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Climate Governance and Federalism in South Africa

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12.1 Introduction

South Africa adopted a quasi-federal system more than two decades ago. The ability of different organs of state to collaborate is put to the test by, among other things, the demands of an adequate scientifically backed response to climate change and established practice of *centralised* governance. National policy asserts that national, provincial and local authorities are all critical role-players in the country's pursuit of climate-resilient development. Yet, the multilevel system is complex, owing to factors such as the absence of geographical and administrative borders for climate change and the vulnerabilities this causes: a legacy of spatial and environmental injustices; persistent high poverty levels; turf protection combined with competency and skills deficits in government; and a blurred division of authority over environmental matters and related sectors. Recent political changes in some of South Africa's largest cities make for new dynamics in a government dominated by the African National Congress (ANC). Despite these complexities, all three spheres of government have started experimenting ad hoc with climate change law and policy.

The chapter gives an overview of South Africa's quasi-federal system, the country's climate change profile, the way the federal system links up with the demands of climate change governance, and a case study of tangible decentralised climate governance practices and developments. We show that, despite the urgency for climate action in South Africa, its quasi-federal government has not yet embarked on a consolidated process of identifying and implementing consistent and locally tailored solutions. The country's climate change law and policy framework is still in its infancy and can at best be described as patchy, as some line functionaries in the national and local spheres of government scramble to merge climate science, competing socio-ecological demands and short-term political imperatives.

12.2 Climate Change in South Africa

12.2.1 Challenges, Contributions and Impact

Climate change affects South Africa's economy, terrestrial and other ecosystems, water, human health, human settlements in urban and rural areas, agriculture, forestry, its disaster risk profile and the coastal zone (NCCRP; NDP; South Africa's Initial Communication Under the UNFCCC 2004). Current stressors emanate from increased temperatures and rainfall variability (mean annual temperatures have increased by at least 1.5 times the observed global average of 0.65 degrees over the past five decades and extreme rainfall events have increased in frequency (Ziervogel et al. 2014, 605). The stressors include land-use change as a result of land degradation and overuse; water stress in the face of high-water demand; natural disasters such as droughts and flooding; housing deficits; poor infrastructure and municipal service delivery; and the quadruple burden of disease (DEA 2011, 13–14; DEA (Department of Environmental Affairs) 2018). It follows that the country's socio-economic and environmental condition aggravates its exposure to climate risks in as far as the country has to: (a) stimulate a struggling national economy that is still heavily dependent on coal; (b) radically reduce high levels of inequality, poverty and spatial and environmental injustice; (c) address poor spatial and developmental planning and energy infrastructure maintenance; while (d) improving on its public administration, service delivery and governance efforts (Parnell and Walawege 2014, 36–42; Swilling and Annecke 2012, 224–45).

South Africa is the world's seventh largest producer of coal and the fourteenth largest emitter of greenhouse gases (GHGs) and its CO₂ emissions are principally due to a coal-dependent economy. The energy sector contributes approximately 80 per cent of the country's total GHG emissions, of which 50 per cent are from electricity generation and liquid- and solid-fuel production (McSweeney and Timperley 2018). Other contributing sectors include road transportation, manufacturing, construction industries and iron and steel production. Notably, some structural dysfunctions of South Africa's current economic model affect the objectives of 'climate-resilient and low-carbon patterns of development and developmental challenges' (Gulati et al. 2016, 36).

12.2.2 Climate Change Commitments

South Africa is one of the few countries that specify an absolute emission reduction target following a peak–plateau–decline trajectory range. The country's GHG reduction targets are captured in a combination of the National Development Plan (NDP), the Conference of Parties (2009) and South Africa's Nationally Determined Contribution under the Paris Climate Agreement (NDC). In summary,

the aim is to achieve a peak–plateau–decline trajectory for GHG emissions, with the peak around 2025; to have an entrenched economy-wide carbon price by 2030; to have zero emission building standards by 2030; and to have absolute reductions in the total volume of waste disposal to landfill each year. In its first NDC of 2016, South Africa committed to:

[W]orking with others to ensure temperature increases are kept below 2 degrees Celsius above pre-industrial levels, which could include a further revision of the temperature goal to below 1.5 degrees Celsius in light of emerging science, noting that global average temperature increase of 2 degrees Celsius translates to up to 4 degrees Celsius for South Africa by the end of the century. (NDC 2016, 1)

The 2020/2021 updated NDC confirms a deepening commitment to mitigation and shows significant progress in terms of the targets that are set. The upper end of the target range for 2025 has been reduced by 17 per cent, the upper end of the target range for 2030 has been reduced by 32 per cent, and the lower range by 12 per cent. The range between upper and lower bounds narrows significantly from 216 Mt in 2025 and 70 Mt CO₂ – eq in 2030. The government itself admits that ‘[m]eeting these targets will require South Africa to implement a range of policies and measures . . .’ (NDC 2020/2021, 15–16).

