

Policies for a Just (Energy) Transition

Gaylor Montmasson-Clair
Trade & Industrial Policy Strategies (TIPS)



Why a just transition?

- ▶ A transition is under way: climate change + 4IR
- ▶ Like every transition, it is disruptive.
- ▶ Like every transition, it brings risks and opportunities.
- ▶ Everyone is set to be impacted, either positively or negatively.
- ▶ People, communities, companies and countries have a different ability to respond and adapt to the disruption.
 - Big business (mining houses, Eskom, Transnet) have resources, flexibility and information to move out – but small business may be left stranded
 - Workers: mobility depends on education, qualifications, age and opp. cost of moving industries/homes, knowledge of opportunities
 - Communities: capacity to diversify depends on infrastructure, education and skills, business capacity and proximity to eco. hubs
- ▶ This situation is compounded by the persistence of a deeply unequal political and economic system.
 - Entrenched and rising asymmetries of market power, social power and political power in the global political economy

Calls for a 'just transition' to an inclusive green economy

- ▶ Aims to ensure that vulnerable stakeholders are better off through the transition process, or at least not negatively impacted by it.
- ▶ JT discussions have focused on the coal VC
- ▶ Yet the JT agenda has an economy– and society–wide relevance
- ▶ Every VC and segment of society is forecasted to be impacted by climate change and the 4IR
- ▶ The JT agenda is arguably relevant in the case of all socio–economic transformations, irrespective of their root causes.

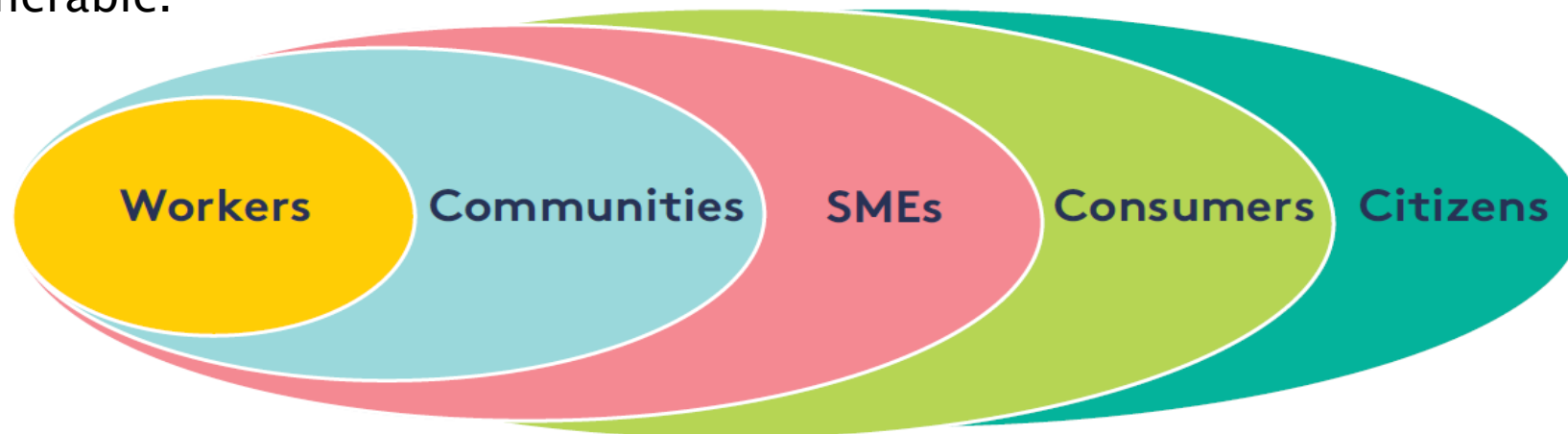
Dimensions of a just transition

What beneficiaries?

