



TRADE & INDUSTRIAL POLICY STRATEGIES

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FOR THE PRESIDENTIAL CLIMATE COMMISSION**

GOVERNANCE AND THE JUST TRANSITION

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Trade & Industrial Policy Strategies (TIPS) is a research organisation that facilitates policy development and dialogue across three focus areas: trade and industrial policy, inequality and economic inclusion, and sustainable growth

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**PRESIDENTIAL
CLIMATE COMMISSION**
TOWARDS A JUST TRANSITION

This working paper has been commissioned by South Africa’s Presidential Climate Commission (PCC) as an input to the process of planning for a just transition. Specifically, it forms part of a series that will provide an evidence-based foundation for a new Framework for a Just Transition — a practical guide to ensure that South Africa’s transition to a low-emissions economy is well-managed, just, and equitable. The Framework will also build on existing just transition debates in the country, the vision set out by the National Planning Commission, and a new series of thematic and social-partner consultations that will gather a diverse range of views on what it means to achieve a just transition.

The views expressed in this paper represent those of its authors, and do not necessarily reflect the views of the PCC or its Commissioners.

About the Presidential Climate Commission:

The PCC is a multi-stakeholder body established by the President of the Republic of South Africa to advise on the country’s climate change response and pathways to a low-carbon climate-resilient economy and society. In building this society, we need to ensure decent work for all, social inclusion, and the eradication of poverty. We also need to protect those most vulnerable to climate change, including women, children, people with disabilities, the poor and the unemployed, and protect workers’ jobs and livelihoods. The PCC facilitates dialogue between social partners on these issues — and in particular, defining the type of society we want to achieve, and detailed pathways for how to get there.

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ABBREVIATIONS

COGTA	Department of Cooperative Governance and Traditional Affairs
CSIR	Council for Scientific and Industrial Research
DALRRD	Department of Agriculture, Land Reform and Rural Development
DBE	Department of Basic Education
DEL	Department of Employment and Labour
DBSA	Development Bank of Southern Africa
DEL	Department of Employment and Labour
DFFE	Department of Fisheries, Forestry and the Environment
DFI	Development Finance Institution
DHET	Department of Higher Education and Training
DMRE	Department of Mineral Resources and Energy
DPE	Department of Public Enterprises
DSBD	Department of Small Business Development
DSI	Department of Science and Innovation,
dti (the)	Department of Trade and Industry
dtic (the)	Department of Trade, Industry and Competition
IDC	Industrial Development Corporation
IDP	Integrated Development Plan
KPIs	Key Performance Indicators
LED	Local Economic Development
LEDET	Limpopo Department of Economic Development, Environment & Tourism
NDOT	National Department of Transport
NEDLAC	National Economic Development and Labour Council
NERSA	National Energy Regulator of South Africa
PIC	Public Investment Corporation
PRASA	Passenger Rail Agency of South Africa.
SAWS	South African Weather Service
SEIAS	Socio-Economic Impact Assessment System
SJRP	Sector Jobs Resilience Plans
SAWS	South African Weather Service
SETA	Sectoral Education and Training Authority,
SEZ	Special Economic Zone
UIF	Unemployment Insurance Fund

1 PROBLEM STATEMENT

The just transition aims:

- To secure a transition to net zero emissions;
- To enable working people and communities that depend on emissions-intensive industries to find alternative livelihoods;
- To anticipate and mitigate the effects of climate change on working people and the poor;
- To strengthen participatory democracy and collective action by working people and their communities; and
- To maximise the economic and social opportunities generated by the transition for society as a whole.

Achieving these objectives requires profound changes in both market outcomes and social and political relationships. They can only be achieved if the democratic state uses its power and resources to promote collective action. In the process, it needs both:

- To pursue economically and scientifically sustainable interventions in a context of uncertain and evolving information; and
- To empower the affected citizens to influence key decisions, and to support social solidarity and collaboration in their implementation.

In practice, despite some substantial successes, government efforts to promote a just transition have run into internal contradictions, inadequate capacity and funding shortfalls, and conflict with some communities. This working paper explores the systemic changes in governance that could mitigate these challenges. Given the uncertain and evolving conditions and science, there is, however, no perfect solution. Rather, governance systems will have to evolve continuously as new information and blockages emerge.

It first analyses the governance functions required for the just transition and their current allocation between state agencies. Because the just transition depends heavily on local solutions, it explores municipal and provincial resourcing and responsibilities and ways to improve the incorporation of the just transition into government's decision-making systems. It then pull outs learnings from the past 30 years of democracy around participation and the use of evidence in policymaking, and ends with some discussion questions.

The analysis leads to the following insights into the governance requirements for a just transition.

- The mandates and monitoring systems for relevant government agencies should derive much more consistently and visibly from the national aims for the just transition. The revised mandates should be incorporated consistently into the annual performance plans and budgets of these agencies. The plans should give agencies more scope for course correction, but also ensure real and timely consequences if there is no progress toward the targeted objectives over a reasonable timeframe – say two to three years.
- New, dedicated agencies are required for some key tasks (for instance, diversification of the coal districts in Mpumalanga or more consistent tracking and anticipation of the effects of climate change). They need adequate resourcing and capacity as well as the authority to secure alignment across government.

- A more consistent approach to the climate emergency also necessitates new and more effective engagement forums within government. These forums will work only if the participating agencies allocate adequate time and skills, including for secretariats. They also need dispute-settlement systems able to take decisions and enforce them without interminable delays.
- Co-ordination across the spheres of the state to support the just transition needs to build on divergent competencies, strengths and weaknesses. Municipalities are critical for local knowledge and often for effective implementation of policies and community engagement. National departments have far greater power to mobilise national resources and technical capacity. A core challenge is to recognise and build on these different strengths.
- When government consults and engages with constituencies and stakeholders, it must be clear about the objectives, which range from obtaining information, to mobilising support, to tough negotiations with powerful stakeholders. The aims of engagement determine who should participate, the technical capacity needed to obtain and analyse evidence, and dispute-settlement systems. Again, success requires that all the parties put in time and resources, and that government officials can get mandates to adapt their positions when required.
- To promote accountability and an evidence-based discourse, decision-makers should have to publish the reasons for their decisions. That is, they should have to lay out the evidence and explain how it shaped their choices. New proposals should specify a critical path to achieving the desired objectives. Proponents should have to publish an assessment using the Socio-Economic Impact Assessment System (SEIAS) methodology that requires honest consideration of the benefits, costs and risks to different socio-economic groups.

2 POLICYMAKING AND INSTITUTIONS FOR THE JUST TRANSITION

Finding ways to improve government functioning for the just transition starts with understanding the systems that currently shape the development and implementation of relevant policies and measures. The premise here is that, in a deeply inequitable and socially divided society like South Africa, every institution and official faces pressure to replace national priorities with other objectives. The pressure takes many forms, including lobbying, corruption, demands to meet unrealistic political promises, and officials' personal allegiance to a group or class outside the government's main constituency.

To counter these pressures, democracies have three main tools:

1. Rules on how government makes decisions, with effective enforcement systems;
2. Monitoring systems both inside the state, especially Parliament but also various agencies, and outside of it (mostly media and advocacy groups); and
3. Broad-based popular organisation with capacity to engage on policy development, implementation and oversight.

From this perspective, chasing down corrupt or captured officials and leaders is necessary but insufficient for effective and accountable governance. Effective solutions require systemic changes to block illegitimate influences on government decision-making and implementation processes. Absent these changes, disciplining individual leaders and officials results, at best, in a revolving cast of characters running an ineffective and unaccountable state.

The mechanisms that shape policy development and implementation can be understood at various levels. They range from power relations outside of the electoral system, to the nature of the state's functions and structures, to the decision-making systems used by political leaders or their officials. This working paper starts with the recognition that power and resourcing are profoundly unequal in South Africa. An effective just transition will nonetheless have to ensure outcomes in the interest of the majority. To that end, it has to secure co-ordination across the state; establish effective and accountable decision-making systems; ensure local governments have adequate capacity and role clarity; strengthen public participation and collective action; and use evidence effectively. All of these areas are critical for the democratic governance in general and the just transition in particular. Each are considered in turn.