The first NDC envisioned the country addressing climate change adaptation through six goals underpinned by adaptation planning, costing of adaptation investments, equity and means of implementation (NDC 2016, 3). The national Department of Environment, Forestry and Fisheries (DEFF) further approved its ten-year National Climate Change Adaptation Strategy 2020 (NCCAS), which articulates the government’s vision for adaptation and climate resilience with a focus on water, health, human settlements, agriculture and commercial forestry, biodiversity and ecosystems and disaster risk reduction and management. The Adaptation Strategy is aligned with the updated NDC, which contains South Africa’s first adaptation communication with emphasis on the constitutional right that everyone in the country has to an environment not detrimental to human health or well-being and the extent of climate change-associated risk and vulnerability (NDC 2020/2021, 5–7).

12.3 Federalism in South Africa

12.3.1 Introduction and Historical Context

South Africa has a national government, nine provinces and 257 municipalities. Provinces and municipalities have their own, locally elected, provincial legislatures and municipal councils and are headed by indirectly elected premiers and mayors respectively. The local government sphere consists of eight

metropolitan municipalities, forty-four district municipalities and, within them, 205 local municipalities. While the hallmarks of a federal structure are present, most design elements, and certainly the federal practice, point towards a centralised or ‘quasi-federal’ system.

The constitutional arrangement is the product of negotiations held in the early 1990s between liberation movements (most notably the ANC) and the outgoing apartheid government, led by the National Party (NP). While the ANC favoured a unitary state, the NP had become a ‘recent convert’ to the idea of regional autonomy, more as a break on the imminent ANC hegemony than as a protection of regional ethnic interests (Steytler and Mettler 2001). Vehement arguments for ethnic federalism came from a regional movement in KwaZulu–Natal (the Inkatha Freedom Party). The compromise, ultimately laid down in the 1996 Constitution, was a quasi-federal state with strong unitary elements, which allocates significant powers to local government (Leon 2013; Murray and Simeon 2001). This is important for understanding multilevel government in South Africa, and how it influences subnational action on climate change. It shows that the quasi-federal structure was a compromise, reluctantly agreed to by the ANC, which subsequently went on to control virtually all the levers of power throughout the three spheres of government.

12.3.2 The Distribution of Power

In line with South Africa’s reluctance towards federalism, the Constitution describes the system as ‘cooperative government’. The central government has plenary powers to make and implement laws with respect to any matter, excluding the matters reserved exclusively for provinces. This authority extends to matters over which it exercises authority concurrently with provinces (see below); matters specifically mentioned for national government in the Constitution; and residual matters not listed anywhere in the Constitution (s. 44.1.a.ii). The exclusive national powers are substantial and include matters such as land, policing and regulating extractive industries and the energy sector. The national government collects most taxes, and distributes these annually across the three levels of government (ss. 214, 228,1 and 229.1).

The national and provincial governments have concurrent legislative and executive authority over matters listed in Schedule 4 to the Constitution (ss. 44.1.a.ii and 104.1.b.i). The list of concurrent powers includes matters such as housing, primary and secondary education, agriculture, environment, trade and health services. Conflicts between national and provincial laws on the same matter are ultimately resolved by the Constitutional Court in terms of a constitutional override clause. The practice of national–provincial concurrency is that the

national government legislates, and the provincial governments implement. Provinces are responsible for implementing not only major social functions such as public health, housing, primary and secondary education, but also regulatory functions such as the environment, agriculture and disaster management. They do so within national legislative frameworks and pass very few provincial laws. This is because the national government has taken up most of the legislative space on these major functions. The constitutional override clause itself also makes it difficult to argue for constitutionally permissible provincial deviation from national laws on concurrent matters. The Constitutional Court has not yet been called upon to adjudicate a conflict between national and provincial legislation over concurrent matters. Perhaps most critically, provincial governments are almost entirely reliant on intergovernmental transfers. The Constitution does not allocate any significant revenue-raising powers to provinces, and the national government has not assigned any to them.

Municipalities are responsible for the delivery of basic services, such as water, sanitation, waste management, streets and the delivery of electricity to end-users. They are also responsible for environmental health services and town planning. National and provincial governments may regulate these local government matters, but only by means of standard setting (ss. 155.6 and 155.7). In perhaps the most significant expression of local government autonomy, the Constitution empowers municipalities to raise their own revenue via property rates and service fees (s. 229.1.a).

The local government sphere is made up of metropolitan, district and local municipalities. The metropolitan municipalities are the City of Johannesburg, Tshwane, Ekurhuleni, City of Cape Town, eThekweni, Mangaung, Nelson Mandela Bay and Buffalo City. They are not city states, but single-tiered local governments that, in theory, operate under the broad oversight of a provincial government.