- ▶ Beneficiaries of a JT are generally identified as ‘vulnerable stakeholders’
 - Workers only: too narrow
 - Society at large: arguably too broad
 - Sweet spot:
 - All vulnerable stakeholders which may be directly and indirectly impacted, including low-income communities at large, particularly women, the youth and the elderly, as well as small businesses
 - However, it also recognises that not everyone in society is vulnerable.

Who should be prioritized?

- Most affected people?
- Most affected communities?
- Future workers in new activities?



Dimensions of a just transition

Procedural justice

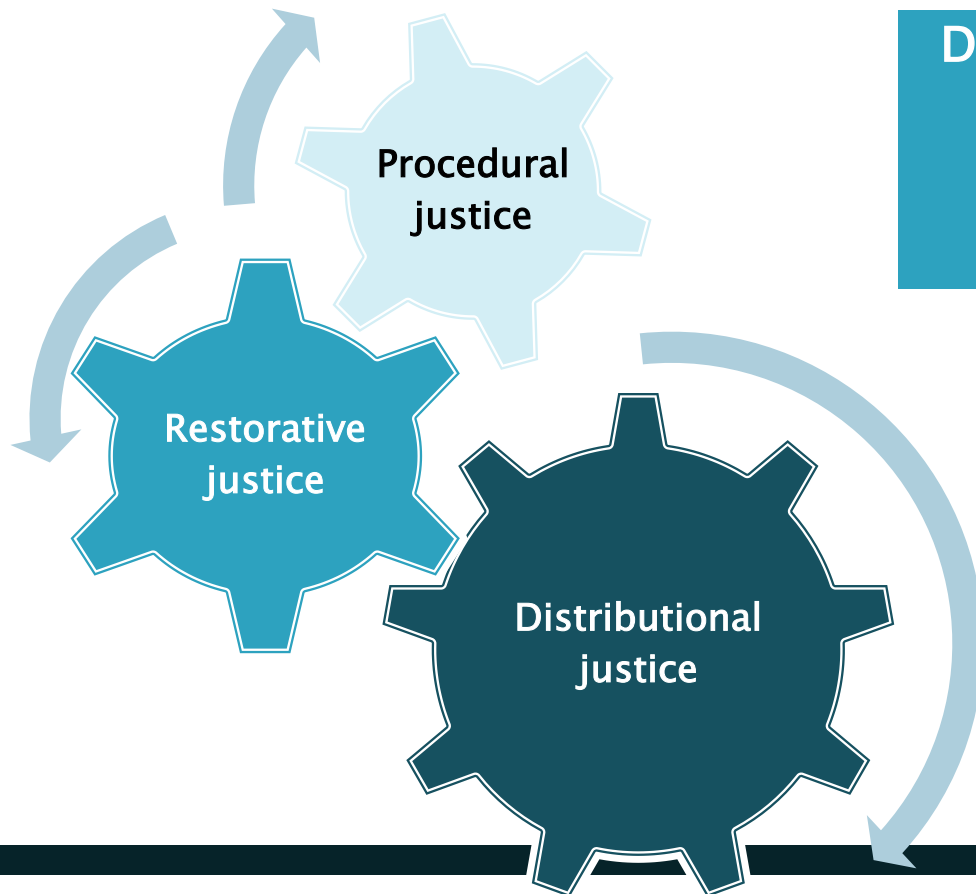
- ▶ Focuses on an inclusive process
- ▶ Recognises marginalised groups by including them in decision-making processes; and enabling/ empowering broad stakeholder

