climate-resilient development and policy agendas under the NCCRP include the National Disaster Management Council, the Forum of South African Directors-General clusters, and the Parliamentary Portfolio Committees, especially those on Water and Environment Affairs; Energy; Agriculture, Forestry and Fisheries; Trade and Industry; Mining; Science and Technology; and Transport. There are also other institutions that are crucial implementers of climate policies, including SoEs (such as Eskom and Transnet), as well as provincial governments, metropolitan municipalities (for example the City of Johannesburg and City of Cape Town), and local governments.

The NCCRP, including through the flagship programmes, gives many of these different departments roles to contribute to realising climate commitments. Most sector departments, especially those targeted in the NCCRP, have developed some form of climate change plan and strategy or have taken action to mainstream climate change into other policies and plans. As discussed earlier this has, however, happened at different speeds and scales.

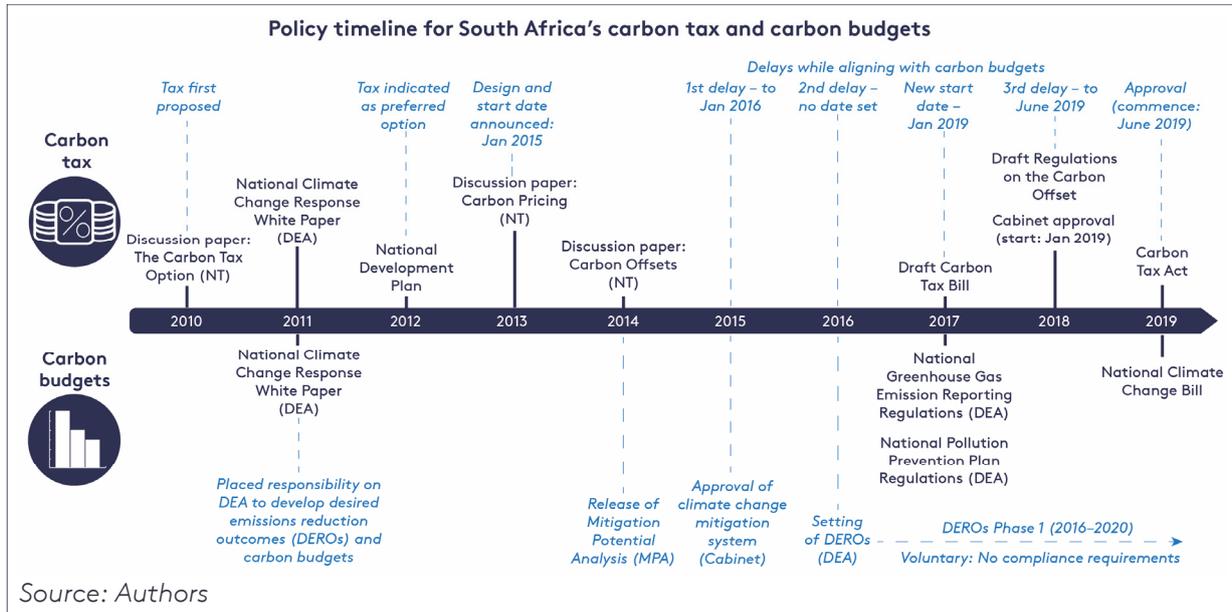
Ensuring coherent policy formulation and implementation both vertically and horizontally remains challenging due to the fragmented nature of responsibility for climate policy. In implementing policy commitments, the DEA coordinates with other relevant government departments and with other levels of government to integrate and align sector-related climate change strategies under the NCCRP and the NDCs with sectoral plans. The DEA often relies on contracting independent consultants to complete its work (e.g. through the Energy Research Centre at the University of Cape Town and private sector consultancies), as well as some parastatals and science councils. This reliance on external consultants has been a longstanding challenge – one that was highlighted in the National Communications and LTAS processes, among others. Furthermore, the DEA in the past several years has been relying significantly on financial and technical support from the German development agency, GIZ.

Despite naming multiple mitigation and adaptation mechanisms and regulatory and economic instruments to operationalise climate policy across different government departments, the NCCRP does not establish a clear relationship between different elements within the policy. In some cases, this has led to a lack of clarity surrounding how the policies will be jointly implemented and aligned across sectors. Further, despite the crosscutting nature of climate change policy, outside of the DEA in other government departments there are not always people with climate change-specific roles. Rather, those that manage departmental climate portfolios often do so alongside other functions.

An example of weaker coordination and lack of coherence is evident in the case of two of the most prominent climate policies developed to date, the carbon tax and the carbon budgets. These two policies were developed somewhat independently although often in parallel, leading to confusion and delays, as discussed in Box 2 below.

Box 2. Coordination challenges in aligning the carbon tax and carbon budget

South Africa's most prominent climate change mitigation policies, outlined in the NCCRP and the National Development Plan (NDP), are the carbon tax and the carbon budgets. While these two policies aim to complement each other, they have been developed separately.



This parallel process has arisen due to the responsibility for development for the carbon tax lying with the National Treasury, while the DEA has responsibility for the carbon budgets. The Treasury started its process in 2010 with the release of a discussion paper on the carbon tax. This paper was followed by the NCCRP and the NDP, which indicated that the carbon tax was a preferred option. However, the NCCRP also provided for the development of carbon budgets, and responsibility for this was allocated to the DEA.

The carbon tax option progressed with discussion papers on the design of the carbon tax and the offsets mechanism in 2013 and 2014 respectively, outlining the covered sectors, tax rates, allowance rates and escalation rates. A start date of January 2015 with the first phase ending in 2020 was announced.

In 2014, the DEA began to develop South Africa's broader climate change mitigation system, starting with the publication of the Mitigation Potential Analysis (MPA) and the approval of the mitigation system in 2015. However, the policies required to support the system and establish the DEROs were not in place; two essential regulations were then passed in 2017, with compliance set for 2018.

During the DEROs development period, the carbon tax was postponed three times and a new start date set twice. The Treasury said each delay was to allow further consultation and support alignment with the DEROs (Curran, 2018). The carbon tax was finally signed into law to start in June 2019, while the DEROs entered a voluntary phase ending in 2020 with no compliance requirements before then.

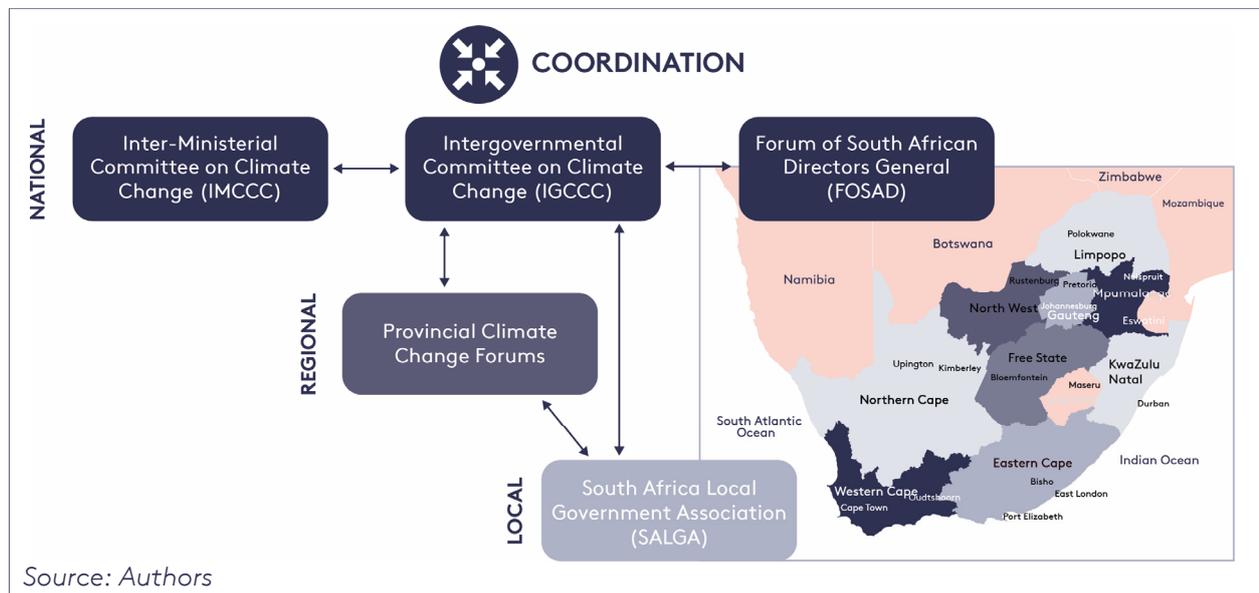
While there was an update in the approved Carbon Tax Bill in an attempt to align the two policies, this was not substantive. The alignment consisted simply of the introduction of a new allowance for covered entities that participate voluntarily in the first phase of the DEROs process (until 2020). Most of the other features of the carbon tax were the same as the first proposal, made in 2013 (see Curran, 2018).