Provinces receive transfers in the form of an annual, formula-based unconditional grant, complemented by conditional grants. Municipalities, on the other hand, are expected to raise much of their own revenue through property rates and fees for services. However, they do receive intergovernmental funding in the form of an unconditional equitable share and limited conditional grants. The overall picture is that cities and larger urban municipalities generally raise significant revenue, but rural municipalities are for the most part grant-dependent.

In addition to the above institutional and financial features, the practice of federalism is strongly influenced by the political reality that the ANC is the dominant political party across all three spheres of government. It controls the central government and eight of the nine provinces with outright majorities. In many of the country's municipalities, it controls the municipal council. However,

the 2016 and 2021 local government elections saw a considerable loss of support for the ANC in major cities, such as Johannesburg, Tshwane and Nelson Mandela Bay that are now governed by coalitions.

In conclusion, South Africa practises an ‘hourglass’ model of federalism: a strong national government, relatively weak provinces and a mix of strong cities and weak rural municipalities in local government (Steytler 2017).

12.4 Climate Change and the Practice of Federalism in South Africa

Navigating South Africa’s climate change response through the lens of the principles, ideals and realities of federalism is a tall order. As would be true for many countries, South Africa’s climate change governance effort hinges on an intricate combination of government, NGO and private sector actions, a law and policy framework dealing with mitigation, adaptation and non-specific issues and various government actors situated in three, often overlapping, spheres and branches of government. The following discussion flags three key issues in the relationship between climate change governance and federalism in South Africa: governmental siloism; institutional, policy and legal fragmentation; and the absence of a direct relationship between national and local government.

12.4.1 Climate Policy and South Africa’s Quasi-federal System

Key taxation and regulatory powers reside with the national government. The regulation and taxation of trade and industry, for example, including critical industries such as car manufacturing, are national powers (s. 44.1.a.ii). This alone makes the national government a key player in climate change mitigation. Furthermore, the national government manages water resources (though not the treatment and sale of water to end-users), biodiversity and electricity generation (though not the sale of electricity to end-users).

Subnational authority with respect to climate change mitigation and adaptation can be summarised, as revolving around municipal planning, the environment and the governance of urban spaces. Provinces play a muted role while the role of local governments and cities is significant.

12.4.2 A Fragmented Law and Policy Framework

Over the past decade, the South African national government adopted several laws and policies relevant to climate change adaptation and mitigation. Provinces have followed suit, albeit with uneven enthusiasm and intensity. Municipal policies on climate change have also come onstream, particularly in cities. The result is a

patchwork of policy initiatives and programmes, the key elements of which are sketched below.

12.4.2.1 Legislative and Policy Developments at National Level

In 2008, the national government adopted its ‘Vision, Strategic Direction and Framework for Climate Policy’, followed in 2011 by the NCCRP. The latter sets two main objectives: (a) to manage expected climate change effects through interventions that build and sustain South Africa’s social, economic and environmental resilience and emergency response capacity; and (b) to make a fair contribution to the global effort to stabilise greenhouse gas concentrations in the atmosphere at a level that avoids dangerous anthropogenic interference with the climate system within a timeframe that enables economic, social and environmental development to proceed in a sustainable manner (NCCRP [DEFF] 2011, 11).

In 2015, the government adopted its Climate Change Mitigation System. At the time of writing, the country is awaiting the promulgation of its first national climate change Act. Its forerunner, the *Climate Change Bill* (B9-2022) was published in 2022. The *Bill* covers aspects such as the institutional arrangements for climate governance and sectoral emission targets (*Bill* ch. 2 and s. 22). The *Carbon Tax Act* (15 of 2019) became operational on 1 June 2019 and provides for the imposition of a tax on the carbon dioxide (CO₂) equivalent of greenhouse gas emissions.

The national government published an Integrated Energy Plan in 2016, providing an energy plan for liquid fuels, gas and electricity, and an Integrated Resources Plan (IRP), of which the most recent version was published in 2019. The IRP is an electricity infrastructure development plan based on a least-cost electricity supply-and-demand balance, considering security of supply and the environment (minimising negative emissions and water usage). The National Green Transport Strategy (2018–50) addresses the significant contribution of transport to national GHG emissions. The 2020 NCCAS consolidates and prioritises local, provincial and sectoral adaptation options and initiatives with a focus on the following sectors: water, agriculture and commercial forestry, health, biodiversity and ecosystems, human settlements (urban, rural and coastal), disaster risk reduction and management, transportation and infrastructure, energy, mining and oceans and coasts. The NCCAS is a high-level national adaptation policy that is intended to be implemented in functional and operational terms via provincial and local adaptation plans (see below).