Distributive justice

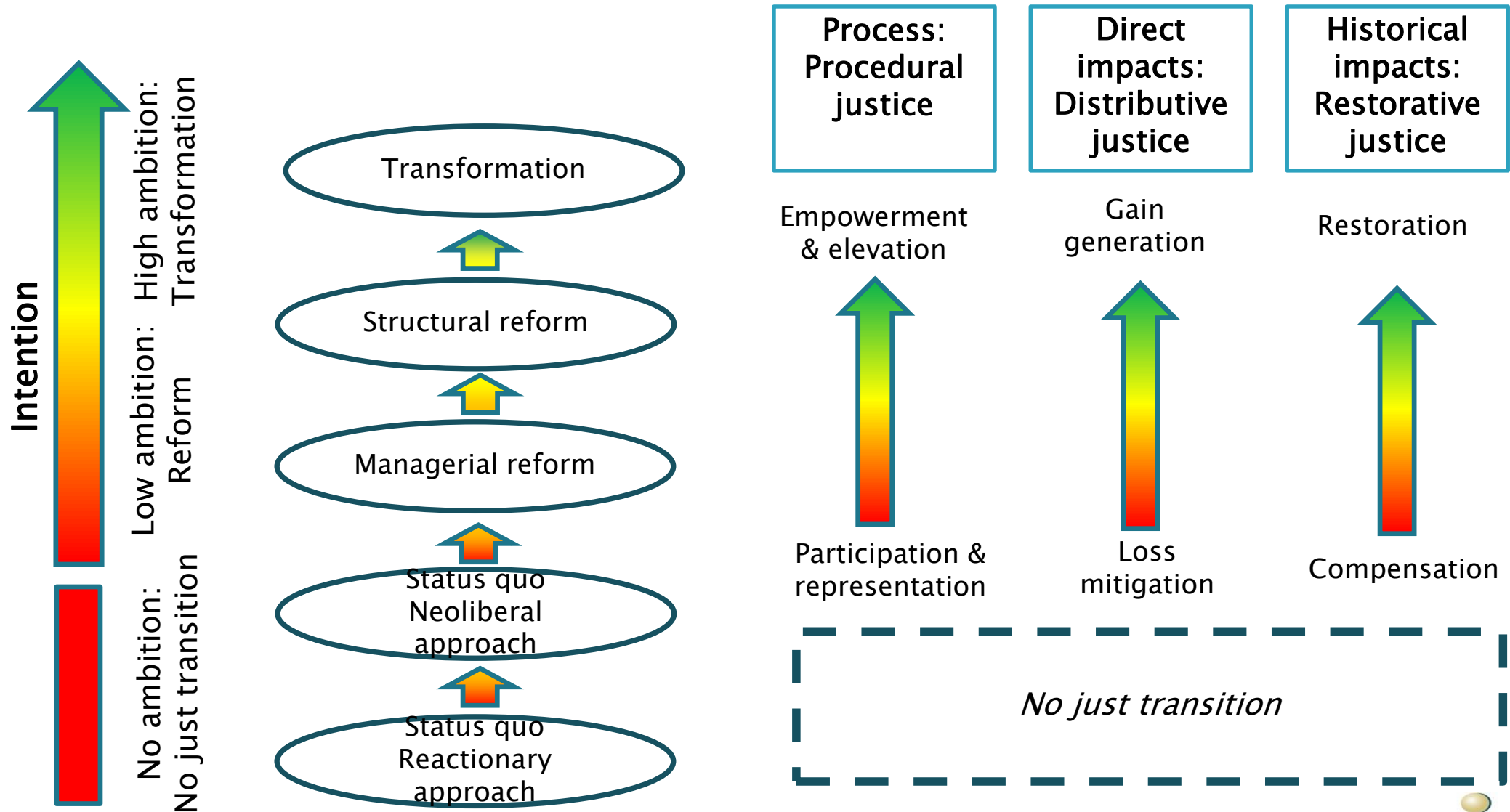
Deals with the distribution of risks and responsibilities
Aims to address a “double inequality” around responsibilities (who pays?) and impacts (who benefits? And how?)