Due to the lack of horizontal coordination between the National Treasury and the DEA, the implementation of the carbon tax was delayed for five years in total. During this period, there was much uncertainty for private sector and state-owned enterprises due to be subject to both the tax and the budgets.

Fora for internal coordination of climate policy

The main fora in which the DEA can shape internal government integration include the Inter-Ministerial Committee on Climate Change (IMCCC), the Intergovernmental Committee on Climate Change (IGCCC), and the Forum of South African Directors General (FOSAD) – see Figure 3.

Figure 3. Fora for coordination of climate policy within South Africa



The remits and relationships of each national level-forum are as follows:

- **The Inter-Ministerial Committee on Climate Change (IMCCC)** is the climate change coordination committee at executive level. Chaired by the Minister of Environment, it is a sub-committee of the full Cabinet, composed of ministers that have a stake in climate change policy.
- **The Intergovernmental Committee on Climate Change (IGCCC)** was established to operationalise cooperative governance and brings together relevant national and provincial departments (and 'organised local government'). The DEA coordinates the IGCCC and thus the IGCCC is a key forum through which the DEA attempts to support the alignment of sectoral policies with national climate change policies and commitments and ensure sectoral policies and strategies do not contradict one another.
- **The Forum of South African Directors General (FOSAD)** was established to coordinate policy development and implementation between the most senior civil servants from each ministry. FOSAD is a deliberative and consultative body that aims to ensure cross-departmental alignment of priorities, monitor implementation of Cabinet priority programmes, and provide technical support to ministerial departments.

The IMCCC and the IGCCC sub-committee are given responsibility for the development and oversight of the flagship programmes. The DEA also consults bilaterally, including with other government departments. Ultimately, however, the other government departments are on the same horizontal tier of government as the DEA, and so the DEA often has to rely on soft power to collaborate with other departments and ensure alignment, such as through the FOSAD, or by collaborating with sectoral ministries on the drafting of funding proposals.

The DEA is also tasked with facilitating vertical coordination to support the implementation of climate policy at municipal and provincial levels. All tiers of government have to adhere to overall national policies, but provincial governments in South Africa have their own legislative and executive branches while municipalities are governed by municipal councils. Therefore, implementation of national policies has to align with provincial and municipal government

budgets and rules. The nine provinces (see map in Figure 3), as well as municipal governments, in the form of local government associations, participate in the formation of climate policy through the IGCCC, and representative bodies such as the South African Local Government Association (SALGA).

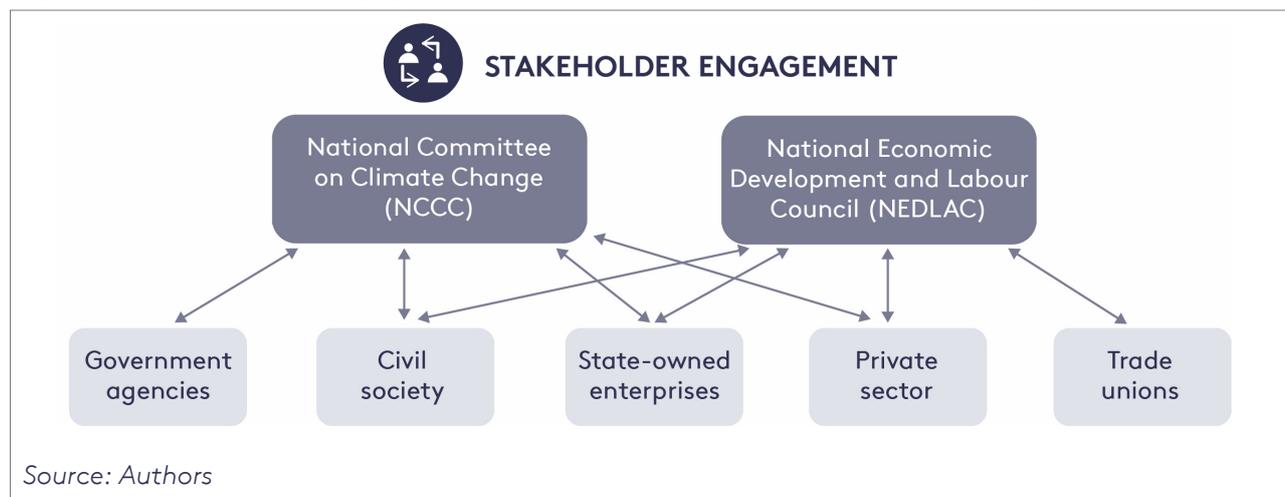
While South Africa technically has an elaborate system for vertical and horizontal coordination, the effectiveness of coordination and the level of integration remain low. All provinces have developed climate change strategies and plans, although only a few have mainstreamed climate change into other plans and strategies – and this to varying degrees of effectiveness. Climate change strategies, plans and mainstreaming are more limited among district and local municipalities. In terms of coordination, several provincial climate change fora have been established, in the Northern Cape, Western Cape, Eastern Cape, KwaZulu-Natal and Gauteng. However, the First Annual Climate Change Report (DEA, 2016) highlighted that the provincial fora in some provinces are not functional.

Integration across other levels also remains limited. Large provinces and metropolitan cities have generally been proactive but slow in developing climate change strategies and plans, including the City of Cape Town’s Climate Change Strategy (approved in 2017), the City of Tshwane Climate Response Strategy (approved in 2018) and the Durban Climate Change strategy (approved in 2014). Progress towards developing strategies and implementing policies within smaller cities and local governments is less advanced and faces challenges due to capacity constraints and limited resources (see Chapters 2 and 3 for discussions).

Private sector and civil society participation in climate governance

The private sector, state-owned enterprises, academic research centres, civil society and trade unions are other major players in climate governance in South Africa – see Figure 4.

Figure 4. Stakeholder engagement pathways in South Africa’s climate governance



South Africa has a comprehensive and robust stakeholder engagement process through which every climate change-related policy must pass. The extensive consultation processes often culminate in acrimony, conflict and threats of legal challenges or litigation.

The primary mechanism established by government for more continuous coordination and consultation on climate change activities with national stakeholders is the multi-stakeholder National Committee on Climate Change (NCCC), overseen by the DEA. The NCCC meets once a quarter and is attended by stakeholders from other government departments, business (including key business associations, as discussed below) and civil society. The work of the NCCC is supported through several technical working groups, which focus on particular policy aspects (e.g. national adaptation strategy or mitigation). The NCCC provides feedback to the IGCCC to support coordination, but has experienced some challenges (see Chapter 2).

Other fora through which climate policy is discussed include the multi-stakeholder forum provided by the National Economic Development and Labour Council (NEDLAC), where policies are discussed and deliberated between business, labour and community representatives. The outcome of the deliberations are fed back to the relevant ministries for consideration in the design of the policies. The inputs from NEDLAC have been submitted for all major climate change policies, including the NCCRP, Carbon Tax Bill, and the draft IRP 2019.

The private sector and SoEs

The primary mechanism for government to interact with business is through the NCCC. Individual companies and associations may also be represented or consulted at the project level (e.g. through the flagship programmes) and the private sector lobbies the Government directly. Business associations and other private sector representative groups may also provide additional forms of climate governance, e.g. by promoting and guiding private sector action on climate change and by providing supportive networking facilities and discussion platforms (Never, 2011).

The private sector both shapes, and is greatly impacted by, climate mitigation and adaptation governance and policy. Through the development of emerging business opportunities, alongside corporate social responsibility (CSR) activities, the setting and implementation of energy reduction plans and targets, and providing access to alternative funding mechanisms (e.g. the Global Environment Facility), the private sector is a route through which climate change mitigation and adaptation can be implemented and upscaled (see Figure 2 above). Decisions surrounding the DEA carbon budgets and the National Treasury's carbon tax proposals, meanwhile, directly target segments of the private sector, including high emitters. The private sector is therefore a major stakeholder in climate change governance and its constructive engagement is fundamental to maximising opportunities, as well as ensuring the practicability, acceptability and buy-in of policy decisions and interventions.

The private sector is represented in consultative climate fora both by large individual companies and through business associations. Some of the most notable private sector groups in the climate governance sphere include the National Business Initiative (NBI), Business Unity South Africa (BUSA), the Energy Intensive User Group and the Chamber of Mines.

Generally and publicly, private sector and state-owned enterprises are supportive of climate change objectives and there is little dispute over the importance of addressing climate change. Yet there are significant differences in the positions among the players when it comes to the speed and means of action and reaction to specific policies. The NBI, which is a voluntary coalition of South African and multinational companies with members from the financial sector, renewable energy and service industries, says it is committed to "working towards sustainable growth and development... and the shaping of a sustainable future through responsible business action" (NBI, 2019). The NBI has been a private sector actor supportive to ambitious action on climate change. It has formed several partnerships with the Government and has been instrumental in helping bridge public and private tensions around climate policy (see Chapter 2).