The national legislature also responded with sector-specific law reform (for a detailed discussion see Du Plessis and Kotzé 2014). The *Integrated Coastal Management Act* (24 of 2008), for example, requires that coastal provinces and

municipalities develop management programmes that consider potential climate change effects in all coastal planning and management. The *Disaster Management Act* (57 of 2002) requires disaster management plans to be developed at national, provincial and local levels. These must include expected climate change effects and risks and disaster risk reduction and climate change adaptation measures (*Disaster Management Act* ss. 14 and 20). Regulations have been published in terms of national air quality legislation and building regulations law to make provision for GHG reporting and energy-efficiency in support of climate mitigation. Despite South Africa's abundance of sunlight, the national government has not yet passed regulations or explicit national policies that commit to solar energy generation as a pillar in the country's transition to a less carbon-dependent electricity grid.

In addition, a comprehensive suite of national local government policy and legislation, mostly administered by the Department of Cooperative Governance and Traditional Affairs, governs municipal affairs. These policies and laws regulate local governance in minute detail and effectively serve to restrain local climate change response measures, especially those with budgetary implications.

12.4.2.2 Policy Development at Provincial and Municipal Level

Local governments, especially metropolitan municipalities, have been rolling out local climate change response policies, plans, strategies and projects. Two of these include the Ekurhuleni Climate Change and Energy Strategy (2007) with a focus on the reduction of the harmful effects of energy use (e.g., pollution and global warming) by promoting cleaner and renewable energy sources, and the Durban Climate Change Strategy (2014) complemented by an Implementation Framework and separate theme reports on biodiversity, food security, health, sustainable energy, transport, and so on. In what is perhaps the most outstanding example of local initiative, the City of Cape Town has a long history of local energy and climate planning and action. It was the first African city to complete a State of Energy Report (2001; updated in 2007, 2011 and 2015) and adopt the Energy and Climate Change Strategy (2006). The City also adopted an Energy and Climate Action Plan (2010) and a Climate Change Policy (2017), and has made associated institutional changes. In 2015, the City of Cape Town adopted the Cape Town Energy 2040 Goal (2015) with its associated energy and carbon-reduction targets. This project, which models a more resilient, resource-efficient and equitable future for Cape Town, commits the City to diversifying Cape Town's energy supply, becoming significantly more energy efficient and reducing carbon emissions. Most recently, the City of Cape Town adopted its Climate Change Strategy (2021) with a vision for the City to become climate resilient, resource efficient and carbon neutral (CoCT 2021, 15). At the time of writing, the City of Cape Town as well as

eThekweni, Johannesburg, Tshwane and Ekurhuleni metropolitan municipalities are rolling out plans and timelines to procure electricity from independent power producers (IPPs) and to integrate IPP-generated electricity into the cities' supply networks. IPPs typically rely on wind, solar, biomass and small hydro projects. In 2020, the *Electricity Regulations on New Generation Capacity* of the *Electricity Regulation Act* (4 of 2006) was amended to enable municipalities in good financial standing to procure new generation capacity in accordance with the national IRP.

12.4.2.3 Does the Division of Powers Support Subnational Climate Action?

Given the above patchwork of national, provincial and municipal commitments, policies and programmes, the next question is: what leverage do the subnational governments, that is, provinces and municipalities, have to follow through on these? Where are the opportunities and where are the bottlenecks? Earlier, it was argued that South Africa has tremendous opportunities for climate action in 'electricity supply, urban passenger transport and residential buildings'. In the same vein, the main points of leverage for subnational governments were later identified as planning, the environment and the management of urban spaces. A closer interrogation of the division of powers in these critical sectors reveals a muted provincial role and a municipal role that is, potentially at least, much stronger.

Spatial planning and land-use management powers are strewn across the three spheres of government by the Constitution, resulting in much uncertainty about the roles of each sphere (Berrisford 2011). After a series of Constitutional Court judgments and a new national law, the *Spatial Planning and Land Use Management Act* (SPLUMA) of 2013, the role definitions settled. Municipalities conduct land-use management such as zoning, and decide on land-use applications (De Visser 2016). This is a source of considerable tension, particularly in the context of climate change mitigation (De Visser 2015). Municipalities are regularly accused of allowing urban sprawl. Furthermore, the municipal revenue model, reliant as it is on property rates and service fees, has the propensity to direct municipal attention away from mitigating climate change to maximising revenue from urban development (Steytler 2009, 444) and the provision of services such as (coal-based) electricity. Provincial governments regulate and oversee municipal land-use management and adopt provincial spatial policies, called provincial spatial development frameworks (PSDFs). Given their regional focus, these are potentially critical for adapting to, and mitigating climate change. However, PSDFs are not binding on municipalities (SPLUMA s. 22(3)). The national government adopts a national spatial development framework (NSDF) that directs development nationally, a power that can be used for climate action (SPLUMA ss. 13–14). Again, the NSDF is not binding on municipalities.