Restorative justice

- ▶ Considers past, present and future damages that have occurred against individuals, communities and the environment
- ▶ Provides opportunities to rectify or ameliorate the situations of harmed or disenfranchised communities



Dimensions of a just transition



Dimensions of a just transition

Approaches	Transformative nature	Distributive justice	Procedural justice	Restorative justice
Status quo: Reactionary approach	None: rejects 'just' and 'transition' aspects	No just transition		
Status quo: Neoliberal approach	None: Progressive greening of capitalism	No just transition		
Managerial reform	Limited: Only addresses some impacts	Focus on workers	Limited to firm level	Not considered
Structural reform	Intermediate: Addresses impacts and some of the root causes	Considers workers and communities	Promotes bottom-up approaches for workers and communities	Peripheral
Transformation	Strong: focuses on the root causes as well as impacts	Considers all vulnerable stakeholders	Rooted in bottom-up, democracy and solidarity.	Core aspect

Policies for procedural justice

Dignity and respect

- All individuals are treated with dignity and respect

- ▶ Inclusive public participation
- ▶ Equal weight for all

Voice

- Individuals are given a chance to express their concerns and participate in decision-making processes by telling their side of the story

- ▶ Bottom-up process
- ▶ Empowerment / capacity building / skills dev.
- ▶ Support for participation
- ▶ Firm-level participation

Neutrality, impartiality and transparency

- Decisions are unbiased and guided by consistent and transparent reasoning

- ▶ Evidence-based
- ▶ Equal, unrestricted access to info

Trustworthiness

- Decision-makers convey trustworthy motives and concern about the well-being of those impacted by their decisions

- ▶ Ongoing public engagement
- ▶ Permanent community / grassroots forums
- ▶ Clear, explicit proceedings

Procedural justice – Key issues

How to decide on which participants should take part in the social dialogue?

- ▶ The decision on whom to include inevitably gives some groups a voice while shutting out others.
 - Open, grassroots participation empowers individuals and communities that often cannot engage in representative processes but may lead to capture by unrepresentative individuals
 - Representative stakeholder engagements (e.g. NEDLAC), where constituencies are expected to designate and mandate representatives.

A central difficulty is always to balance:

- ▶ the power of organised constituencies,
- ▶ the desire for participatory and open procedures, and
- ▶ the need to bring in expertise to test diagnostics and proposals against the evidence, and to identify the necessary resources.

Social dialogue is a means to an end, not an end in itself.