BUSA, the Energy Intensive User Group and the Chamber of Mines, which represent the interests of large emitters and industries that are likely to be affected by climate change policies, have taken a different approach. These bodies have been lobbying against specific policy proposals, arguing for changes and often delays to implementation. For example, they have consistently raised concerns against the carbon tax and its alignment with the carbon budgets policy, requesting support for increased operation costs due to rising input costs, and have promoted technology investment over other policies (for examples see Bisseker, 2019 and BUSA, 2018).

The private sector is also actively employed in the design and implementation of climate change projects, through significant dependence on the use of a relatively small pool of consultants to design and implement various climate governance strategies and to develop decision-making tools. Often the same consultants are employed by individual companies and industry associations to develop and assess the impacts of climate policy on their operation, or represent them in consultative fora.

Civil society, NGOs and international donors

Civil society actors and international donor communities play an important role in the design and delivery of climate policy and action, including through participation on advisory panels and steering committees, and through capacity-building and lobbying for the interests of more vulnerable groups, including through the NCCC. In support of this function, civil society provides additional consultation fora (e.g. through the Adaptation Network) and, again, civil society may directly lobby the government.

Non-governmental organisations (NGOs) and other development actors (e.g. the German development agency, GIZ – which, among others, has played a major role in supporting DEA on climate policy) also support delivery of climate projects at a technical and programme level and are key actors in the downscaling and mainstreaming of climate policy into local development activities. Civil society may also provide capacity-building support to increase access to climate finance, including for more vulnerable groups. The broader capacity of civil society to engage on climate change and to influence decisions seems to be generally weaker than that of the private sector. Limited resources and capacity curtail their ability to engage in all the fora.

Overall, our stakeholder interviews⁵ revealed little coordination and cooperation among different non-state actors. This is in part due to a high level of competition for consulting contracts among consulting companies and research institutions. As a result, many actors with the highest levels of knowledge, a supportive stance on climate change policy and high levels of personal commitment miss out on the opportunity to cooperate and be more effective in pushing for a more ambitious climate policy.

Trade unions

South Africa has a long history of trade union engagement and activism. Most of the major trade unions and trade union bodies in South Africa, including the Congress of South African Trade Unions (Cosatu) and the South African Federation of Trade Unions (SAFTU), recognise climate change as a major issue and support a just transition to a low-carbon economy (SAFTU, 2017; Cosatu, 2019). They have participated in the design of policies on behalf of their members through fora such as NEDLAC, Parliament and other consultations and have extensive lobbying power with the national government, above that of other civil society organisations; indeed, many of their former leaders now hold senior government positions, including President and Minister of Energy, and as Members of Parliament.

In recent years, the unions have built resistance to the development of more ambitious climate policies due to their implications for sectors where many of their members are employed (including coal mining, heavy industry, electricity generation and road transport). Concerns around job losses, rising electricity prices, or implications for fuel price increases have led unions to call for changes or delays to policies, including the carbon tax and the REIPPPP (Omarjee, 2019). For example, trade union court action delayed the restarting of the REIPPPP as the National Union of Metalworkers of South Africa and others attempted to prevent the signing of the outstanding PPAs that had been stalled since 2015 (NUMSA, 2019). That case was lost and the contracts signed, but there have been calls for other policies to be reconsidered, including the carbon fuel levy.

⁵ See Appendix for an overview of the interview process we carried out with 30 experts on climate policy in South Africa.

2. Challenges for climate governance

South Africa has taken a strong stance on climate change on the international stage and has developed a significant and forward-looking domestic strategy through the National Climate Change Response White Paper (NCCRWP), which lays out a pathway for both mitigation and adaptation in line with the country's nationally determined contribution to the Paris Agreement. Yet South Africa is facing a common challenge for climate governance: how to transition from policy planning to implementation (e.g. Respondents 11, 18, 29)⁶ exacerbated by the overall political turbulence discussed earlier. In the words of a private sector expert we interviewed: South Africa "has been very progressive from a target setting perspective. The issue is just always in the execution and the implementation from those policies into funded programmes" (Respondent 18). A government expert agreed: "The strategic intent of most policies is good, but implementation mechanisms in many cases are not sufficiently developed or structured to actually meet the NDC" (Respondent 11).

This chapter considers the key governance challenges for the implementation of the NDC based on analysis of our interviews. These challenges can be structured along five major themes:

- Lack of policy alignment, coherence and coordination
- Policy complexity and continuity over time
- Limited staff capacity and financial resources
- Limited information
- Issues with public-private engagement and consultation

Policy alignment across sectors and tiers of climate governance

There is a need for longer-term planning and alignment between core development and climate change objectives. There are pressing social and economic challenges in South Africa but long-term planning is challenging, in particular under the conditions of significant political uncertainty of the past decade. "We're dealing with immediate problems, and we can't think about what you want to do in 10 years or 15 years," argued an expert who works for a state-owned enterprise (Respondent 2). A private finance expert agreed: "We need somebody that's got a 20-year view, and government people typically have got a four-month view, and investment bankers have got a three-month view, so with these time horizons, we struggle to get everybody on the same page" (Respondent 28).

A related systemic issue that could become a roadblock for the implementation of the NDC is the lack of alignment and policy coherence: in other words the gap between climate change goals and the objectives set in other key strategies and policy documents that determine the trajectory of development. A prominent academic expert said: "South Africa said all the right things. What we haven't had is the big political and fiscal push for alignment into that space – the big political economy moment" (Respondent 23). This translates into a lack of plans for most sectors on what is required in terms of mainstreaming climate change (e.g. Respondent 11, a government expert).

This lack of alignment was particularly important for the period 2010 to 2018 in the case of the Integrated Resource Plan (IRP), which determines South Africa's strategy for energy generation for the next 20 years (Respondents 10, 14, 17, 18, 25, 30). The IRP provides an indication of the country's electricity demand, how this demand will be supplied and at what cost (IRP, 2010) and therefore has been highly influenced by the overall political uncertainty (see Box 1 above). At the time of writing, South Africa's energy policy is formally guided by the IRP 2010, developed in 2010 and promulgated in 2011. The plan outlines several scenarios for the future, leaving uncertain the relative role of renewable versus nuclear energy in South Africa, which has become a point of

⁶ In this chapter and the next we reference stakeholders' observations provided to us in the interviews that informed this report.

much political debate in recent years (Respondents 10, 14, 17, 18). In 2016 the Government developed a draft revised IRP, in which limits were placed on annual new-build solar PV and wind capacity – and thus the role given to renewables. However, this revised plan has not been approved.

Many experts interviewed noted that the uncertainty over South Africa's energy strategy has impeded effective engagement on climate change by the relevant government departments and restricted private sector investment in low-carbon energy. If the draft IRP that opened for public consultation in 2018⁷ were approved to replace the IRP 2010, it would remove a number of these uncertainties as it places a greater emphasis on renewables and does not envision a big role for nuclear energy.

Policy coherence is not only a challenge for the energy sector. Much work is still to be done to reconcile what can be seen as potentially competing policy objectives and find ways to balance them (for example, demand for water from the residential, agriculture and industrial sectors). While South Africa's National Development Plan (NDP, 2012) includes a chapter on transitioning to a low-carbon economy and sets the objective of transition to a "low-carbon, resilient economy and just society" for 2030, it has been criticised by the media and expert community due to the lack of coherency and capability of the Government to implement it. However, there does not appear to be a coordinated effort across line ministries to do so.

Similarly, the Industrial Policy Action Plan (IPAP) is a major government policy that determines industrial development (see Figure 1 above). While the plan mentions climate change mitigation, it does so in the context of assessing its impact on employment, competitiveness and growth (DTI, 2014). Consequently, several experts noted that the stance of the Department of Trade and Industry on climate change action in the past has been mostly critical, which is consistent with the conclusions of a study by Trollip and Boulle (2017). In 2018 a 'just transition' process led by the National Planning Commission was initiated, based on dialogues to develop a common vision for a just, low-carbon transition. However, we could not find recent updates on the process at the time of writing, which suggests that there have been some delays in its implementation.

Horizontal and vertical coordination

Ineffective coordination on climate change horizontally among national government departments and vertically between national, provincial and municipal governments, as well as with non-state actors, was highlighted as another critical barrier by all experts interviewed. A silo-based culture that lacks effective coordination is particularly challenging in the context of raising finance for the implementation of the NDC and related policies. The lack of instruction from above for the departments on how to work on climate change and coordinate with the DEA resulted in coordination being to a large extent 'a bottom-up process' of finding the people and building relationships (Respondent 11, government expert).

Coordination challenges are shaped by a combination of factors. These include a lack of high-level direction and clear institutional mandates for implementation; a relatively weak agency politically (the DEA) designated to lead; and a lack of dedicated resources and capacity shortages in the sectoral and subnational agencies.