2.1 Functions and structures

To date, the government has not systematically mapped out the state functions required for the just transition as the basis for allocating responsibilities and resources. Instead, as the climate crisis deepened over the past 20 years, it met new demands by cobbling together earlier structures. The new tasks started as add-ons for existing agencies, mostly with vague mandates and inadequate capacity.

In analysing the functions and structures of the state, it is useful to distinguish between impacts, outcomes and outputs. Impacts refer to the ultimate policy aims – in the case of the just transition, the five objectives listed above. Outcomes comprise intermediate aims that are needed to achieve those impacts, for instance increased renewable energy use. Outputs refer to specific government products, such as providing transmission lines to serve renewable power producers. These conceptual categories often overlap significantly. Nonetheless, they help to distinguish between the aims of a policy, which usually depend on many factors outside of direct state control, and the government measures to achieve them.

When specific outcomes and outputs do not bring about the desired impacts, they should be modified even if they have been implemented as originally planned.

A coherent strategy for the just transition requires that the state allocate the outcomes needed to achieve it across the responsible agencies. That provides a basis for resourcing and monitoring the agencies involved. Moreover, specifying the desired impacts for government outputs makes it possible to measure progress and, when necessary, change course to address unanticipated blockages or new opportunities.

The following table translates the impacts of the just transition into outcomes with targets.

Table 1. Impacts, outcomes and targets for the just transition

IMPACT	OUTCOMES	TARGETS FOR IMPACTS AND OUTCOMES
Achieve net zero	Reduced emissions from coal (mostly electricity and Sasol) Electricity system functions during the transition More renewable electricity	Reduced tonnes of CO ₂ from coal, driven primarily by targets for Eskom and Sasol More reliable and affordable electricity Higher share of electricity from renewables
	Reduced emissions from petrochemicals Greater use of alternative technologies and public transport Densification reduces the need for transport	Reduced tonnes of CO ₂ from petrochemicals Increased share of non-petrol transport and public transport Denser settlements leading to shorter commutes
	Reduce emissions from other value chains (cement, agriculture, gas, etc.) Promote offsets	Targets for reductions in emissions from sources outside the coal and petrochemicals value chains Targets for offsets on the necessary scale
Ensure a just transition	Promote activities that generate new livelihoods especially in hard-hit communities	Economic diversification (establishment of new clusters and projects) Stable or increasing incomes, income equality, and employment ratio in affected communities (derived from targets for reducing emissions)
	Support displaced workers' transition into new opportunities through active labour-market policies, improved education and infrastructure, and social protection	Share of displaced workers with new livelihoods (or retired on reasonable income) Improved education and infrastructure for households and small businesses in affected communities
	Effects of climate change on working people and the poor identified as soon as possible Working people and poor assisted in dealing with potential and actual effects of climate change	Monitoring systems in place and able to identify (better: to anticipate) impacts of working people and the poor Vulnerable low-income communities empowered with information about climate change and responses Resilience of low-income communities affected by climate change measurably improved (access to infrastructure, productive and other assets, social protection, improved education, etc.)
	Promote collective action by working people and their communities	Broader and more equitable ownership of productive and other assets Growth in accountable membership-based organisations Decision-making systems reflect inputs and views of working people and their organisations

IMPACT	OUTCOMES	TARGETS FOR IMPACTS AND OUTCOMES
	Ensure energy transition translates into lower prices and more reliable energy as the basis for more inclusive growth	Falling electricity tariffs in real terms Fewer outages (hours of load shedding, load reduction, municipal breakdowns), especially in low-income communities Overall economic growth Rising employment and improved income equality Numbers of small formal businesses and social enterprises

The authority and resources to achieve these outcomes are currently spread out over multiple state agencies and spheres. Table 2 shows the government agencies that are now responsible for the outcomes required for the just transition (as identified in the second column in Table 1). The functions involved range from energy and industrial policies to active labour market interventions to social protection. Annexure A lists the functions required per department. None of the agencies in the table, except for the Department of Fisheries, Forestry and the Environment (DFFE) and the Department of Mineral Resources and Energy (DMRE), include the just transition explicitly in their annual performance plans.

Table 2. Functions and mandates required for the just transition, and structures to implement them as of September 2021 (abbreviations for government agencies are spelled out below the table)

IMPACT	OUTCOMES	FUNCTIONS AND STRUCTURES
Achieve net zero	Reduced emissions from coal (mostly electricity and Sasol) Electricity system functions during the transition Increased renewable generation	Emissions targets: DFFE Electricity planning: DMRE, Eskom, CSIR Emissions pricing: Treasury (carbon tax and energy efficiency incentives), NERSA Electricity pricing: NERSA, Eskom, municipalities Eskom oversight and strategies: DPE Contracting renewables for national grid: DMRE Transmission and payment for renewables: Eskom Rules for private generation: DMRE Proposed Musina Makhado coal plant: the dtic and Limpopo Province Financing for renewable generation: DFIs and PIC Financing for Eskom: Treasury, DFIs, PIC Electrification: Eskom, municipalities, Treasury (through municipal grants) Coal transport: Mpumalanga Province, Treasury, Transnet Carbon budget for Sasol: DFFE Liquid fuels pricing: DMRE, Treasury Innovation (mostly storage): DSI, the dtic Regulation of pollution: DFFE; provinces for Environmental Impact Assessments

IMPACT	OUTCOMES	FUNCTIONS AND STRUCTURES
	<p>Reduced emissions from petrochemicals</p> <p>Greater use of alternative technologies and public transport</p> <p>Densification to reduce need for transport</p>	<p>Emissions targets: DFFE</p> <p>Transport policy: NDOT, Sanral (decisions on roads), Transnet (investment in rail), DPE (freight rail policy)</p> <p>Petrol and emissions pricing: Treasury, DMRE</p> <p>Freight pricing: Transnet, Ports Regulator; Sanral sets tolls, but road freight pricing is unregulated</p> <p>Financing for roads: Treasury, provinces, municipalities</p> <p>Financing for public transport: Treasury (bus and PRASA subsidies); Gauteng Province for Gautrain; municipalities</p> <p>Local bus systems: municipalities</p> <p>Densification policy: Human Settlements, provincial housing, municipalities</p> <p>Densification implementation: municipalities (infrastructure); provincial housing departments and agencies (housing)</p> <p>Support for technology innovation: the dtic, Treasury, NDOT</p> <p>Regulation of pollution: DFFE</p>
	<p>Reduce emissions from other value chains</p> <p>Promote offsets</p>	<p>Quantify other sources of emissions and effective offsets: DFFE</p> <p>Regulation to reduce emissions: DALRRD, DFFE</p> <p>Finance for new technologies: DFIs, DALRRD, the dtic</p> <p>Incentives for offsets: DFFE, Treasury, the dtic</p> <p>Financing for offsets: DFIs</p> <p>Support for technology innovation: Agricultural Research Council, CSIR</p> <p>Regulation of pollution: DFFE; provinces (for Environmental Impact Assessments)</p>
Ensure a just transition	<p>Promote activities that generate new livelihoods especially in hard-hit communities</p>	<p>Planning framework: DFFE (through Sector Jobs Resilience Plans)</p> <p>Development and testing of options: Municipalities must complete Local Economic Development (LED) plans, but focus on infrastructure</p> <p>Industrial policy: the dtic</p> <p>Agricultural policy: DALRRD; provincial agricultural departments</p> <p>Tourism policy: national tourism department; provincial economic development departments; municipal governments</p> <p>Financing: the dtic; DFIs; provincial development agencies and DFIs</p> <p>Infrastructure to support industrial diversification: national infrastructure departments; national state owned companies; the dtic; provinces (through SEZs); municipalities</p>
	<p>Support displaced workers' transition into new opportunities</p>	<p>Policy framework: DFFE</p> <p>Active labour market policies: DEL</p> <p>Education and skills development: DBE; DHET; SETAs</p> <p>Improved community infrastructure: Municipalities, Eskom, Water Boards</p> <p>Financing for community infrastructure: Treasury, municipalities, DBSA</p> <p>Social protection: Social Development (grants); UIF</p> <p>Public employment schemes: DPW</p>