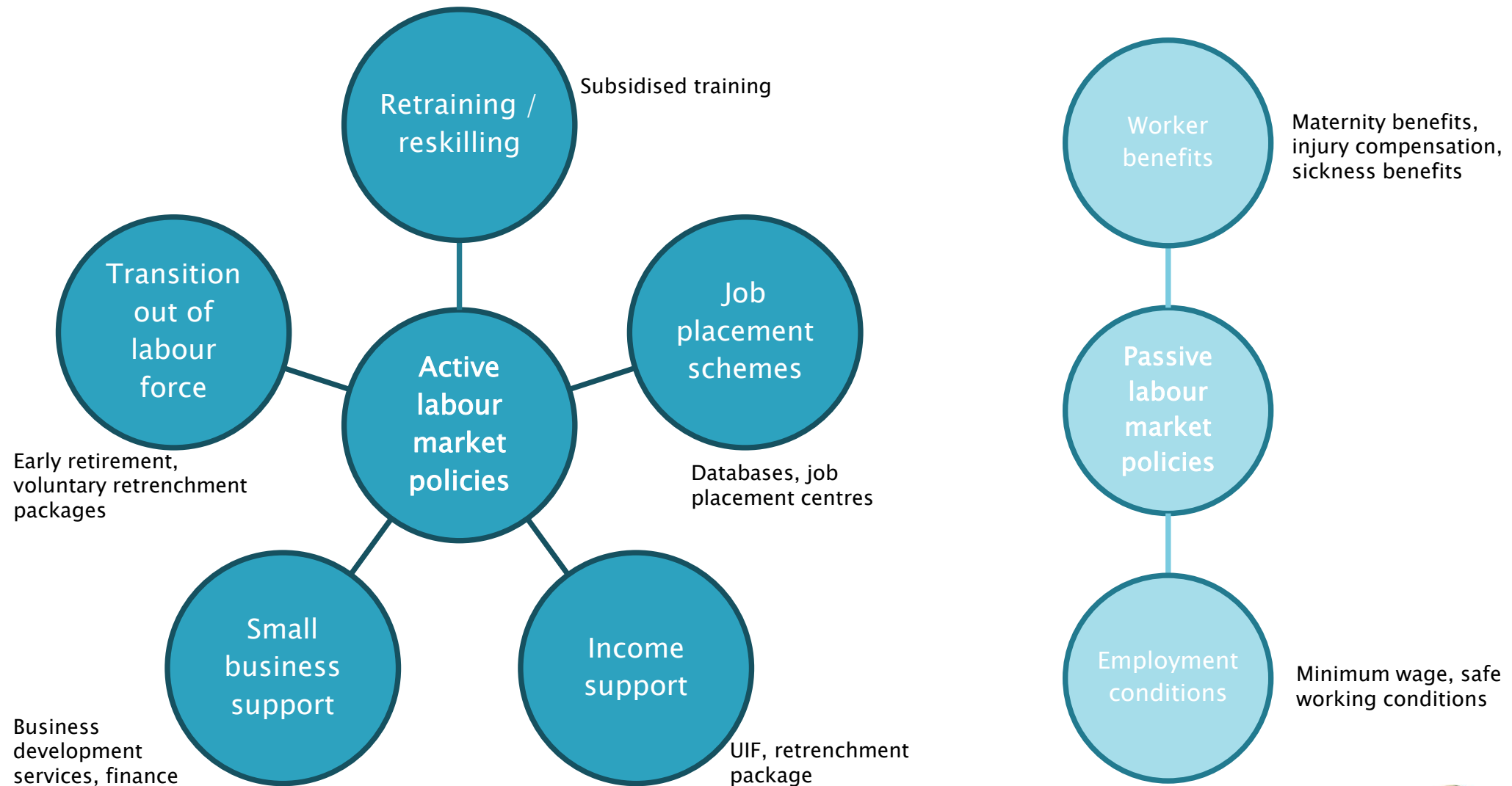
- ▶ Realistically, some differences between stakeholders are inherently ideological and full consensus might well never be reached.
- ▶ This should not prevent action.

Achieving co-creation takes time

- ▶ Trade-off between co-creation and the urgency to act
- ▶ Finding the balance between reaching consensus and forging ahead with implementation (in the absence of consensus) is itself a political compromise