Until the recent Cabinet restructure following the elections in May 2019, the responsibility for developing climate change strategy sat clearly with the DEA, but there were ambiguities in terms of the mandate for overseeing and coordinating the implementation of the NDC and NCCRP (e.g. Respondents 11, 20). In the words of a business association representative: "Since there is no real drive that flows top down through the government structures [...] then [coordination] has to do much more with trading political influence" (Respondent 6). Many of the respondents noted that the DEA is a weaker ministry in the political hierarchy compared with, for example,

⁷ See <http://www.energy.gov.za/IRP/irp-update-draft-report-2018.html>

the National Treasury, the Ministry of Energy or the Ministry of Planning, and lacks the necessary political influence for coordinating the delivery of climate action.

When an environmental ministry has relative political weakness (a situation by no means unique to South Africa) and lacks a clear mandate, it becomes especially challenging for it to fulfil a cross-sectoral coordination role. The absence of legislative backing for climate change policy was therefore seen by many respondents as an additional barrier the DEA faces when trying to direct cross-cutting climate action. Some key pieces of legislation, such as the Disaster Management Act and Water Act, have already been amended to include climate change clauses in them, which the informants suggested helps with policy coordination and implementation in these sectors. But there are gaps in this respect in relation to other sectors.

The lack of clarity on the roles and responsibilities of individual sectoral agencies with respect to climate change policy complicates communication and limits their engagement on climate change. A government representative explained the impact of this: "You rely largely on your working relations and persuasion, in terms of asking [sectors] to consider climate change. You don't rely on the law that then compels them to make those amendments" (Respondent 7). A consultant who has worked extensively with the Government made a similar point and described the communication challenges: "You are never sure who to speak to, what role they are playing, whose interests they are representing, and particularly whether they are on board with the climate agenda" (Respondent 29).

While several mechanisms and fora for coordination have been established under the DEA (e.g. the Inter-Ministerial Committee, Intergovernmental Committee and National Committee on Climate Change [IMCCC, IGCCC and NCCCC], as discussed earlier), attendance, engagement and continuity from the sectoral agencies and other stakeholders was characterised as limited and unreliable, with a few exceptions. A government expert elaborated: "Setting up the structure is easy. Getting everybody to participate is a different thing altogether [...]. It's the capacity, the political influence, the leverage that is often lacking" (Respondent 11). The respondents also noted that there needs to be greater clarity and transparency about the identity of the responsible individuals and focal points on climate change issues in each agency.

Another issue is that even when the right departments are around the table, the level of representation is sometimes not senior enough, even in the ICCC itself (Respondent 11). A vivid example highlighting the implications of this strategic disconnect and lack of effective coordination is the existence for several years of two seemingly disjointed and potentially competing policy proposals, on carbon budgets and carbon taxation, that, as previously discussed, emerged from the DEA and the Treasury respectively.

The lack of aligned position is not only an internal challenge that impacts the ability and effectiveness of the public sector to produce and implement climate policies, but it also impedes engagement with and policy signalling to other stakeholders, in particular to the private sector and the investment community. In the words of a business association representative: "We expect that we are dealing with one government, so internally they should work out those dynamics first before they come to us [...]. The Government should have internal discussions among trade and industry, mineral resources, water, energy, to discuss one government's view and not the DEA's view that we engage with" (Respondent 6). "Greater policy cohesion would help to align finance and signal to the banking community that they can make money from climate finance" noted Respondent 28, a financial sector expert.

Policy complexity, continuity and coherence

Lack of policy alignment and coordination leads to a highly complex policy landscape, which was mentioned as another barrier to implementation by several interviewees. In the words of a business association representative: "The regulations aren't written clearly, so as somebody who's subject to the law, it's difficult to tell if you are complying because there is a lot of it that's open to interpretation" (Respondent 17). A government employee agreed: "The vast majority [of policies and frameworks] are too fuzzy, they're vague on what actually needs to be done and

there's a lot of interpretation on how to do it" (Respondent 11). This, key informants suggested, creates confusion for stakeholders who do not have expertise on climate change or the time or resources to understand what it means for them and their sector.

Other challenges include the perceived lack of policy certainty and continuity in some of the areas central to South Africa's decarbonisation pathway that have been particularly acute over the past several years due to the broader political and economic uncertainties. Private sector actors have been repeatedly asking for policy certainty so that they can drive their investments accordingly, particularly in terms of getting clarity on the relationship between two central policy proposals – those on carbon budgets and the carbon tax – as well as the future of the REIPPPP programme, where previous changes in government policy have meant earlier investors are no longer confident of returns.

Recent political changes and statements from the current Government, as well as the restarting of the REIPPPP, suggest a more positive outlook for renewables and potentially for policy streamlining and greater continuity in this area.

Limited public sector capacity

A perceived lack of capacity to deal with climate change and related policies within the South African government and sectoral departments is a major governance challenge that all interviewees highlighted. It stems from limited human and financial resources, and a shortage of relevant expertise and skills. Several key agencies are generally understaffed. The lead agency, the DEA, was widely praised by interviewees for its high level of dedication of its staff. But key informants almost uniformly suggested that their team was too small for the challenging task of designing and coordinating climate action across all sectors. For many other sectoral agencies, meanwhile, climate change is not part of their official mandate and there are no dedicated staff designated to work on the issue.

Limited human resources are further challenged by the growing complexity of work involved in designing and implementing sectoral and multi-sector decarbonisation and resilience policies. For example, an agriculture ministry now must consider improvements to energy efficiency and other low-emission practices to reduce its carbon footprint but also address climate change impacts in the form of reduced water availability and increased temperatures. In the words of an NGO expert: "The whole debate is advancing too fast. It's no longer a generic policy issue [...] and if you don't catch up and develop more technical competency, you get left behind" (Respondent 20).

Responding effectively to this complexity requires the ability to work across a broader range of sectors, disciplines and actors, which is increasingly challenging for already over-stretched government actors, as well as other stakeholders including NGOs and the private sector. High staff turnover in the key ministries, particularly at the technical level, also makes it difficult to retain capacity and subsequent over-reliance on external consultants was noted as an important barrier to policy development and implementation by most experts interviewed.

In this context many experts were concerned that the analysis and advice provided are not being sufficiently internalised into the skills and capacities of the Government. "A consultant does a project and then leaves. You actually need embedded capacity in government to have more effective implementation," commented an informant who is a consultant (Respondent 21). Furthermore, at times consultants are being rushed to complete their work, leaving them little opportunity to engage sufficiently with important stakeholders and the economic and political realities. Lack of consultation in this way sometimes affects the quality of advice and resulting policy strategies, according to a respondent from a state-owned enterprise (Respondent 2).

Technical skills and capacity to work on climate change are in even greater shortage for many provincial governments and municipalities than they are for central government departments (e.g. Respondents 16, 19, 23, city government experts). "For most mayors in most cities climate change is a 'nice to have'", explained a local government expert (Respondent 23). This is particularly noticeable outside the major metropolitan areas where, according to another local

government expert, it is difficult to find even a dedicated environment post: “You’d have a safety and security function, like the guy that drives around in the cop car; the traffic guy would often be your environment guy” (Respondent 19). Some of the NGOs and unions also have capacity issues, which has been impeding their wider and more effective participation in the climate debate.

However, improvements in the capacity of the key players would be meaningless without strong political will to act on climate change at all relevant levels.

Dedicated financial resources

Adequate financial resources are essential on the one hand for enabling the Government to do its job (e.g. by augmenting governance capacities to work on climate change in the key agencies), and on the other hand for financing policy implementation and the underlying investments in the low-carbon and climate-resilient transition. Most interviewees highlighted the shortage of financial resources for both of these purposes as being among the top barriers to effective governance and implementation of climate policies in South Africa.

One of the critical gaps underlying the shortage of finance mentioned by the experts was the lack of a comprehensive climate finance strategy to define the allocation of resources to support climate change work and develop a plan for attracting international funding and investment (e.g. Respondents 1, 10, 11). While the development of a climate finance strategy has been mandated by the White Paper, the work was not finalised at the time of our interviews.

Raising finance for climate-related work is particularly difficult at the level of the provinces. While cities may finance their climate work through local residence taxes, at the provincial level financing is dependent on allocations from the national government (Respondent 19, local government expert). Lack of finance impedes the ability of provinces to attend meetings, for example under the NCCC, limiting their opportunities to represent their needs and, effectively, to participate in vertical coordination on climate change (Respondent 12, 19). In the past few years the number of people engaged in climate change work in the cities and provinces has declined significantly, weakening devolved governance on climate change, a local government expert noted (Respondent 16).