IMPACT	OUTCOMES	FUNCTIONS AND STRUCTURES
	Effects of climate change on communities identified as soon as possible Communities assisted in dealing with effects of climate change	Policy framework: DFFE, COGTA Drought and flood monitoring: SAWS, DALRRD Disaster relief: Provinces and municipalities Financing for disaster relief: Treasury, COGTA Disseminate information: DFFE, COGTA, provinces and municipalities Technological innovation to promote resilience: the dtic, CSIR, Agricultural Research Council Funding more resilient infrastructure: Treasury, DPW, DBSA, Eskom, municipalities, provinces Planning and delivering more resilient infrastructure: municipalities, Eskom, provinces (roads and housing), Water Boards <i>Economic diversification and support for displaced as above</i>
	Promote collective action by working people and their communities	Policy frameworks on ownership: the dtic, DSBD, DALRRD, Presidency Financing to promote more equitable ownership: DFIs; DALRRD; DSBD Incentives for more equitable ownership: dtic and Treasury (mostly through broad-based BEE) Technical support for new owners: the dtic, DSBD, DALRRD Policy frameworks on membership-based organisation: DEL (unions, NEDLAC), COGTA (municipal systems and structures), Parliament (national legislation), provinces, municipalities Resourcing for membership-based organisations: n.a. Policy frameworks on consultation: Parliament, virtually all government agencies Resourcing for consultation: Parliament, government agencies
	Ensure energy transition translates into lower prices and more reliable energy as the basis for more inclusive growth	Policy on pricing and reliability: DMRE (but does not publish targets for reliability); municipalities Policy on private and municipal generation: DMRE Electricity pricing: NERSA Ensuring reliability: Eskom; municipal utilities Electrification: Eskom, municipalities, National Treasury (through grants to municipalities) <i>Note: No national or municipal agency publishes either targets or outcomes for reliability or price of electricity</i>

Abbreviations: BEE – Black Economic Empowerment, COGTA – Department of Cooperative Governance and Traditional Affairs, CSIR – Council for Scientific and Industrial Research, DALRRD – Department of Agriculture, Land Reform and Rural Development, DBE – Department of Basic Education, DBSA – Development Bank of Southern Africa, DEL – Department of Employment and Labour, DFFE – Department of Forestry, Fisheries and the Environment, DFI – Development Finance Institution, DHET – Department of Higher Education and Training, DMRE – Department of Mineral Resources and Energy, DPE – Department of Public Enterprises, DPW – Department of Public Works, DSBD – Department of Small Business Development, DSI – Department of Science and Innovation, the dtic – Department of Trade, Industry and Competition, NDOT – National Department of Transport, NEDLAC – National Economic Development and Labour Council, NERSA – National Energy Regulator of South Africa, PIC – Public Investment Corporation (manage public-sector pension funds), SAWS – South African Weather Service, SETA – Sectoral Education and Training Authority, SEZ – Special Economic Zone, UIF – Unemployment Insurance Fund, PRASA – Passenger Rail Agency of South Africa.

The underlying fragmentation of the South African state makes it harder to align functions and structures for the just transition. It has four main roots.

First, the Constitution establishes three levels of autonomous elected government. This system was a compromise with the former regime, which wanted to divide the state in order to hobble economic redistribution.

Second, the government has appointed independent experts as regulators and for dispute settlement, often in anticipation of privatisation that did not in fact occur. This system adds to demand for expertise that is often in short supply. Moreover, it sometimes generates inconsistent decisions and delays.

Third, only Cabinet, the Presidency and the courts have the power to arbitrate disputes between government agencies, although a variety of mediation structures exist, including clusters and cross-sphere bodies. The arbitration centres are overburdened, so that contradictions and disagreements can drag on for years, even when legislation sets deadlines.

Finally, political parties frequently allocate executive positions (Ministers and members of provincial and municipal executive committees) to build internal and inter-party coalitions rather than to drive policies. In these cases, they may be reluctant to discipline executive authorities who mismanage or flout national policy initiatives.

In short, the functions required for the just transition were divided between numerous government agencies, generally with poorly defined mandates and inadequate resourcing. When they disagreed, there was often no way to expedite dispute resolution. These factors led to long-running inconsistencies in policies, regulations and implementation.

2.2 Local and provincial structures for the just transition

Many effects of the climate crisis and the energy transition have particularly sharp impacts in relatively poorly resourced regions. Affected areas depend on emissions-intensive industries, farming and tourism, or face weather extremes with poor infrastructure. Their municipalities often have limited revenues and capacity, making it difficult to design and implement a just transition.

In theory, the roles of municipalities and national departments in the just transition are clear. Municipalities have local knowledge and networks, enabling them to identify and support affected workers, businesses and communities. National agencies have capacity to redistribute national resources and technical capacity in order to support areas in need; shape large-scale interventions and co-ordinate government efforts; and provide bulk infrastructure.

In practice, it is always difficult to balance decision-making power, resourcing and consultation across the spheres, each of which has its own autonomous elected government. The Constitution gave national departments effective control of almost all tax and budgetary decisions, environmental policy, most economic functions and post-secondary education and training, bulk infrastructure, and all of labour policy, social grants and security. The provinces have power over health and education, while municipalities were mandated mostly to provide local infrastructure. Table 3 shows the consequent allocation of just transition functions across the spheres.

Table 3. The allocation of just transition functions between spheres of government

AIM	MANDATE	NATIONAL	PROVINCIAL	MUNICIPAL
Achieve net zero	Reduce emissions from coal	Environmental targets Regulation of national grid and pricing Incentives for coal plant at Musina Makhado SEZ, and electricity price subsidies for refineries Carbon taxes Innovation support Final decision on some Environmental Impact Assessments	Coal transport in Mpumalanga Incentives for coal plant at Musina Makhado SEZ Environmental Impact Assessments	Regulation and pricing on municipal grids Municipal electricity sourcing, including own generation where permitted by national regulations

AIM	MANDATE	NATIONAL	PROVINCIAL	MUNICIPAL
	Reduce use of petrochemicals	Emissions targets Transport and freight policy and pricing Densification policy Financing for national roads, local buses and PRASA Innovation support Designate and subsidise SEZs	Provincial roads Housing funding Gautrain subsidy and regulation Environmental Impact Assessments Manage and subsidise SEZs	Regulation and provision of local roads Regulation and provision of public transport (except for PRASA and Gautrain)
	Reduce other emissions; offsets	Identify and regulate emissions Finance and incentivise new technologies Support for technology innovation Designate and subsidise SEZs	Agricultural extension Environmental Impact Assessments Manage and subsidise SEZs	Local business licencing Provision of industrial sites and infrastructure
Ensure a just transition	Promote new livelihoods in hard-hit communities	Sector Jobs Resilience Plans (SJRP) Industrial policy and incentives Agricultural policy and incentives Tourism policy and promotion National infrastructure (mostly electricity, roads and freight rail) DFIs and other development and industrial finance Funding for RDP housing National licencing rules National taxation dtic subsidies for SEZs and industrial sites	Provincial development plans Agricultural extension Tourism promotion Provincial roads Housing projects Various provincial DFIs, development agencies and small business support	LED (mostly focused on infrastructure) Support for small business Local roads, electricity, water and waste removal (provision, maintenance and pricing), including for industrial sites Local licencing rules and rates
	Support displaced workers	SJRP Labour market regulation Social grants Policy and standards for general education Provision of post-secondary education and skills development Funding for RDP housing and for household infrastructure	Provision and resourcing of general education	Provision and pricing of household infrastructure

AIM	MANDATE	NATIONAL	PROVINCIAL	MUNICIPAL
	Assist communities affected by climate change	Identify and monitor threats Develop policy frameworks and technological solutions Disaster relief Build resilience in housing, human capital and other resources Funding for RDP and household infrastructure <i>Promote diversification and support displaced workers as above</i>	Improve resilience of provincial roads and housing projects <i>Promote economic diversification and support displaced workers as above</i>	Increase resilience of local roads, electricity, water and waste removal, and repair as required Disaster relief <i>Promote economic diversification and support displaced workers as above</i>
	Promote collective action	Requirements for policy development and decision-making across spheres Regulatory frameworks for NEDLAC, unions and social enterprise Policy and laws on ownership Resourcing and incentives to transform ownership Support for new owners	Design and implement provincial policy development and decision-making systems	Design and implement municipal policy development and decision-making systems Manage municipal integrated development planning processes Support new business owners
	Maximise benefits from electricity transition	Regulation and pricing on national electricity grid Financing electrification		Regulation and pricing for local electricity Implementing electrification Procurement of electricity

The budgets of municipal and provincial governments¹ reflect their main Constitutional mandates – health and education in the provinces, and municipal infrastructure in cities. Pre-democratic structures still largely shape their incomes and spending structures.