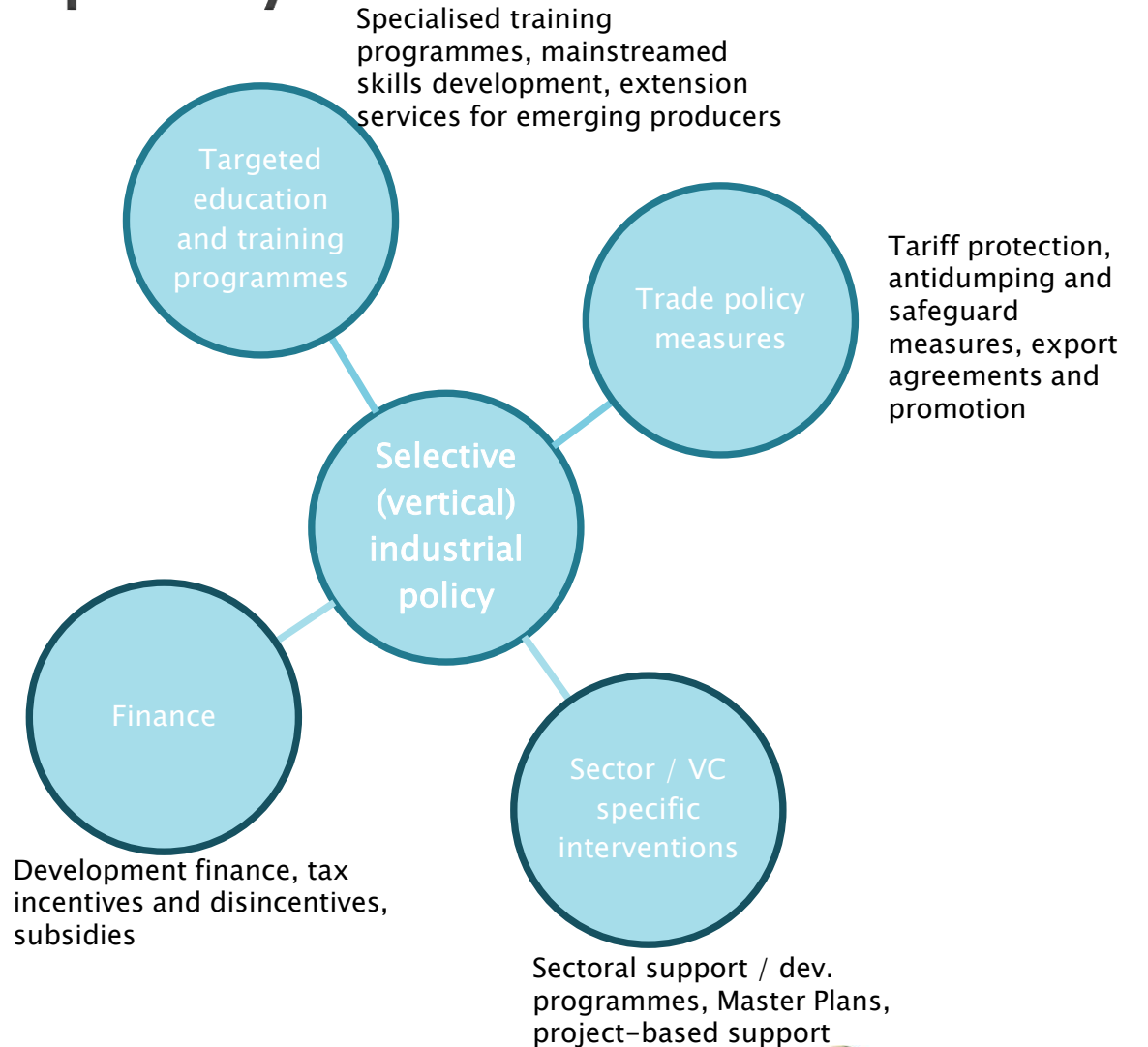