Apart from the lack of a comprehensive strategy for the dedicated allocation of public resources for climate change work, there is a shortage of skills and capacity among the government departments, devolved administrations and private actors to prepare financeable project propositions. An added challenge is that the DEA is in charge of coordinating access to international climate finance, yet it lacks the processes and resources to do it. According to a donor organisation expert, the lack of good-quality projects is the main barrier to financing climate investments, more so than the actual availability of finance (Respondent 9). This finding is consistent with conclusions of studies on barriers to climate finance internationally (Averchenkova, 2014; Averchenkova, 2017) and in turn it limits the country’s ability to access international climate finance.

Gaps and constraints in information and data

The lack of credible data on current and projected greenhouse gas emissions is another challenge for climate governance that interviewees mentioned. This is particularly significant in the context of implementing the NDC. Some informants argued that there is no good understanding of what the country’s total emissions have been since 2012 and what they will be in the future. While most experts were confident that actual emissions would be unlikely to exceed the NDC targets in the near-term due to the economic downturn in South Africa (e.g. Respondents 28, 18, 15, 10), they recognise that the ability to set and track clear targets is very important. “Without knowing where we are, it’s difficult to really plan on how we should be going forward,” noted a respondent from the private sector (Respondent 17).

Issues around the quality of data have prompted wider concern about the legitimacy of targets and policies (e.g. in relation to the long-term mitigation scenario [LTMS] outcomes, discussed in

Chapter 1). Experts noted that both data on current emissions and on emissions projections and mitigation potential needed to be improved.

Addressing challenges around the availability and quality of data will require improvements to the collection of information and to the measurement of progress, including rigorous reporting and evaluation frameworks with clear common indicators. A government expert explained: “We have a poor record of formal documentation that describes a programme: what it is, its components, how it’s coordinated. You put something together that you think makes sense. There’s no level of rigour that’s required to attract investment” (Respondent 11).

These challenges, arguably, are being exploited by the emission-intensive industries and other opponents of climate policies, to aid stalling tactics. Some respondents shared that certain business associations, for example, point to technical gaps and weaknesses within the Government’s policy proposals and demand further analysis as a route to delaying decision-making (Respondents 10, 11, 17, 27).

A particular information gap that was noted surrounds the collection and analysis of the private sector’s experience of investment in low-carbon and carbon-resilient projects and mechanisms to inform the design of government policies. Several experts from the private sector said that such insights could be useful for the Government and that there is willingness from the private sector to share them. Certainly the current dynamics in the public–private consultation fora on climate change do not provide a sufficiently or consistently conducive environment for constructive exchanges, so there is a need to consider alternative, potentially less formal, ways of engaging (which we discuss in Chapter 3).

Mistrust of public–private engagement

A profound mistrust between the various players in climate change fora was an issue raised by most of the key informants interviewed (e.g. Respondents 8, 11, 27). The roots of this mistrust, according to respondents, lie partially in the legacy of Apartheid – the private sector continues to be dominated by wealthy white South Africans – and partially in the fact that the private sector is mainly represented by the large emitters (e.g. Respondent 11, government expert). These issues are not specific to climate policy – they are prevalent throughout South Africa’s political discourse and economic structure – but climate is a policy area where constructive interaction between the public and private sector is particularly important for making progress.

Most of the large private sector greenhouse gas emitters are either state-owned or have recently been privatised (e.g. public electricity utility Eskom is the largest emitter and energy and chemical company Sasol, which went private very recently, is the second largest) and there is pushback from these emitters on policies that may impact their greenhouse gas-intensive business model. Several respondents commented that the interaction between the Government and private sector on climate policy is stuck in a vicious cycle and it is difficult to turn it into a more constructive dialogue (Respondents 8, 10, 11, 17, 27, 29). This makes it difficult for proposals from the private sector to be considered purely on their merit. There is a perception from the Government that business is trying to block progress and the private sector, in turn, often seeks to protect its interests by raising concerns around the quality of policy proposals, as discussed earlier (Respondents 10, 11, 17, 27). The recent suspension of the renewable energy programme (REIPPPP), which has had widespread impacts for the business viability of the private sector actors involved, has exacerbated these tensions. There, dynamics were closely intertwined with the overall political uncertainty around the situation of state capture.

Respondents said that a factor affecting stakeholder engagement in the climate fora is the way it is orchestrated. Some respondents suggested that the nature of the NCCC, where most of the formal stakeholder interactions on climate change happen, is very broad, so it helps to “get a good sense of what all the parties are feeling, but you can’t really get much done” (Respondent 17, business association representative). A related issue is the way in which information is presented at the policy consultations. Often policy proposals that have a strong impact on particular players are presented in the wide public forum without any prior consultation with the

key affected actors. This leads to very strong pushback and even outright opposition, ultimately limiting opportunities for constructive dialogue or negotiation with the private sector (Respondents 10, 17).

Weak transparency and lack of feedback on stakeholders' input are other factors that impede more effective engagement. In the words of a private sector expert: "We are extremely, extremely good at public consultation. We are really, really bad at doing something with the input" (Respondent 28). Both NGO and private sector experts noted that they were not sure if their inputs had been received and considered and that follow-up took a lot of time, reducing the motivation for some actors to engage. Sometimes there are feedback sessions in which a new draft is presented without explanation of the changes made, after the period for submissions; this was deemed unhelpful, as the meeting turns into an interrogation of the Government on why it had not considered comments. Respondents said this caused the discussion to take on a more negative and defensive tone.

Engagement needs to be strengthened also between national, provincial and city levels (e.g. Respondents 9, 27). In the words of a donor organisation expert: "Generally, interaction is not as good as I would hope for between provinces and local government and the DEA" (Respondent 9). The main challenges to the participation of provincial and municipal governments remain capacity, political will and coordination, as discussed above. As a result, continuous participation is limited to the large metropolitan areas.

3. Maximising opportunities to strengthen climate governance

In this chapter we discuss some potential solutions to the challenges described in Chapters 1 and 2. The proposed solutions are based on the suggestions made in the interviews, with priority given to those that were raised independently by several respondents, and complemented by the authors' own perspectives.

Strengthening high-level commitment and setting clear mandates

Successful implementation of South Africa's NDC and national climate change policy requires political will and leadership, both of which were lacking at the highest level under the Zuma Government up to 2018. Many respondents saw strengthening political commitment as the greatest and most impactful priority (Respondents 5, 18, 20, 23, 24), yet it is also one of the most challenging ones. However, the change of Government in 2018 signalled a shift in the right direction, presenting a significant opportunity going forward. The central actions in this context are demonstrating a strong commitment to climate change objectives at the top, designating a focal point (a government ministry) and giving it a strong mandate to lead on the implementation and coordination of activities, and requiring sectoral agencies to work on the issue.

There were some effective strategies prior to the change of Government, including engaging sectors through multi-sectoral projects, building on the experience of some of the flagship programmes, and putting sectors in the driving seat while climate change agencies acted as facilitator and enabler (Respondents 11, 12, government experts).

The draft Climate Change Bill, if adopted, would help address some of the challenges around coordination and increase the influence of the Department of Environmental Affairs. The draft contains a chapter on 'alignment of laws and policies', which states that: "Every organ of state must coordinate and harmonise the policies, plans, programmes and decisions of the national, provincial and local spheres of government that exercise functions that effect or are affected by climate change or are entrusted with powers and duties aimed at the achievement, promotion, and protection of a sustainable environment" (Government Gazette, 2018). The Bill should provide a tool for clarifying institutional mandates, including those for policy development, coordination and implementation and could also potentially trigger the amendment of existing sector policies.

Box 3. Identifying where responsibility for coordinating implementation is best placed

Identifying responsibility for coordinating implementation and raising the profile of the implementation agency would ensure that the coordinator has the political clout and ability to manage the cross-sectoral complexity. Several experts argued in favour of this option (e.g. Respondents 2, 5, 8, 9, 11, 12, 19, 21, 23), with some suggesting that there would be benefit in placing responsibility for implementation of climate change policy with either the Office of the Presidency, the National Planning Commission, the Department of Planning, Monitoring and Evaluation or the National Treasury.

Others argued that much of the specialist expertise sits within the DEA and pointed to the lack of engagement from those other departments with climate change in the past and the risks of other priorities taking over in those agencies (Respondents 7, 10, 13, 26). A solution proposed by these respondents was to leave the responsibility for coordinating implementation with the DEA, but back it up with a clear high-level mandate through the mid-term development strategy, climate legislation or another vehicle. Furthermore, it was proposed to increase the seniority level of the individuals leading coordination (Respondent 11, government expert).

Another positive recent development is that the Minister for Planning, Monitoring and Evaluation in the Presidency will co-chair the IMCCC with the Minister of Environmental Affairs. The authority brought by the Office of the Presidency should assist in bringing more weight to climate policy.