Municipalities spend most of their budgets on bulk services (electricity, water and waste removal) and infrastructure investment. They generate around 70% of their revenues from their own tariffs and rates, with the rest sourced from national transfers. Outside of the metros, most municipalities – including the coal towns in Mpumalanga – lack capacity to promote economic diversification on scale.

To a large extent, municipalities' limited economic policies and programmes follow from their constitutional role. The Constitution broadly mandates local governments to promote economic and social development, as well as a safe and healthy environment (South African Government, 1996). It gives them limited powers to achieve these aims, however. They

¹ Figures for municipal budgets are calculated from National Treasury. SA27 Monthly budgeted revenue and expenditure per function and operating and capital Budget data for municipalities for 2019/20. Excel spreadsheets. Available at: http://mfma.treasury.gov.za/Media_Releases/mbi/2019/Pages/budgetinfo2019.aspx. Population figures from estimates by Quantec. EasyData. Standardised regional series. Accessed at www.quantec.co.za. Provincial budgets from Treasury. Tabled Provincial Budget 2021 MTEF. Excel spreadsheet. Available at: <http://www.treasury.gov.za/documents/provincial%20budget/2021/default.aspx>.

essentially have authority only over the quality and pricing of local infrastructure; licensing of local businesses, especially restaurants and bars; and tourism promotion.

National legislation seeks to improve municipal support for economic development by requiring a range of plans, but provides little in the way of technical support or quality control. The Municipal Planning and Performance Regulations (2001) mandate municipalities to develop an Integrated Development Plan (IDP) that includes a LED plan. In 2013, the Spatial Planning and Land Use Management Act required that IDPs include a separate spatial planning framework.

In practice, most municipalities neither inherited effective planning units nor have the resources to set them up, and few smaller towns encompass tertiary institutions or research agencies that could provide consistent technical support. As a result, they rely heavily on consultants. That said, the spatial planning agencies are usually relatively strong because they support the core municipal function of infrastructure delivery. They generally end up driving economic strategies, often without substantial inputs from the (much smaller) LED units. As a rule, they prioritise household infrastructure over quality and reliable services for businesses, and rarely incorporate large-scale programmes to promote diversification or small enterprise. For their part, LED initiatives mostly remain vague or very small. Many change fundamentally every few years when new officials or consultants come in.

Govan Mbeki Municipality, which depends largely on Sasol's coal mines and refineries, is typical. In its 271-page IDP for 2020-21, the LED plan gets three pages plus two pages of performance indicators. The LED targets relate exclusively to process outputs – a mix of feasibility studies, designs for an industrial park, convening stakeholder forums and fundraising. They do not link to targets elsewhere in the IDP for infrastructure provision, densification or public transport. Infrastructure targets get six pages, including specific investment and maintenance projects. Meanwhile, Govan Mbeki's Spatial Development Framework (22 pages) prioritises economic development and says it builds on the LED plan. It does not, however, refer to any of the specific projects in the LED section. Nor does it commit to providing infrastructure and sites to support small enterprise or diversification in line with the LED. Instead, it focuses on improving road and rail links for coal mining and synfuels production, combined with nebulous commitments to promote renewable energy and assist communities affected by mine closures; proposes a new SEZ for manufacturing (without specifying priority industries), which is nowhere visible in the LED plan; and lays out broad guidelines for supporting tourism, commercial agriculture and agro-processing. It does not set any targets to secure affordable, quality infrastructure for businesses or for industrial sites. In contrast to the main IDP, it also does not specify responsibilities and outputs, much less outcomes, for municipal agencies. (Govan Mbeki, 2021)

Municipality capacity reflected substantial differences in revenue and expenditure per person, largely reflecting discriminatory public investment patterns under apartheid. As a group, local governments budgeted R450 billion in 2019, the latest available complete data. The sum was spread over 234 municipalities and metros, with populations varying from almost six million in Johannesburg to under 10 000 at Laingsburg in the Western Cape. In 2019, spending per resident averaged R7 300, but it ranged from R11 000 in the metros to R3 000 in the historic labour-sending regions, and R6 000 in other towns.

The difference in spending largely reflected the sharp differentials in regional prosperity and consequently municipal revenues. Almost 80% of local government budgets derived from

rates and tariffs, but the share ranged from 85% in the metros to 50% in the historic labour-sending regions. Taken together, the metros accounted for 40% of the national population but 70% of municipalities' own revenue. The historic labour-sending regions held 30% of the national population (down from around half before the democratic transition), but took in less than 10% of municipal revenue. The remaining municipalities also had over 30% of the population but raised under 25% of municipal revenue. These municipalities, essentially secondary cities and rural municipalities in areas designated "white" under apartheid, include the main coal towns in Mpumalanga.

Differences in resourcing affected municipalities' ability to provide, maintain and expand infrastructure. The metros spent around two thirds of their budgets on infrastructure, or R6 000 per person. Of that, they used some 15% – close to R900 per person – to maintain and expand investments, while the rest went to pay for bulk water, electricity and waste removal. Smaller municipalities outside of the historic labour-sending regions used a similar share of their budgets for infrastructure but their lower budgets meant they spent less than R4 000 per resident. They used about 12% for maintenance and investment, or under R500 per capita. In the historic labour-sending regions, municipalities spent only around 40% of their budgets, on average, on infrastructure, or just R1 000 per person. Moreover, although these regions had by far the worst infrastructure backlogs, they had much less to spend on it. They used 20% of their total infrastructure spend for maintenance and new investment, which came to less than R220 per resident in 2019.

The average municipality spent 3% of its budget on planning and development. The metros used 2.7% of their budgets, or an average of R700 million per city. In contrast, towns in the historic labour-sending regions spent 5% of their budgets, but that resulted in an average of just R30 million each – around half as much as the metros in per-person terms. Other towns used 2.8% of their budgets for planning, or R25 million on average.

From 2019, the national government aimed to strengthen municipal planning through a new "district development model". Each district includes several local municipalities. The Constitution established them to centralise technical capacity where appropriate, especially to help small, underfunded towns. In many historic labour-sending regions, they also manage the water supply. The new proposals required the districts to develop "One Plan" for all spheres within their borders, which would align municipal IDPs with provincial and national agencies active in the area. The Annual Performance Plan of the Department of Cooperative Governance foresaw finalisation of the first round of district plans by March 2022.

It is not clear how this process will affect municipal capacity to promote the just transition, since the district model will have to balance the demands of the different local governments for capacity and resources. For instance, in the coal regions of Mpumalanga, two districts (Gert Sibande and Nkangala) each contain two coal towns that account for around 45% of their population. They also cover four to five other towns, of which two or three are similar in size to the coal municipalities.

Provincial spending and revenues are vastly different from that of municipalities. They spend little on economic functions, but use 75% of their budgets for health and education. Moreover, they generated only 0.3% of their total revenue in 2021/22. The rest was transferred from the national budget – some R523 billion in 2021/22, or just under 30% of all national spending. Provincial expenditure averaged R12 000 per person in 2021/22, ranging

from R9 000 in Gauteng (with a population of 16 million) to R14 000 in the Northern Cape, which had 1.3 million residents.