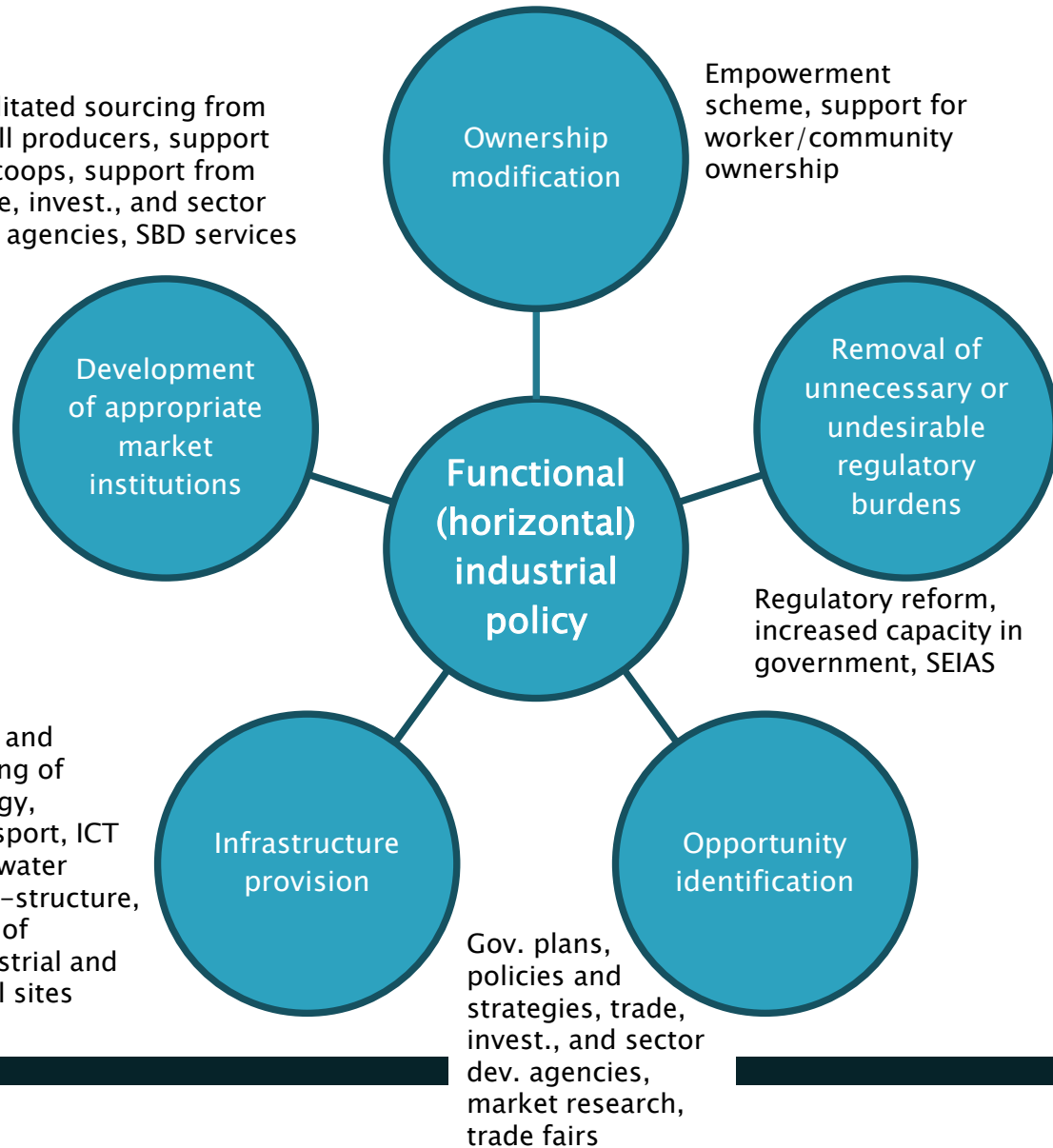
Policies for distributive justice