Aligning climate change policy with development planning

A concerted effort to align decarbonisation and climate resilience with overall social and economic development objectives, as well as policies within specific sectors (e.g. energy, transport, water), would help to improve policy coordination across sectors, as well as longer-term planning and continuity. Respondents suggested that this could be brought about by integrating climate change objectives into the performance goals for the ministries and into the strategic development frameworks; and by ensuring the Integrated Resource Plan and other key policy documents targeting economic sectors align with the objectives of the NDC. The Medium-Term Strategic Framework (MDSF), the NDP and special developmental and management plans at provincial and city levels, could provide anchors for this (Respondents 4, 7, 9, 10, 12, 25).

The MDSF is a planning tool that determines the five-year mandate and programme for the Government and is used to assess government performance. To strengthen the mandate for inter-agency coordination some experts propose to add a requirement to mainstream climate change and cooperation into the performance goals or outcomes and monitoring frameworks for each of the ministries and into budget planning cycles (Respondents 11, 12, 13, 25, 26). Such indicators should be oriented to a broad low-carbon transformation to 2050 and beyond, rather than simply assessing current emissions. It is also important to formulate the goals in such a way as to position them under the control of the department in question (Respondents 4, 22).

Another strategic document that should be brought into consistency with and incorporate the objectives of the NDC is the IRP (Respondents 10, 14, 17, 18, 25, 30). This would involve clarifying the vision for South Africa's economy in 2050 and whether it would be nuclear-based, gas-based or follow a renewables-based model. It was suggested that concrete measures that would give confidence to industry and investors would be to set an annual target for renewable capacity within the IRP and put the REIPPPP back into operation (Respondents 5, 14, 24, 25).

Several experts also mentioned the potential of the Independent System Market Operator (ISMO) Bill that has been under Parliamentary consideration for several years (Respondents 5, 15, 18, 23). The Bill would transform the current monopoly held by Eskom and open the market to independent power producers, allowing different generation sources to compete, increasing the share of renewable energy in the grid. In the words of a state-owned enterprise expert: "That alone will change the entire discourse around climate change mitigation [...]. It would give us the opportunity to move towards a renewable energy smart grid across the entire country" (Respondent 15). In February 2019, a process to separate Eskom into three different entities, covering generation, transmission and distribution, had been proposed.

Closer integration between climate change and development strategies is already being implemented in the context of the National Climate Change Bill, the National Adaptation Strategy and the long-term adaptation scenarios, as well as through the national flagship programmes. However, implementation is moving slowly with neither the National Climate Change Bill nor the National Adaptation Strategy yet approved.

Strengthening delivery and implementation mechanisms

Several experts agreed that South Africa has some very good policies, and it is important to tackle the implementation of existing policies before developing new ones (Respondents 4, 7, 11). Solutions to this challenge are closely linked to the aims of policy alignment and clarifying mandates. Having a clear driver with a mandate from a high level to lead and coordinate the implementation process is an essential condition for strengthening implementation (Respondents 2, 7, 21). Further requirements are having an implementation plan for climate change policy with clear timeframes and assigned responsibilities linking to all the relevant frameworks, from the national development plan downwards (Respondent 12, national

government expert; Respondent 19, local government expert), and prioritising activities and starting with a few focus areas, rather than trying to tackle everything at once; this could improve effectiveness of implementation and build positive momentum (Respondent 30, consultant). Improving policy coherence would make it easier for stakeholders and in particular the private sector to engage with and follow the plan.

A common system of planning and monitoring indicators or outcome templates, including those that specifically measure cross-sectoral integration and coordination on climate change, would help to bring sectors together and to leverage finance from multiple sources (Respondent 11, government expert). Similarly, at the municipal level a scorecard⁸ could be used to integrate the requirement of working together with other departments and other cities; some cities have already started implementing these ideas (Respondent 16, municipal expert).

There is also a proposal to create a forum focused on implementing the NDC so that for each of the flagship programmes there is a lead department that assembles and coordinates implementation teams. Furthermore, as South Africa moves to implement the NDCs, cities need to be part of a nationally coordinated approach and the national government should commit to interacting with local government representatives in a more structured and regular way (Respondent 27, local government expert; Respondent 23, academic). In this context the scope of the current Resilient Cities forum could be expanded to accommodate a broader municipal agenda on climate change, including adaptation and mitigation (Respondent 16).

Taking a strategic approach to allocating financial resources

Predictable funding is needed to support the transition to low-carbon and climate-resilient development. There are resources available for climate change work, according to several respondents, so the opportunity lies in improving effectiveness of its use and prioritisation of allocation, e.g. by building climate change issues into discussions on each budget allocation (Respondents 4, 7, 11). Some experts suggested establishing a designated coordination mechanism for financing the implementation of the NDC.

The national government should assist the provincial and municipal levels by providing guidelines on how to prepare projects and by making some funding available for project preparation and implementation. The Government is working on a toolkit to support local municipalities to integrate climate change responses into their planning processes (Respondent 7, government expert). There are examples of successful energy efficiency projects that were catalysed by the national government that could provide useful learning. According to a municipal government expert, without that support from the Government, cities would not necessarily prioritise these projects (Respondent 16).

An important area for financing strategy to consider is improving access to international climate finance for South Africa. Donors need to make sure they are not pushing an agenda, that the action they invest in aligns with and supports national climate strategies and processes, and that they are cognisant of what the political requirements are of government. Experts working for donor organisations (Respondents 3, 30) argued that it is important to ensure there is no duplication and to find ways that donors can collaborate.

Relatedly, it is important to build up new skills and capacity and to provide skilled support to the sectors, provinces and municipalities and to new people coming into the Government to ensure there are designated people to work on climate change-related programmes and to have them trained (Respondents 3, 4, 7, 11, 12). There may be potential to support capacity-building within the expanded public works programmes that focus on job creation and poverty alleviation, i.e. not just focusing on climate change, but taking a multiple benefits approach (Respondent 4, NGO expert).

⁸ The Municipal Systems Act requires that municipalities set targets and monitor their performance to achieve the Integrated Development Plans (IDPs) to improve efficiency, effectiveness and accountability for resource use. Scorecards are used to identify key performance indicators to enable measurement and management of performance.

New ways to communicate and engage

Changing the ways of approaching communication and engagement on climate change would help coordination between the key sectors and stakeholders as well as between national and subnational and municipal levels. Communication was also regarded by most respondents as the key area in which to intervene to improve relationships between the Government and the private sector and civil society, as well as to better engage with the general public.

Firstly, there is scope to improve the existing consultation and engagement fora. For example, it was proposed by some of the private sector respondents that the Inter-Ministerial Committee on Climate Change should include chief executive or financial officers of relevant companies, so that it can meet as 'IMCCC plus CEOs' at times and consult with business. A concerted effort would be required to engage with the sectors, such as mining, that are most affected by decarbonisation policies.

Consideration needs to be given to the best channels and fora for engagement, the mode and tone of engagement, potentially the individuals leading the engagement on each side, and how to improve the presentation of information and feedback. Several experts noted the critical importance of investing in developing personal relationships, moving away from 'political lines' to interactions as individuals (e.g. Respondents 11, 19, 22). "There's a lot of work on policy design and scenarios and there's very little to nothing that goes on in terms of getting people on the same page," argued an academic expert and consultant (Respondent 22). Respondents noted that individuals that lead the engagement on each side (government and business) sometimes have a particular history of interactions, so changing the persons leading or securing a neutral, trusted player to facilitate interactions might be helpful to soften the conversation. Business associations can and should play an active role in transforming relationships, according to many experts interviewed. Working through well-organised business associations reduces the burden on the Government as it means having fewer actors to deal with. Getting experts with better understanding of business perspectives to lead the public-private engagement on the Government's side could also be helpful (Respondent 11).

Convening through a platform outside of a government body where stakeholders can collaborate as equals, representing their personal opinion rather than their constituency, thereby removing the power politics, could be very effective for building more constructive relationships (e.g. Respondents 22, 27). Several experts mentioned the work that the National Business Initiative (NBI) is doing in bringing government and senior business experts together (Respondents 11, 15, 18) in so-called 'quiet conversations' to discuss a particular topic. Another positive example is collective action projects, where various stakeholders join together to address a specific problem for a region. "Working together breaks through the public-private dynamics and facilitates a constructive conversation on the problems and finding jointly a solution," noted a business association representative (Respondent 10). In a similar vein, a local government expert (Respondent 19) noted the positive experience of bringing in the private sector "with the independent power producers programme" (before the programme was suspended). Lessons learnt from these examples of successful cooperation could feed into developing platforms for engaging business, potentially meaning the private sector could help more in areas where there is limited capacity in government.