The limited provincial economic spending goes primarily for public works, roads and transport. In 2020/21, these functions averaged 11% of total provincial spending, ranging from 14% in the Western Cape and the North West to 8% in Limpopo and 9% in Gauteng. While every province had a department of economic development, their budgets averaged just 1.9% of the total. The share ranged from a high of 2.5% in KwaZulu Natal and Mpumalanga, which inherited “development projects” in the historic labour-sending regions, to a low of 1.1% in Gauteng. Departments of agriculture averaged 1.8% of the budget, with a high of 3.6% in the Northern Cape and 2.8% in the Eastern Cape and a low of 0.7% in Gauteng.

Ultimately, the Constitution allocated fairly limited functions to provincial and municipal governments, as reflected in their expenditure patterns. Its logic was that a strong national government was required to drive economic reconstruction and especially to support impoverished regions. In practice, however, elected leaders often want to drive broader development initiatives in their regions. In any case, given the Constitutional division of labour, achieving a just transition requires more effective co-ordination mechanisms between the spheres of the state.

2.3 Systems for decision-making

Achieving a just transition requires that government decision-making consistently takes it into account. That in turn requires an understanding of existing systems and how they militate against decisions needed to promote more equitable and diversified growth in general, and in particular to move away from emissions-intensive activities.

Before 1994, government decision-making systems in South Africa had two core purposes. First, they aimed to promote economic growth, especially in mining, based in large part on exploitation of coal reserves for electricity and liquid fuels. Second, they were designed to limit inputs from, accountability to, and services for the majority of the population. With the transition to democracy, the new government reshaped many decision-making processes in an effort to diversify the economy, expand services, and open space for broader engagement and oversight. These reforms centred on setting up routes for more people and organisations to make inputs, generally through public hearings or written comments. They did not, however, proactively promote or resource organisation or collective action by people from poor communities who lack the resources and education to engage easily. Moreover, they did not set up procedures to measure decisions consistently against the desired socio-economic impacts. As a result, they often effectively opened the door to inputs mostly from the rich and powerful, with almost no consequences if the resulting decisions did not achieve the desired ends.

Figure 1 provides a simple model of decision-making. It points to three mechanisms that shape government choices.

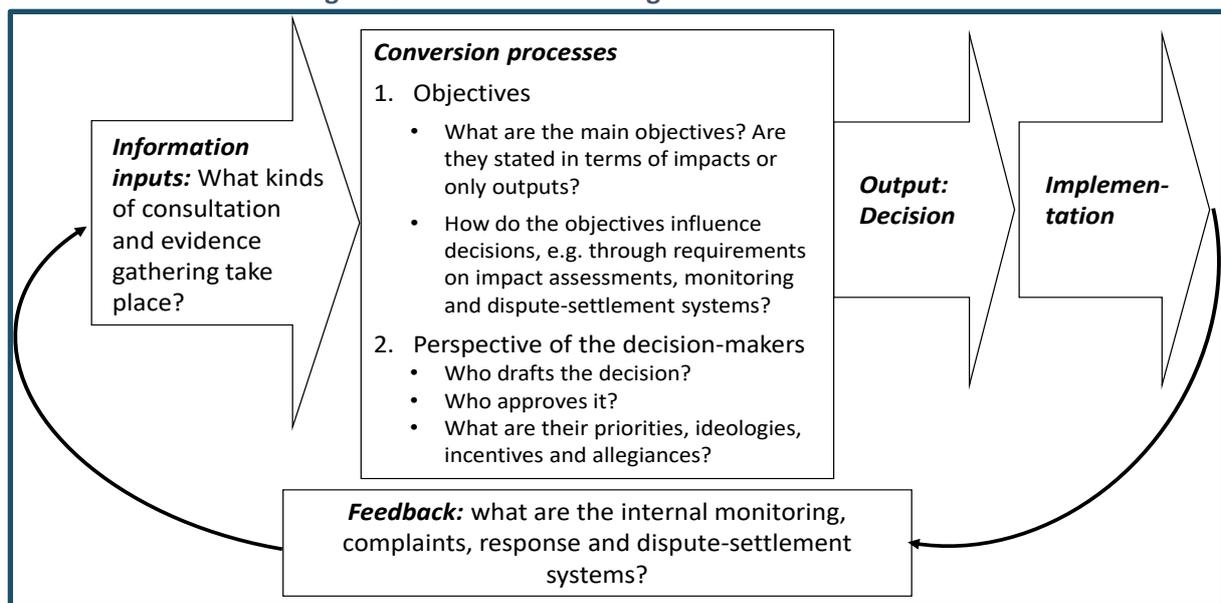
First, the stated objectives of the decisions may be phrased in terms of impacts, outcomes or outputs. Currently, explicit economic-policy aims almost never include the just transition. Instead, they entail some combination of GDP growth, investment, exports, job creation and black economic empowerment, usually without measurable targets.

Second, the kinds and sources of information that are considered affect decisions. Various laws require major decisions to permit public inputs, and sometimes also demand a technical

analysis or impact assessment. The courts may also require decision-makers to show that they considered the available evidence. Ideally, decisions should take into account experience from earlier measures. Despite efforts to promote evidence-based and open processes, decision-making also invariably involves informal lobbying by well-placed individuals, businesses and advocacy groups.

Finally, the decision-makers' perspectives influence their choices. Their views may be shaped by personal allegiance to particular groups; ideological and methodological tenets; and the incentive systems they personally face (do they benefit more from ignoring or paying attention to the original aims of the decision-making process and to information from less powerful groups?).

Figure 1. Factors that affect government decisions



Source: Adapted from Seidman, Seidman and Abeyesekera, 2001. *Legislative Drafting for Democratic Social Change*.

Departments would prioritise the just transition more consistently if related targets were included in their Annual Performance Plans. Since 2010, they have had to list their explicit objectives for the year (called “key performance indicators” or KPIs) in these plans, effectively laying out their priorities. The annual plans ensure transparency around agencies’ priorities, but two key weaknesses mean they have not improved impacts and outcomes as much as hoped.

First, the Annual Performance Plans are designed to permit evaluation against pre-determined outputs, rather than assessing progress toward social and economic impacts. This methodology initially arose to ensure that contractors stick to agreed-on plans – for instance, when constructing a new power station. It is less helpful when, as in the just transition, agencies must work to solve a broad social problem with only limited information and experience, in continually changing conditions, and in collaboration with powerful stakeholders. In these circumstances, success requires that the agencies continually re-evaluate measures against the desired impacts, and have flexibility to change interim output targets as needed. By policing adherence to pre-determined outputs, even if they have become irrelevant, the Annual Performance Plans effectively re-entrench bureaucratic systems that emphasise procedural achievements, often reports and studies, rather than substantive longer-run aims. They generally prevent adjustment of KPIs when information

and circumstances change – an approach that would be catastrophic for the just transition. In terms of the model in Figure 1 in they set the aims of decisions around paperwork submitted by a specific time, rather than substantive outcomes and impacts.

Second, Annual Performance Plans are effectively agreed within individual departments, with virtually no discussion with other agencies. There is no effective process to ensure consistency or rigor either within departments or between them. However, as discussed, the just transition requires extensive coordination across government.

The DMRE's 2021/22 performance plan illustrates the challenges for the just transition. It includes the following targets related to emissions reductions:

1. Procuring electricity in line with the IRP;
2. Improving assessment of both mining and energy emissions and the measures to reduce them, without, however, setting a target for cutting emissions themselves;
3. Approving a set number of carbon offset and Clean Development Mechanism projects, again without specifying the scale or implications for total net emissions; and
4. Developing a framework for a just energy transition, which it does not define. It says the DMRE will maintain limits on renewable energy generation for the national grid until the framework is finalised.

The plan does not indicate if these measures, taken together, will meet national emissions targets or generate a more equitable political economy. Meanwhile, it targets new Master Plans for metals beneficiation and for gas-based production without any indicators to ensure they reduce emissions and inequality. (See DMRE, 2021/22:76 ff).

The process of getting approvals for the huge new coal plant proposed for the Musina Makhado SEZ in Limpopo exemplify the fundamental weaknesses in existing decision-making systems from the standpoint of the just transition. Two procedures provide a case study: the original designation of the SEZ, and the subsequent Environmental Impact Assessment.