In real terms, therefore, municipalities have considerable autonomy to decide on land use and critically influence climate change action in that respect. This has made it difficult for national and provincial governments to use the land-use system to impose constraints on any urban eagerness to develop. However, there are many other constitutional levers that national and provincial governments can use.

One such a lever is the fact that the national and provincial governments share authority with respect to the 'environment' (Schedule 4, Part A). The national government's suite of environmental management legislation on air quality, waste management and environmental development control may be applied, with agreement, by provincial and local enforcement officers (see *National Environmental Management Act* s. 31C). Provinces have passed little or no environmental legislation, but play a critical role in implementing national legislation. National environmental management legislation, for example, empowers provincial governments to demand and approve environmental impact assessments (EIAs), required for developments that trigger an EIA. So, while a development could be approved by a local government, a provincial EIA could be required. A landmark court ruling on the controversial approval of a coal-fired power station determined that the climate change effects of such developments must be considered in the environmental assessment (*Earthlife Africa Johannesburg v Minister of Environmental Affairs and Others* [2017] 2 All SA 519; see also Du Plessis 2018, 11–16; Kotzé and Du Plessis 2020, 634–43). Aside from the important victory for climate change action, this judgment may in future influence the above-mentioned intergovernmental dynamics between provincial and municipal governments on climate change.

Public transport is another sector with tremendous potential for climate action. Urban dwellers, if they have the means, overwhelmingly rely on private car-based transportation (IUDF 2016, 52). For the majority of South Africans, there are minibus-taxis, buses and some trains, all of which are generally inefficient, unsafe and/or expensive. Combined with the urban sprawl in cities (a stubborn result of apartheid spatial design and poor planning), the result is that low-income households spend more than 20 per cent of their monthly income per capita on public transport (StatsSA 2015, 55). Furthermore, the Integrated Urban Development Framework (IUDF) of 2016 reported that, out of forty countries surveyed, South Africans spend the longest time in daily commutes to and from work (IUDF 2016, 52).

The Constitution distributes public transport functions across the three spheres of government. In practice, the public transport sector is very fragmented and riddled with historical inefficiencies (IUDF 2016, 53). Commuter rail (even within urban boundaries) is managed by a national utility, interprovincial transport is

regulated nationally, and most road-based public transport (such as taxis and buses) is regulated and licensed provincially. Subsidy arrangements are uneven and disjointed across spheres of government, resulting in 'separate systems for different public transport modes hav[ing] become embedded' (IUDF 2016, 54).

Cities have long clamoured for greater authority to manage and integrate the various urban-based public transport systems, critical to streamline services, enable people to choose public transport instead of private cars and thus ultimately reduce emissions. At a policy level, the national government agrees. In the IUDF, it committed supporting the devolution/assignment of functions for various public transport modes to local government, based on the premise that local government is the sphere most able to manage and integrate public transport with other infrastructure and services (IUDF 2016, 55). The *National Land Transport Act* (5 of 2009) indeed envisages greater decentralisation of public transport functions to local government and even contains something akin to a subsidiarity principle (*National Land Transport Act* s. 11(3) Palmer, Moodley and Parnell 2017, 219). However, this decentralisation has not gained much momentum. The ANC-led national government is reluctant to cede power and budget to the cities, where voters are increasingly interested in voting for opposition parties (see, Siddle and Koelble 2012, 197–204).

12.4.2.4 Institutional Actors, Support and Monitoring, and Evaluation

The national policy intention is for cross-cutting climate change responses to be included in national, provincial, and local planning, law, and policy regimes such as the national Industrial Policy Action Plan, the national Integrated Resource Plan for Electricity Generation, the Provincial Growth and Development Plans and municipal Integrated Development Plans (IDPs) (NCCRP [DEFF] 2011, 14–15). The Department of Performance Monitoring and Evaluation in the Presidency has been tasked with ensuring that the implementation of climate change adaptation measures is properly integrated across government levels. Reporting on climate responsibilities and adaptation measures must be integrated into the Programme of Action and the ministerial delivery agreements as well as the quarterly reporting requirements of government at all levels (NCCRP [DEFF] 2011, 47–8).

Specific national government bodies responsible for climate change response action include the International and Domestic Reporting Unit and the Climate Change and Air Quality Branch, both in the DEFF. A total of thirty-two organs of state and universities are involved in the preparation of the country's National Communications to the United Nations Framework Convention on Climate Change, for example.

In the provincial sphere it is mostly provincial departments responsible for environmental affairs that take the initiative regarding climate change adaptation

and mitigation but few provinces have dedicated provincial structures for this. Several municipalities have reshuffled their structures in recent years to make provision for directorates and departments dedicated to climate change governance. The eThekweni Municipality, for example, has an Environmental Planning and Climate Protection Department with a staff complement of over thirty.