Clearer communication on policy proposals and more detailed reflection on stakeholder feedback by the Government is another way in which the quality of stakeholder dialogues could be improved (e.g. Respondents 5, 6, 17). Specifically, the respondents argued that they would appreciate more transparent feedback from the Government, e.g. within the NCCC, including an indication to the extent to which they considered input, and to receive some response to the issues raised. To build trust and avoid a situation in which stakeholders feel their views from consultations have been interpreted too loosely (as was the case following submission of South Africa's NDC), there is a need to clarify upfront the scope and implications of any given consultation and to maintain consistency in the engagement. Furthermore, national

government and municipalities could actively search for and cultivate ‘champions’ to catalyse action, as is already being done in some municipalities (Respondent 27).

Better engagement of sectoral agencies and other stakeholders could be achieved by showing how addressing climate change can present opportunities for advancing their agenda. Successful examples of cooperation have been developed in the past where the DEA and sectoral departments have worked together on joint funding proposals or supported sectoral agencies in identifying financing opportunities linked to climate change (Respondent 1, government expert). It is important to highlight the co-benefits of interventions, such as reducing poverty, improving energy access for communities through renewable energy and stimulation of new low-carbon industrial growth, innovation, and research and development.

Engagement with the general public is important for raising climate change awareness, showing the actions that individuals can take and for building support for government policies. The first broad public engagement happened during roadshow consultations in 2013 and 2014 launched by the DEA in preparation of the NDCs. The roadshows were beneficial for communities, but also raised some important issues for the Government to consider (Respondent 12, government expert). The DEA has subsequently started a new public engagement initiative in various languages through interactive radio programmes (Respondent 12).

Table 1 shows a summary of the barriers identified in the study and the opportunities to address them, as well as the key actors that would be responsible for undertaking them. Most of the proposed actions would have multiple benefits, contributing to addressing several challenges.

Table 1: Mapping of barriers, solutions and key actors to be engaged

		Challenge						Main government actors responsible
		Lack of alignment and ineffective coordination	Policy complexity, continuity and coherence	Limited public sector capacity	Dedicated financial resources	Information and data gaps and constraints	Mistrust in Public-private engagement	
Solution/ opportunity	Aligning climate change policy with development planning							Presidency, Planning Commission
	Strengthening delivery and implementation mechanisms							Presidency/ Planning Commission; coordinating agency in charge and sectoral Ministers
	High-level commitment and setting clear mandates							Presidency, Planning Commission, Parliament
	Strategic approach to allocating financial resources							National Treasury
	New ways to communicate and engage							Lead agency on climate change, DEA, sectoral ministries, stakeholders
	Adopting common metrics and improving data collection							Lead agency on climate change/ DEA

4. Recommendations

South Africa has put in place a number of complex and ambitious climate change governance mechanisms. However, as the country moves towards implementing its climate objectives, it needs to address several important challenges. Experts interviewed for this study pointed to several essential improvements to the governance infrastructure and practices. The process of consultation on the draft climate change legislation recently launched by the Government, as well as the new draft Integrated Resource Plan (IRP), offer very good opportunities for discussing and implementing some of these improvements.

Based on our analysis we offer the following recommendations for South Africa. Other developing countries can learn from the general principles too.

Align development policies and strategies with the objectives of the Nationally Determined Contribution (NDC)

Successful implementation of the NDC requires that its objectives are strongly anchored in the National Development Plan, the Medium-Term Strategic Framework and developmental and management plans at provincial and city levels. It could be useful to include a requirement to mainstream climate change and to cooperate with other agencies in the performance goals and monitoring frameworks for each ministry and into the budget planning cycle, and for the performance metrics to include policy coordination and integration.

The draft 2018 IRP is an important step in the right direction, having integrated the NDC objectives in its scenarios and included a clear target for renewable capacity. Similarly, the reinstatement of the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) in 2018 was a welcome step. It is important that the Government's commitment to these programmes and objectives is sustained and integrated into other sectoral policies.

Renew high-level commitment and empower key agencies through clear mandates

The successful implementation of the NDC requires renewed political commitment and leadership from the highest level and a unified approach from the Government. There needs to be a clear mandate for a lead agency entrusted with coordinating implementation and for each of the sectoral agencies to designate staff and resources and to implement policies, based on the existing work and lessons learnt from past experiences.

Launch a forum focused on implementing the NDC

There is a need to move from climate change policy development to implementation. This requires a transparent and continuous process focused on policy alignment and coordination of implementation, led by a strong government agency that has a clear mandate from the highest political level to coordinate this process. A system of common planning and monitoring indicators or outcome templates could help facilitate the coordination of implementation, backed up by an iterative process of reflection, learning and integration of learning outcomes. Provincial and city governments should have strong representation in this process. This forum should be chaired and convened at a high level (for example, ministerial), and include senior representatives from the private sector and civil society to discuss issues and challenges and coordinate implementation.

Develop a comprehensive finance strategy

Effective implementation of the NDC and the transition to low-carbon and climate-resilient development requires allocation of resources and strategic realignment of budgets. Development of the national climate finance strategy, as mandated by the White Paper, should be among the priority actions. Establishing a designated coordination mechanism on finance for

NDC implementation could help align existing – and mobilise new – sources of funding. National government should also assist the provincial and municipal level by providing guidelines and capacity-building on how to prepare projects. It should also make targeted funding available.

Frame the climate change discussion around developmental benefits and opportunities

Linking climate policy to poverty reduction objectives, clean energy access for communities and stimulation of new low-carbon industrial growth and innovation is key to leveraging buy-in and effective engagement across levels of governance, horizontally and vertically. In order to engage the relevant sectoral agencies in implementing the NDC, it is important to demonstrate the co-benefits of the interventions and opportunities and positive synergies for advancing sectoral agendas while addressing climate change.

Improve existing consultation and engagement fora

The effectiveness of the existing mechanisms for engaging stakeholders could be improved by expanding their membership (for example, by inviting the Inter-Ministerial Committee on Climate Change to meet with company CEOs), by engaging with the relevant sectors more consistently, and by making their participation in the main fora mandatory through direct, high-level mandates. Changing the mode and tone of engagement, and emphasising transparency in the Government's methods of dealing with stakeholder feedback, would aid communication with stakeholders. Having senior experts with a good understanding of business perspectives lead the engagement on the Government's side is also important.

Invest in strengthening relationships between stakeholders and the processes of interaction

Providing opportunities for all stakeholders to engage informally in non-governmental fora is key for breaking down the current barriers inhibiting public-private engagement. Spaces are needed where all parties can collaborate outside bureaucratic processes without being entrenched into formal positions of the constituencies they represent. This effort should be facilitated by a neutral broker who is trusted by both the Government and private sector. It should build on past experiences and focus on concrete implementation challenges.

National government and municipalities should also look for and cultivate 'climate champions' that could catalyse action. Furthermore, developing personal relationships that move away from 'political lines' to interactions as individuals, and investing in improving interaction processes, should be considered as part of key measures to improve the effectiveness of climate governance. This would help overcome obstacles in horizontal and vertical coordination and stakeholder engagement. Practically, this could be done through participatory training or pilot projects that bring together experts from different sectors and stakeholder groups.

Improve data, information and public awareness

Developing and implementing the NDC and climate policies more broadly requires improving the data and information base. Continuing to strengthen public engagement to build awareness of climate change and related actions and policies, alongside the facilitation of climate activism, should form an important part of the NDC implementation strategy. Consideration should be given to improving ways of sharing expert information and research relevant for the low-carbon and climate-resilient transition, making it more accessible to the public sector and other stakeholders.