In 2017, the dti² designated the Musina Makhado SEZ under the Special Economic Zones Act of 2014. In terms of objectives, the Act's criteria for designation centre on industrialisation and investment, consistency with "any applicable national laws and policies", and feasibility. (Presidency, 2014:21 ff.) It does not include reducing emissions. In the event, the proposed power plant lies outside the targets for coal in the Integrated Resource Plan for electricity. For information inputs, the SEZ Act requires a feasibility study, but does not mandate analysis of emissions; public hearings; or agreement from affected departments. In the event, the dti apparently designated the SEZ before the feasibility studies were finalised. (SEZAB 2018:37). Finally, the decision-makers themselves seemed unlikely to prioritise environmental considerations. The statutory SEZ Advisory Board comprises officials from the dtic, the National Treasury and the South African Revenue Services; Eskom, Transnet and the Industrial Development Corporation (IDC); organised business, labour and community constituencies; and five relevant experts. Its sole published Annual Report, from 2018, does not refer at any point to environmental sustainability or community engagement. Rather, it

² The Department of Trade and Industry (the dti) merged with the Economic Development Department in June 2019 to become the Department of Trade, Industry and Competition (the dtic)

prioritised increasing the number of designated SEZs and promoting investment. (See SEZAB, 2018:38-39)

Under the National Environmental Management Act Of 1998, the SEZ also requires an Environmental Impact Assessment. As of September 2021, the process appeared to have deadlocked. The factors behind the deadlock can be understood as a consequence of contradictions between the aims and inputs laid out in the mandated decision-making system, on the one hand, and the perspective of the decision-makers, on the other – specifically, the Limpopo Department of Economic Development, Environment and Tourism (LEDET). In terms of objectives, the Environmental Management Act requires that the impact assessment take into account economic and social as well as environmental outcomes. It specifies that information sources must combine public participation and an expert report. Regulations set out a detailed template for the expert analysis. For Musina Makhado, the process elicited a host of public objections and a negative expert evaluation. In contrast, LEDET’s 2020/21 Annual Performance Plan prioritised the SEZ as a flagship project. Moreover, prospective investors in the SEZ demanded it approve the environmental assessment irrespective of opposition from advocacy and community groups and the negative technical report. In response, LEDET appears to have delayed the final decision indefinitely, and in May 2021 the investors threatened to take it to court.

These case studies point to critical shortcomings in government decision-making systems when it comes to ensuring alignment around the just transition. Specifically:

- Major decision-making processes do not aim explicitly either to reduce emissions or to support the political and economic aims of the just transition. As noted, except for the DFFE, no agency with responsibility for aspects of the just transition includes it in its overall mandate. Most agencies include no targets for the just transition in their Annual Performance Plans.
- Legislation often sets outcome and impact indicators for decision-makers without any mechanisms to ensure adherence. For instance, most laws do not require publication of the evidence considered or analysis of impacts over time.
- Most processes do not specify the kinds of evidence and consultation that officials must obtain and evaluate as the basis for their decision, or require that they publish their analysis. In these circumstances, officials often rely on lobbyists or informal networks for evidence.
- Few officials have the training or experience to take the just transition into account in their decision-making. Economics training in particular almost always prioritises growth, and largely ignores proposals on how to improve economic inclusion and sustainability.

2.4 Participatory democracy in the just transition

The just transition explicitly aims to empower working people and their communities. That aim can be understood as strengthening participatory democracy – an explicit aim of the Constitution, in response to the unequal and closed governance systems that characterised apartheid. In practice, however, opening decision-making processes to direct participation by citizens has mostly led to a long list of inputs from business and, to a lesser extent, advocacy groups, suburban residents’ associations where relevant, a few experts, and the union movement. Frequently it results in frustration, deadlock or even protest action, as participants feel their views have been ignored. Outside of Parliamentary hearings and

NEDLAC, public participation can seem like a toy telephone, allowing inputs without influencing the final outcome.

Participatory democracy means citizens and their organisations, rather than only elected representative or officials, engage directly in decision-making. In terms of the model in Figure 1, that means they may act as decision-makers themselves, as in School Governing Bodies and hospital boards; have more opportunities to provide inputs; help set the aims and other criteria for decision-making; and be given the information needed to monitor outputs and outcomes.

The blockages to participatory democracy can be understood in terms of the scope for working people and their communities to organise, on the one hand, and the nature of decision-making systems on the other.

Participatory democracy becomes far more difficult when:

- Decisions affect large numbers of people who are not organised in groups to represent their interests;
- Societies are deeply inequitable, so that small, powerful groups have disproportionate resources to influence government decision-making; and
- The problems addressed are complicated and require study and expertise to understand.

In South Africa, working class and poor communities usually lack the resources and organisation needed to participate in policy processes. The need for travel and time off work for meetings, as well as the use of technical language and internet communications, often militate against their participation. In these circumstances, labour unions and advocacy groups end up shouldering much of the burden of representing the needs and views of communities beyond their membership. For the unions, that can prove a difficult task. They have had both to develop expertise to engage on policies outside the workplace, and to manage compromises between the needs of union members and other groups, such as the unemployed and informal traders. Ensuring accountability is even more complicated for advocacy groups.

From the perspective of decision-making systems, participatory democracy still has an ambiguous position. Officials often have to finalise proposals by deadlines set by their superiors or Annual Performance Plans. Those deadlines rarely provide adequate time for public participation. Few departments have efficient mandating systems to enable officials to modify proposals in response to new inputs. If new information or perspectives arise from consultations, officials often cannot easily reach their Minister or Director General to approve a modification. Moreover, if Cabinet approves an initial proposal, officials may not be able to get a mandate to make any modifications, so that engagements with stakeholders end in frustration. In any case, few officials have any training in engagement with the public or in mediation. Many find it hard to communicate or to understand the positions taken by working-class people, given their very different qualifications, work and living circumstances.

A recurring problem is that officials engage the public without being clear about why. Effective consultation requires clarity about the main objectives, which may be (a) to get information to improve policies and decisions; (b) to empower affected communities and mobilise support for policies; or (c) to reach agreements with powerful stakeholders. As Table 4 shows, these

different kinds of engagement vary substantially in participants and the procedures they need; the use of technical expertise; indicators of success; and risks.

Table 4. Characteristics of different forms of participation in policymaking

	INFORMATION GATHERING	BUILDING AGENCY FOR WORKING PEOPLE	PACTING
Aims	Improve understanding of policy context and opportunities	Give voice to excluded in decision-making and implementation Promote collective action	Manage economic power by requiring transparent engagement rather than secret lobbying and corruption (move from discourse of power to discourse of reason and evidence) Require groups with power to take concerns of other groups into account Mobilise coalition for just transition
Criteria for participants	Experience (own or as representative of an affected group) Technical expertise	People affected by policy Sometimes prioritise representatives from membership-based groups in order to incentivise organisation and ensure accountability	Stakeholders with substantial power outside of the democratic order based in economic role or organisational strength Socio-economic groups affected by the policy but lacking power are effectively represented mostly by the democratic state, unions or advocacy groups
Processes	Discussion of issues and experiences, including group interviews and focus groups	Empower participants with information on policy options and/or proposals Solicit responses to policy proposals and options Indicate where collective action is needed and discuss how to mobilise and act	Presentation on positions and claims; identification of areas of disagreement; evidence gathering where appropriate to resolve disagreements; pacting in some form All participants need effective and efficient mandating systems and sufficient technical expertise to analyse proposals

	INFORMATION GATHERING	BUILDING AGENCY FOR WORKING PEOPLE	PACTING
Role of technical expertise	Consolidate inputs and pull out key findings Test participants' inputs against other evidence	Empower participants to understand issues as the basis for action Test participants' inputs against other evidence	Managing mediation and negotiation Resolve disputes that reflect differences on evidence (e.g. how many workers may be displaced) rather than interest (e.g. what is an acceptable alternative livelihood)
Impacts if succeed	Policies achieve aims more effectively and efficiently	Mobilised communities able to create and take advantage of new opportunities	Powerful groups support policies to bring about greater inclusion and equality as basis for sustainable long-run growth, even if they must take on some short-run costs
Risks	Unrepresentative groups participate, so information is poor or biased Raise expectations that will change proposals, then don't	Unrepresentative groups participate, so not actually empowering working people Unable to reach agreement on way forward Participants have unsustainable demands Organisers cannot deliver on agreements, leading to protests or withdrawal	Unable to reach agreement, so stakeholders end up using power (e.g. reduced investments; strikes or protest action; regulation) Agreement is not realistic and therefore not sustainable Parties do not deliver on commitments Powerful stakeholders have other ways to influence policy decisions, so they do not have to compromise

It is crucially important to anticipate the costs and risks of effective participatory democracy, as well as the benefits. Annexure B analyses the downsides and gains for different socio-economic groups. Overall, the main benefits are more sustainable and effective policies, especially in unequal democracies such as South Africa. The costs and risks relate primarily to the time and expertise required to engage, as well as the need to manage compromises.