Capacity building, the development of technical skills and knowledge generation on climate change response action happen across the three spheres of government in a fragmented and ad hoc fashion. In one example, the National Treasury has a Cities Support Programme on the Provision of Technical and Strategic Recommendations to Mainstream Climate Responsiveness into City Plans, Budgets and Grant Conditions. The programme aims to develop tools for the mainstreaming of climate responsiveness into city planning, budgeting and projects, as a low-cost approach to efficient city management and fiscal sustainability (National Treasury 2018, i).

12.4.3 Intergovernmental Coordination and Planning

Given the patchwork of policies and law across the three spheres, the inefficiencies in the distribution of powers and the multiple institutional actors involved, what is then the intergovernmental glue that brings these seemingly disparate strands together? The importance of coordination for the government's climate action project is well-recorded (Ziervogel and Parnell 2014, 59).

12.4.3.1 Intergovernmental Relations

South Africa's multilevel system is held together by an array of intergovernmental mechanisms for dialogue, coordination and information sharing. Much of the country's intergovernmental mechanisms are expected to support the coordination of climate change action across the three spheres of government. The Constitution itself contains 'principles of cooperative governance' that call on organs of government to share information, consult, refrain from litigation, and so on. The *Intergovernmental Relations Framework Act* (13 of 2015) provides a general framework for intergovernmental relations between national, provincial and municipal levels, including intergovernmental forums.

12.4.3.2 Intergovernmental Forums

The President's Coordinating Council brings together the presidency, key national ministers, provincial premiers and a representative of the South African Local Government Association (SALGA) (accredited as local government's voice in intergovernmental relations). National ministers, in turn, regularly meet with their provincial counterparts. In practice, these standing intergovernmental bodies are

important vehicles for national–provincial coordination. Most of them include SALGA representatives. In the context of climate change, the MINMEC: Environment is particularly noteworthy. It meets quarterly and brings together the national minister of environmental affairs, all nine members of the provincial Executive Councils (MECs) responsible for environmental management functions and a representative of SALGA.

The Forum of South African Directors is the technical equivalent of the President's Coordinating Council, comprising the most senior government officials of the national and provincial governments as well as SALGA senior management. Much of this architecture is repeated at the provincial level, where provincial executives meet with municipal mayors. There are also several coordinating bodies that focus specifically on climate change, such as the Inter-Ministerial Committee on Climate Change (IMCCC) and the Intergovernmental Committee on Climate Change (IGCCC).

There is certainly no shortage of forums and structures for coordination. However, it is not always clear whether these forums go beyond information sharing, and into more programmatic alignment and coordination. The intergovernmental forums neatly follow the 'hierarchy' of national, provincial and local government. In addition, intergovernmental forums tend to be dominated by the most senior sphere of government involved, thereby hollowing out their integrative potential. Steytler (2011, 420) argues that instead of focusing on common issues, the intergovernmental relations forums are mostly used by the national government to monitor the performance of provinces.

The greatest flaw in this architecture is that cities are not directly connected to the national government. Given the pivotal role of cities, this rather diminishes South Africa's ability to coordinate climate change action. Other than the President's Coordinating Council (which meets sporadically and is far removed from the sites of pragmatic policy coordination), the *Intergovernmental Relations Framework Act* does not provide for an intergovernmental forum that connects cities directly to the national government. As stated earlier, MINMECs generally include local government but only through SALGA. The assumption is thus that cities connect with the national government through one representative of organised local government at the President's Coordinating Council or a MINMEC, or via their provincial governments. This does not satisfy the need for city–national intergovernmental relations, particularly in the context of climate change. In practice, municipal–national intergovernmental relations thus take place mostly outside the generic intergovernmental relations framework. The National Treasury has, for example, established dedicated structures and programmes to engage with subnational authorities, such as the Cities Support Programme referred to earlier.

12.4.3.3 Integrated Development Planning

Local government legislation provides for an intricate framework of integrated development planning as a strategic planning and budgeting framework that brings together the plans and programmes of all three spheres of government. Each municipality adopts a five-year strategic plan, which is expected to function as the ‘landing strip’ for all government planning in the municipality’s jurisdiction. The key entry point for this ‘all of government’ approach are the eight metropolitan and forty-four district municipalities. The spatial development frameworks (SDFs) mentioned earlier are key components in this framework. As explained, they must be developed at municipal, provincial and national level. Potentially at least, they are important instruments for climate change adaptation and mitigation. First, these SDFs are expected to ‘identify long-term risks of spatial patterns and contain measures to mitigate those risks’ (SPLUMA s. 12(1)(j)). Second, while they are not binding, they must inform the exercise of discretion in relation to land use and development. This is most pronounced at municipal level. Proposed developments that contradict a municipal SDF must be specifically motivated (SPLUMA s. 22 (1)). Arguably, therefore, if climate change mitigation and adaptation principles are articulated in these SDFs at all three levels, this ought to influence the direction of development.