References

- Averchenkova A (2014) *Barriers in developing national mitigation strategies and actions in developing countries*. UNDP LECB Programme Global Support Unit
- Averchenkova A (2017) 'Engaging Private Sector and Mobilizing Private Finance through Mitigation Actions in Developing Countries', in Markandya A, Galarraga I and Ruebbelke D (eds.) *Climate Finance: Theory and Practice*, pp. 55-78. World Scientific. DOI: 10.1142/9789814641814_0004
- Averchenkova A, Fankhauser S and Nachmany M (eds.) (2017) *Trends in Climate Change Legislation*. Cheltenham: Edward Elgar
- Baker L (2017) Commercial-Scale Renewable Energy in South Africa and its Progress to Date. *IDS Bulletin*, 48, pp. 5-6
- BBC (2019) Eskom crisis: Why the lights keep going out in South Africa. 16 February 2019. <https://www.bbc.co.uk/news/world-africa-47232268>
- Bhorat H, Buthelezi M, Chipkin I, Duma S, Mondli L, Peter C, Qobo M, Swilling M and Friednstein H (2017) *Betrayal Of The Promise: How South Africa Is Being Stolen*. <https://pari.org.za/wp-content/uploads/2017/05/Betrayal-of-the-Promise-25052017.pdf>
- Bisseker C (2019) Carbon tax: a misguided call? *Business Live*, 30 May 2019. <https://www.businesslive.co.za/fm/features/2019-05-30-carbon-tax-a-misguided-call/>
- Business Unity South Africa [BUSA] (2018) *Submission by Business Unity South Africa (BUSA) on the Draft Carbon Tax Bill*. <http://busa.org.za/wp-content/uploads/2018/03/Member-6-BUSA-Submission-Carbon-Tax-Bill-03-2018.pdf>
- Congress of South African Trade Unions [Cosatu] (2019) *COSATU Submission on the Carbon Tax Bill* https://pmg.org.za/files/190312COSATU_Carbon_Tax_Bill_Submission.doc
- Cotterill J (2017) South African nuclear deal with Russia unlawful, court rules. *Financial Times*, 26 April 2017. <https://www.ft.com/content/ce7d0fdc-2a7d-11e7-bc4b-5528796fe35c>
- Curran P (2018) *As South Africa's carbon tax is delayed again what is the story so far?* 24 October 2018. London: Grantham Research Institute on Climate Change and the Environment. <http://www.lse.ac.uk/GranthamInstitute/news/as-south-africas-carbon-tax-is-delayed-again-what-is-the-story-so-far/>
- Curran P (2019) *How ready is South Africa for a new fuel levy to reduce greenhouse gas emissions?* 15 March 2019. London: Grantham Research Institute on Climate Change and the Environment. <http://www.lse.ac.uk/GranthamInstitute/news/how-ready-is-south-africa-for-a-new-fuel-levy-to-reduce-greenhouse-gas-emissions/>
- Department of Environmental Affairs [DEA] (2011) *National Climate Change Response White paper*. Government of the Republic of South Africa, Pretoria. https://www.environment.gov.za/sites/default/files/legislations/national_climatechange_response_whitepaper.pdf
- DEA (2016) *South Africa's 1st Annual Climate Change Report*. https://www.environment.gov.za/otherdocuments/reports/southafricas_firstnational_climatechange
- Department of Trade and Industry [DTI] (2014) *Industrial Policy Action Plan (IPAP) 2014/15 –2016/17*. Government of the Republic of South Africa, Pretoria. www.thedti.gov.za
- Eberhard A and Naude R (2017) *The South African Renewable Energy IPP Procurement Programme: Review, Lessons Learnt & Proposals to Reduce Transaction Costs*. University of Cape Town Graduate School of Business. https://www.gsb.uct.ac.za/files/EberhardNaude_REIPPPReview_2017_1_1.pdf
- ERC, CSIR and IFPRI (2017) *The developing energy landscape in South Africa: Technical Report*. Energy Research Centre, University of Cape Town.
- Government Gazette (2018) No. 41689 Vol. 636 8. Climate Change Bill 2018. June 2018
- Government of South Africa (2015) *South Africa's Intended Nationally Determined Contribution (INDC)*. [http://www4.unfccc.int/ndcregistry/PublishedDocuments/South Africa First/South Africa.pdf](http://www4.unfccc.int/ndcregistry/PublishedDocuments/South%20Africa%20First/South%20Africa.pdf)

- Grootes S (2019) Zuma's conveniently forgotten Nine Wasted Years. *Daily Maverick*, 29 January 2019. <https://www.dailymaverick.co.za/article/2019-01-29-zumas-conveniently-forgotten-nine-wasted-years/>
- Hogg A (2019) SA president Cyril Ramaphosa goes off-piste in Davos – again. *Biz News*, 24 January 2019. <https://www.biznews.com/wef/2019/01/24/cyril-ramaphosa-off-piste-davos-again>
- Kazeem Y (2019) The top South African CEO gig that no one wants. *Quartz Africa*, 4 June 2019. <https://qz.com/africa/1629503/ramaphosa-to-break-up-eskom-as-ceo-quits-again/>
- McSweeney R and Timperley J (2018) South Africa at the climate crossroads: Carbon Brief's long-read profile of the Rainbow Nation. *Carbon Brief*, 29 November 2018. <https://www.greeneconomycoalition.org/news-analysis/south-africa-at-the-climate-crossroads>
- National Business Initiative [NBI] (2019) *About us*. <https://www.nbi.org.za/about-us/>
- National Treasury (2013) *Carbon Tax Policy Paper: Reducing greenhouse gas emissions and facilitating the transition to a green economy*. May 2013. <http://www.treasury.gov.za/public%20comments/Carbon%20Tax%20Policy%20Paper%202013.pdf>
- National Union of Metalworkers of South Africa [NUMSA] (2019) NUMSA calls on NERSA to stop the IPP project at Eskom! Press release, 1 February. Available at <https://www.numsa.org.za/article/numsa-calls-on-nersa-to-stop-the-ipp-project-at-eskom/>
- Never B (2011) Integrating energy and climate governance in South Africa: drivers, barriers and the shadow of hierarchy. The Governance of Clean Development Working Paper 013. Norwich, UK: University of East Anglia. https://www.die-gdi.de/uploads/media/Never_Working_Paper_013.pdf
- Omarjee L (2019) New Carbon Tax gets roasted by AA, Cosatu. *Fin24*, 2 February 2019. <https://www.fin24.com/Budget/carbon-tax-labelled-grossly-unfair-abuse-20190221>
- Organisation for Economic Co-operation and Development [OECD] (2017) *Economic Survey of South Africa*. Paris: OECD. https://www.oecd-ilibrary.org/docserver/eco_surveys-zaf-2017-en.pdf?expires=1559731519&id=id&accname=ocid71015720&checksum=EAC47CBB824CCADC8635A4E1EA6F5336
- Public Protector of South Africa (2016) *State of Capture*. <https://cdn.24.co.za/files/Cms/General/d/4666/3f63a8b78d2b495d88f10ed060997f76.pdf>
- Rennkamp B and Bhuyan R (2016) The social shaping of nuclear energy technology in South Africa. WIDER Working Paper 2016/19. www.wider.unu.edu/sites/default/files/wp2016-19.pdf
- South African Government (2010) *Executive Summary of the Draft Integrated Electricity Resource Plan for South Africa - 2010 to 2030. IRP 2010*. 22 October 2010. <https://www.gov.za/documents/executive-summary-draft-integrated-electricity-resource-plan-south-africa-2010-2030-irp>
- South African Federation of Trade Union [SAFTU] (2017) *The Resolutions of SAFTU Inaugural National Congress*. <http://saftu.org.za/wp-content/uploads/2017/05/The-Resolutions-of-SAFTU-Inaugural-National-Congress-held-on-the-21-23-April-2017.pdf>
- Transparency International (2014) *State capture: an overview*. https://www.transparency.org/files/content/corruptionqas/State_capture_an_overview_2014.pdf
- Trollip H and Boule M (2017) *Challenges associated with implementing climate change mitigation policy in South Africa*. Energy Research Centre, University of Cape Town
- Tyler E and Gunfaus MT (2015) *What was the contribution of the Long-Term Mitigation Scenarios process to South African climate change mitigation policy?* Cape Town: MAPS
- Winkler H (2010) Taking action on climate change: Long term mitigation scenarios for South Africa. *Juta Academic*
- Wright JG, Bishof-Niemz, Calitz J and van Heerden R (2017) *Formal comments on the Integrated Resource Plan (IRP) Update Assumptions, Base Case and Observations*. Pretoria: Council for Scientific and Industrial Research
- Yelland C (2016) Analysis: The Draft 2016 Integrated Resource Plan – lightweight, superficial and downright dangerous. *Daily Maverick*, 30 November 2016. <https://www.dailymaverick.co.za/article/2016-11-30-analysis-the-draft-2016-integrated-resource-plan-lightweight-superficial-and-downright-dangerous/>

Appendix: interview respondents

This study is based on 30 semi-structured interviews with active or former civil servants, policy experts and private sector representatives in South Africa conducted over the period October 2017 to March 2018. Two interviews were in a group setting with two experts each, so the overall number of experts interviewed was 32.

The interviewees were selected to cover a range of relevant perspectives, from a number of sectors and with different stances towards climate change policy, based on direct engagement in the climate change debate or policymaking. While some could be characterised as broadly supportive of climate change action, others represented carbon-intensive industries that may stand to lose out from ambitious climate action. Ten of the interview respondents were women.

The interviews were transcribed and analysed qualitatively through thematic content analysis with the aid of NVivo software to identify themes and stories and to extract relevant direct quotes.

In addition, we held several background discussions with experts and carried out a literature review.

Table A1: Perspectives represented by the respondents

Perspective	No. of respondents based on current position
National government officials , including climate change and sectoral ministries (Respondents 1, 7, 11, 12, 13)	5
Local/municipal government officials (Respondents 16, 19, 27)	3
Private sector, including: Business associations (Respondents 6, 10, 14, 17) Private finance companies (Respondents 18, 28) State-owned enterprises (Respondents 2, 15) Consultants (Respondents 5, 8, 21, 29, 30)	13
Other stakeholders, including: NGOs (Respondents 4, 20) Academics (Respondents 22, 23, 24, 25) Donor organisations (Respondents 3, 9, 26)	9