Ultimately, efforts to empower working people and their communities in the just transition must go beyond formally opening decision-making up through consultations or inputs. Effective participation requires clarity about the aims of engagements; effective and responsive systems to modify proposals in light of new inputs; expertise for mediation and engagement; and extensive information sharing and joint analysis. They also often entail assistance to historically excluded groups to set up representative organisations and obtain technical support.

2.5 Using evidence³

The just transition is taking place in a context of rapidly changing circumstances and scientific insights. In this context, evidence has three main roles: identifying priorities for government action; diagnosing the mechanisms leading to problems; and testing proposed solutions for relevance, viability and sustainability. In crises, however – as the COVID-19 pandemic also demonstrated – policymaking has to proceed on the basis of imperfect information. There are two main strategies to manage the resulting risks: ensuring that policies can adapt rapidly to changes in scientific understanding; and using the precautionary principle to minimise costs while avoiding paralysis in the face of huge and urgent hazards.

The first role of evidence in policymaking is to identify appropriate issues for government action, mostly by evaluating who is affected and what the effects are. Evidence on these issues helps ensure that officials and politicians use state resources to address genuine social and economic challenges. The just transition requires evidence to identify the communities, workers and small businesses that face a loss of livelihoods or who could access opportunities from the energy transition and climate change, and to tease out the nature of those impacts. This kind of analysis often relies at least in part on statistics, in order to ensure that officials are not exaggerating or downplaying the scope of the problem based on personal interactions, allegiances or views.

The second function for evidence is to identify the mechanisms that cause problems or block opportunities. This lays the basis for developing effective policy solutions. For the just transition, examples of core questions include why South Africa has found it so hard to move away from fossil fuels, and what factors make it difficult for the coal towns in Mpumalanga to diversify.

To understand causal mechanisms, policy almost always relies on a pattern of evidence, which combines many forms – data, statistical analysis, experience and case studies – rather than a single piece of rigorous research. This is partly because society is too complex to be captured by a single investigation, and partly because of the technical difficulties in demonstrating causality. For this reason, social scientists have increasingly recognised the importance of deep knowledge of cases to understand causal pathways or mechanisms (see Hedström, 2008). As David Freedman observes: “causal inference rides on the argument, not the magic of least squares” (Freedman, 1987:208). In practice, the discourse on any policy takes place in myriad iterative engagements, with the evidence coming together over time from various sources.

To take an example from the just transition, it is impossible to prove in rigorous academic terms why municipalities do not diversify away from coal. The combination of different kinds of evidence, however, can generate a convincing analysis. It could include, among others, statistics from the coal towns about resources and economic structures, including the main industries, infrastructure provision, education levels, and access to capital; interviews with stakeholders on their experiences and understanding of the local economy; case studies of industries and enterprises; and analyses of regulatory frameworks and municipal capacity.

Finally, proposed solutions should be tested using evidence on their viability and likely impacts on different social groups. Requiring a formal theory of change makes policymakers

³ I am grateful to Dr Tumi Makgetla for assistance in thinking about causal mechanisms, and finding sources on the topic.

define the steps required for implementation, as well as the potential blockages and risks at each stage. The SEIAS methodology helps anticipate unexpected costs, benefits and risks. Because it requires analysts to differentiate between socio-economic groups, the SEIAS methodology also ensures officials have to reflect on the implications for working people and the poor, which is foundational for the just transition.

In all of these areas, policymakers inevitably have to work with inadequate information, inconsistent data and unreliable sources and interviewees. Experts also have their own biases, which affect how they collect and interpret evidence. Furthermore, because evidence on complex socio-economic problems is rarely unambiguous, opponents of action can use demands for further proof to stall for more time. This is particularly apparent around the climate crisis and the relative cost of renewable energy. Yet in emergencies, debates around the nature of proof cannot be allowed to block action indefinitely.

The COVID-19 pandemic points to ways to manage this dilemma. Public health authorities had no choice but to take action based on the available evidence, however imperfect. That led to a complete lockdown in the first wave. But the authorities consistently monitored the effects of their measures as well as new scientific evidence, and modified their policies on that basis. As a result, in subsequent waves they controlled the contagion much more efficiently, relying on masking, social distancing and ventilation, and only restricting businesses that require social gatherings.

This approach aligns with the precautionary principle, which is usefully analysed in a research note by the European Union (Bourguignon, 2015). The principle has various definitions, but they all centre on the requirement that public authorities take action to minimise highly damaging risks even if the evidence on costs and benefits is incomplete or disputed. The European Union paper argues for a “procedural interpretation” with four main parts:

1. The situation poses risks of “serious, irreversible and uncertain consequences”;
2. Decision-making responds with iterative evidence-based processes that ensure learning over time;
3. The government and cost bearers share the burden of proof, rather than requiring decision-makers to prove every move beyond a reasonable doubt; and
4. Government is open to alternatives and new options based on improved information. (Bourguignon 2015:8)

Ultimately, effective policy has to rely on evidence to ensure that measures address real problems for society; are rooted in a realistic analysis of the mechanisms that give rise to the problem; and incorporate viable and sustainable solutions. Engagement with the public and stakeholders often generates critical evidence. Because information is inevitably imperfect, however, the process of decision-making has to be iterative, taking into account new information as conditions evolve. That in turn requires that all measures have strong monitoring mechanisms and that officials have both capacity and incentives to modify them where experience or evidence warrant.

3 KEY DECISIONS AND DEBATES

The following questions arise from the analysis here of governance of the just transition.

- Can the impacts and outcome targets proposed here for the just transition be improved?
- What agency or body should have responsibility for driving the just transition at the national level? How can it ensure greater alignment across the state?
- What structures should drive implementation of just-transition measures at local level, and in particular what are the roles of national, provincial and municipal structures? Should responsibility for co-ordination fall to a government institution or an autonomous structure? If the latter, to what government agency should it account?
- How to ensure that structures driving the just transition are responsive to the views of working people and the available evidence, rather than relying on informal elite networks? In particular, what decision-making rules and structures can empower communities to engage in developing, implementing and monitoring specific measures? How should they be able to communicate if they are dissatisfied with a decision or programme? How to ensure that officials respond constructively, rather than just ignoring inconvenient inputs?
- How should monitoring and dispute-settlement systems be shaped to require a response if impact and outcome targets are not being met?
- What is the role of NEDLAC in the just transition?