12.5 Opportunities for Greater Climate Change Resilience

12.5.1 Provincial Government

The extent to which provinces and municipalities in South African engage in climate change is informed by the degree of devolved autonomy. As alluded to earlier, provincial autonomy is limited both because of the constitutional design – including the absence of fiscal autonomy for provinces – and a highly centralised political practice.

Provincial governments have the authority to make significant contributions, but mainly in the regulatory sphere. They have little financial leverage: provinces are almost completely grant dependent; do not provide much grant funding to local governments; and most of their spending power is in social services, namely education, health care and housing. Of those three, housing is the most closely associated with climate change action. However, the provincial role is primarily focused on the project management of subsidy housing projects. Here, the imperative is to produce as many housing opportunities as possible, given the large housing backlogs. Housing subsidy rules are determined nationally and, as discussed earlier, the location of new housing projects is not determined by provincial governments. So, there is relatively little scope for provinces to invest in

climate change mitigation or adaptation programmes or influence public funding streams towards these goals.

Provincial governments also constrain themselves by not making full use of the policy and legislative space afforded to them by the Constitution. Provinces adopt very few provincial laws and do not compete with the national government over concurrent powers (De Visser 2017, 229), including those most closely related to climate change. This is borne out by the absence of any Constitutional Court jurisprudence on the application of the constitutional override provision with respect to concurrent powers. As a result, all critical sectors are regulated nationally. Furthermore, even when exclusive provincial powers offer some leverage for climate action, there is little uptake. Provinces are reluctant to do so for fear of trampling on municipal autonomy, which is vigorously asserted by cities.

12.5.2 Local Government

Municipalities, metropolitan municipalities in particular, have greater leverage for two reasons. The first relates to the constitutional design and the functions allocated to local government. While the 'big ticket' provincial functions are social services, the municipal functions relate closely to the built environment, where a significant part of climate change mitigation and adaptation is located. Municipalities conduct town planning and thus determine the direction and location of new developments. They approve building plans, determine urban design and have the authority to develop their own (green) building codes. They deliver electricity, water and sanitation services and control municipal roads and traffic. They also see to waste management and can implement waste-to-energy projects. Second, municipalities (in particular those governing cities) have greater budget autonomy and command revenue sources that can be used to mitigate or adapt to climate change. Electricity and water sales, as well as property rates and development charges are critical revenue sources that reduce a city's grant dependency. Cities can also use their taxation and service tariff policies to influence behaviour towards climate action (De Visser 2012). Lastly, unlike provinces, cities actively borrow on national and international capital markets and some cities issue city bonds (Khumalo et al. 2016, 210).

However, cities are also constrained by a lack of autonomy. Climate action at the city level is subject to a dense national legal framework, designed to reign in errant local governments, that works mostly to constrain much-needed innovation. Long-term public-private partnerships, procuring renewable energy and other essential tools for urban climate action are so tightly regulated that many municipalities shy away from them (De Visser 2012). Furthermore, as already alluded to, cities lack critical aspects of the broad built environment function that

enable them to contribute to climate change action: while they control town planning, they lack direct control of housing subsidies (Palmer, Moodley and Parnell 2017, 251) and urban public transport. Similarly, whereas they control (most of the) electricity reticulation function, they are prohibited from generating their own electricity without national permission. Without national permission, they are even prohibited from purchasing electricity from any other supplier than the national power utility, Eskom, which delivers predominantly brown energy.

On all three issues, namely public transport, housing and electricity generation, there is no shortage of policy, rhetoric and promises to increase city powers. However, progress has been slow, mainly due to a lack of political will at the centre to devolve powers. The difficulties with respect to public transport were outlined earlier (see Section 12.4.2.4). With respect to housing, greater decentralisation of housing funds to cities commenced enthusiastically around 2010. However, as more cities turned into battlegrounds for opposition politics, the national government got cold feet and this has all but stalled.

Electricity generation has been in an outright crisis for over a decade with regular episodes of ‘load shedding’ (scheduled blackouts) crippling the economy, and seemingly unbridled air and water pollution by South Africa’s power utility, Eskom. Eskom holds a firm monopoly on power generation and the management of the power grid, protected by national legislation and the assurance that electricity generation lies entirely within national jurisdiction (see Section 12.2.2). It is, however, not able to meet the country’s electricity demands. This is due to persistent political interference by national politicians, large scale corruption, poor planning and the reliance on a dated model of highly centralised electricity generation, predominantly from South Africa’s abundant coal reserves. This situation stresses how timely it is for municipalities in good financial standing to be able to turn to IPPs in terms of the 2020 *Electricity Regulations on New Generation Capacity* referred to earlier.