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ANNEXURE A: RESPONSIBILITIES FOR JUST TRANSITION FUNCTIONS BY AGENCY AS OF SEPTEMBER 2021

AGENCY	RESPONSIBILITIES
COGTA	Policy frameworks for densification; disseminate information on climate change for municipalities; financing for disaster relief; policy frameworks and regulations on systems and structures for municipal consultation; policy frameworks for LED planning
DALRRD	National agricultural policy; land reform policy and implementation; policies on broad-based BEE in agriculture; oversight of Land Bank; regulation to reduce emissions in agriculture; finance for new agricultural technologies; drought and flood monitoring
DBE	General education policy
DEL	Active labour market policies; policy frameworks on membership-based organisation
DFFE	Planning frameworks for just transition; SJRP; emissions targets; carbon budget for Sasol; regulation of pollution; quantify sources of emissions and effective offsets; incentives for offsets; policy frameworks for just transition; communicate prospects for climate change
DFIs and PIC	Finance for new technologies; financing for offsets; financing for renewable generation (DBSA, IDC); financing to promote more equitable ownership (IDC, Land Bank); financing for Eskom and other bulk and community infrastructure (DBSA, IDC); agricultural finance (IDC, Land Bank)
DHET	Higher education and skills development; funding for tertiary education; management of national skills fund
DMRE	Electricity planning; contracting renewables for national grid; policy on pricing and reliability of electricity; policy on private and municipal electricity generation; rules for private electricity generation; liquid fuels pricing
DPE	Eskom and Transnet oversight
DSBD	Policy frameworks for small enterprise; support for small businesses and co-operatives
DSI	Innovation policy, incentives and funding
dtic (the)	Designation of and advocacy for SEZs, including Musina Makhado coal plant; support for technology innovation; industrial policy development and financing (through incentives and IDC); policy frameworks on and incentives for more equitable ownership (mostly broad-based BEE); technical support for emerging businesses; incentives for offsets
Eskom	Electricity planning; electricity pricing; ensuring reliable electricity supply and grid management; investment in new generation capacity where approved by DMRE and DPE; transmission and payment for renewables; electrification; household electricity supply (around half of all households, mostly low income); planning and delivering more resilient infrastructure
Human Settlements	Housing policy, including densification and standards; financing for housing
Municipalities	Community and business infrastructure planning, development, maintenance and financing (based on own revenue and grants); paying for bulk electricity, water and waste removal out of own revenue and grants; ensuring reliable and affordable electricity and supporting local renewable generation, including setting electricity tariffs; electrification of informal settlements (conditional grant from Treasury); local bus systems; densification planning and implementation; local economic development planning; tourism promotion; disaster relief implementation; diffusion of information on impacts of climate emergency
NDOT	Transport policy and subsidies for PRASA and buses
NERSA	Electricity pricing; implementation of environmental levy on Eskom
Parliament	Policy frameworks on consultation; resourcing for consultation
Ports Regulator	Ports pricing
Provinces	Disaster relief implementation; provincial roads, including for coal in Mpumalanga; Gauteng subsidy for Gautrain; manage environmental impact assessments; provincial agriculture policy; tourism promotion; housing policy (impacts densification); oversight, advocacy and financial support for SEZs, including Musina Makhado in Limpopo; diffusion of information on impacts of climate emergency
Public Works	Build, maintain and manage infrastructure for government agencies; manage expanded public works programmes
Sanral	Develop, maintain, manage and finance national roads; set tolls
SAWS	Drought and flood monitoring and forecasting
Science Councils	Support for technology innovation; technical support for electricity planning (CSIR)
SETAs	Skills planning for sector/industry; allocation of funds for skills development for industry; financing of National Skills Fund, TVET colleges and universities
Social Development	Social protection policy; social grants systems
Tourism	Tourism policy; marketing of venues

AGENCY	RESPONSIBILITIES
Transnet	Transport policy, including bus subsidies; road, rail and port policies, including pricing; support for innovation in transport; coal transport, especially for export
Treasury	Emissions pricing, mostly through the carbon tax and associated incentives for offsets; financing for Eskom; petrol tax and consequently the effective price of liquid fuels for consumers; funding social grants, including annual increments and new grants; financing for roads and other infrastructure; financing for disaster relief; bus subsidies; funding for coal transport in Mpumalanga; tax incentives for SEZs, including Musina Makhado; rules on procurement, which affect emerging businesses and ownership; electrification through conditional grant to municipalities
UIF	Unemployment insurance regulations, financing and implementation
Water Boards	Bulk water provision; ensuring more resilient bulk water infrastructure

ANNEXURE B: ANALYSIS OF COSTS, BENEFITS AND RISKS OF CONSULTATION FOR DIFFERENT SOCIO-ECONOMIC GROUPS

	INFORMATION GATHERING	BUILDING AGENCY FOR WORKING PEOPLE	PACTING
Benefits			
Political leaders	More effective policies	Mobilised base actively supports proposals	Mobilise private resources for programmes; reduce direct lobbying; minimise disinvestment, workplace conflict, protests and electoral losses
Government officials	More effective policies	Policies have improved outcomes as active support from affected groups	Mobilise private resources for programmes; strengthen evidence-based policy processes and discussions; minimise disinvestment, workplace conflict and protests
Business	Policies more likely to reflect concerns and needs	In long run, improved social cohesion as the basis for sustainable growth; better policy outcomes	Clear channels to negotiate policies; improved policies and developmental outcomes, which are prerequisites for sustainable growth
Marginalised people (e.g. jobless, working poor)	Policies more likely to reflect concerns and needs	Space to influence policy development and implementation; build social capital and solidarity	Limit lobbying and corruption; powerful do not block and may support policies to promote inclusive growth and equality
Costs			
Political leaders	Delays in finalising policies Time and cost of meetings Need to modify proposals in light of new evidence	Delays in finalising policies Time and expense of meetings Have to manage demands from newly mobilised (and historically voiceless) groups	Delays in finalising policies Resources and time for engagement and for mandating Compromises on some issues Dealing with conflict rather than avoiding or ignoring it
Government officials	Delays mean don't meet KPIs Time and cost of meetings Need to modify proposals	Delays in finalising policies Time and expense of meetings Loss of power and position relative to newly mobilised groups	Delays in finalising policies Resources for engagement systems, including mandating as well as engagement Stress from conflict with stakeholders Forced to compromise on some issues

	INFORMATION GATHERING	BUILDING AGENCY FOR WORKING PEOPLE	PACTING
Business	Time to prepare for and attend meetings	Loss of power and position relative to newly mobilised groups, reflected in less favourable policies for business in short run Time to prepare for and attend meetings	Time to prepare for and attend meetings, including obtaining mandates Stress from conflict in negotiations Forced to compromise on some issues Short-run costs from agreements (e.g. land reform, taxation, donations, etc.)
Marginalised people (e.g. jobless, working poor)	Time to prepare for and attend meetings Expense of travel to meetings and time off work	Time and resources to develop positions and engage collectively, including travel and communications expenses Need to manage compromises	Time and resources to develop positions and engage collectively, including getting expert advice, travel and communications expenses Setting up mandating systems Need to manage compromises Stress from conflict in negotiations
Risks			
Political leaders	Participation is biased against constituencies (e.g. business or opposition parties dominate)	More demanding constituents Newly powerful groups compete in elections Inclusive, decentralised implementation processes devolve into patronage and corruption	Compromise too much with business at cost of constituents, leading to electoral setbacks or protest action Do not compromise with business, leading to disinvestment Policies delayed interminably by engagements
Government officials	Bad information based on biased participation or inadequate analysis leads to ineffective or even damaging policies	Inclusive implementation processes devolve into patronage and corruption, and officials are blamed	Unable to get mandates on time, so engagements collapse Unable to reach agreement, worsening prospects for successful implementation of policies Powerful groups forum shop, making engagements pointless Political pressure to compromise leads to unsustainable policy decisions Delays mean do not meet KPIs
Business	Business lobbying is countered by inputs from other groups	Face more effective political pressure for disruptive policies to achieve equality (e.g. land reform, wealth taxes) Confrontation and protest increase as other groups mobilise	Divisions within business deepen as face growing demands Political pressure to compromise leads to unsustainable costs in the long run Government does not implement agreements Delays in finalising policies Continued contestation and political anger from majority despite engagements and compromises
Marginalised people (e.g. jobless, working poor)	Participation used to justify policies without actually taking views on board	Policies fail despite collective action, leading to conflict and demoralisation Leaders hi-jack programmes for corruption and patronage	Do not have power in negotiations processes as representatives lack visible mass support and technical capacity to formulate and defend demands Political pressure to compromise leads to ineffective or inadequate policies for majority Government and/or business do not implement agreements

Source: Author's experience.