South Africa must thus urgently make a just transition to green energy. The reality is that cities are chomping at the bit to contribute. However, they are held back by the restraints on their autonomy over electricity generation and a national government that is reluctant to loosen the reins. However, in a major policy shift in 2020, the national government amended the Electricity Regulations, enabling municipalities in good financial standing to develop their own power generation projects. This signals a careful but important first move to transform the energy sector.

Once the *Climate Change Bill* is enacted, provincial and local authorities will be expected to undertake ‘climate change needs and response assessments’ to be reviewed every five years, as well as ‘climate change response implementation plans’, informed by the mentioned assessments (*Climate Change Bill* (B9-2022)

ch. 3). These assessments will have to be aligned with national sectoral emission targets and should address adaptation considerations and options as well as risks and vulnerabilities, such as the impact of climate change on ecosystems and households (*Climate Change Bill* (B9-2022), s. 15).

Prior to the national government's adoption of the NCCRP, the *Climate Change Bill* and the *Carbon Tax Act*, it was mostly individual municipalities (especially metropolitan municipalities) that have shown an interest and leadership in climate governance. Notably, the National Climate Change Response Database by 2016 listed 125 climate change adaptation projects implemented since 2011. Government implemented around half of these projects with metropolitan municipalities at the forefront, said to have been responsible for approximately thirty of the government-implemented projects (TNC 2018, 177; see also Ziervogel et al. 2014, 610–612), followed by the NGO sector (TNC 2018, 178).

By 2016, all eight metropolitan municipalities in South Africa had a climate change plan or strategy, either completed or in process, as well as plans and practices that integrated measures for adaptation (DEA 2018, 177). A few smaller municipalities have shown remarkable initiative and have been quite resourceful as far as their local climate actions are concerned. In 2018, the National Treasury published a detailed report on climate mainstreaming in South African cities. The project probed whether climate change responsiveness is reflected in the language of the city planning instruments. The findings indicated that most metropolitan municipalities highlight climate responsiveness in their IDPs, but the integration remains largely at a high level with very few specifics (National Treasury 2018, 42). Many of these municipalities have started to reflect climate responsiveness in their SDFs but the coverage is 'patchy and inconsistent'; when included, it is again at a relatively high level (National Treasury 2018, 42). The mainstreaming of climate change responsiveness in municipal operations did not form part of the study and the valid concern has been raised that the effectiveness of local initiatives lies in the ability of municipalities to translate climate policy and planning into action in the face of institutional complexity and human capacity constraints (Ziervogel et al. 2014, 612).

12.6 Conclusion

South Africa is said to have the most advanced research, observation and climate modelling programme on the African continent (Ziervogel et al. 2014, 606). Yet, despite the constitutional emphasis on cooperative government and intergovernmental relations and the unequivocal local effects of climate change, South Africa's quasi-federal government has not yet embarked on a consolidated *process* of deliberation, cooperation and intergovernmental learning and planning

concerning climate governance. The reasons for this range from climate change not yet being high enough on the political agenda, to the diversity of climate change impacts in the country, institutional complexity, a lack of resources and political problems.

South Africa has a national policy compass for subnational action, in the *National Development Plan* and the *National Climate Change Response White Paper*. Yet, many of the details required for climate change response planning, budgeting, implementation and reporting are spread across line functions situated in the national and local government spheres. While some cities have eagerly taken up possibilities for being involved in local climate change governance by way of local plans, policies and programmes, most municipalities are struggling to make ends meet and to see to the delivery of the most basic of municipal services. Climate change thus serves to put the spotlight on the country's hourglass model of federalism: a strong national government (particularly active in the climate change policy, planning and legislative arenas); relatively weak provinces (mostly publishing provincial climate change policies and plans); and a continuum of very strong metropolitan cities, weakening secondary cities and very weak rural municipalities in the local government sphere. Despite significant constraints on their autonomy, the strong municipalities tend to be involved in the initiatives of global city networks and transnational climate change partnerships, and are changing structures, adopting strategic climate change plans, amending spatial decision-making orientations and development objectives, as well as making bold commitments to reduce their emissions.

The muted role for provinces in climate change is perhaps the logical result of their orientation towards social services, the absence of fiscal autonomy and the backdrop of South Africa's reluctant entry into the family of federations. However, the constraints on cities to leverage their control over the built environment and make very meaningful contributions to climate action are not in keeping with the constitutional and policy commitment to devolution. Instead, they seem informed by the political economy of decentralisation in South Africa, that is, the reluctance on the part of the national government to accept strong cities. This said, the government architecture of South Africa is such that it holds huge potential benefit for a coherent yet diversified and context specific policy, law and programmatic response to climate change. Much of the possibilities sit in the multifarious existing financial, strategic, environmental and disaster-risk related planning and management instruments of all three spheres of government, and in the nuts and bolts of a law and policy framework that is all for a government working closely together to the benefit of the health and well-being of the present and future generations.

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