Labour market policies



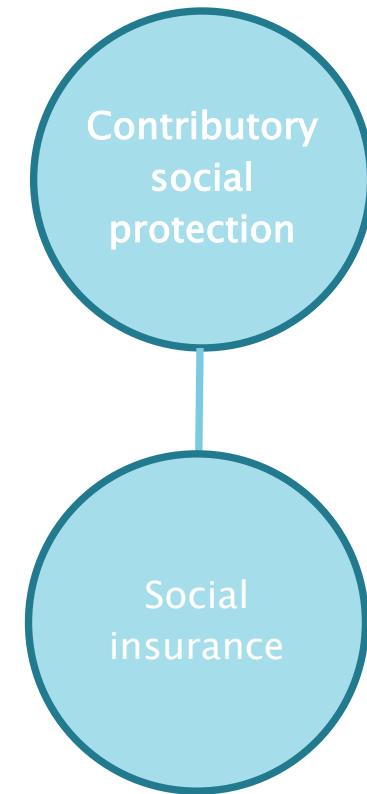
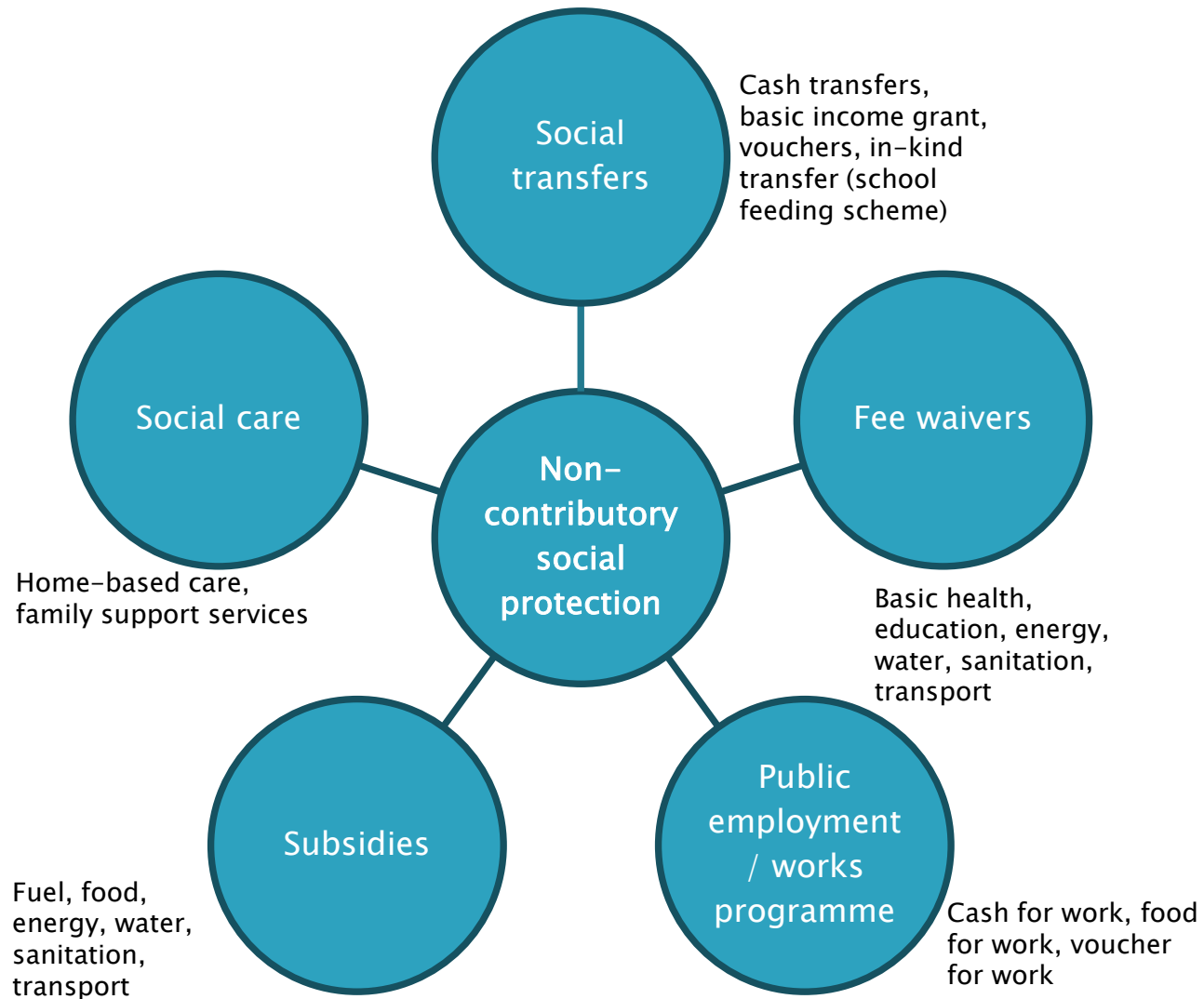
Policies for distributive justice

Industrial policy



Policies for distributive justice

Social protection



Health insurance, UIF, maternity / paternity insurance, disability insurance, work accident insurance, old age pension, crop / livestock insurance

Distributive justice – Key issues

Managing the tension between a broad social compact and specific solutions

- ▶ Broad JT: Risk of broad guidelines (can delay solutions) rather than specific plans for affected communities.
- ▶ Narrow JT: Risk of missing vulnerable stakeholders
- ▶ Realistically, both are required

Burden sharing

- ▶ Who should pay for the required interventions?
- ▶ Too often, the costs of transition (and negative externalities) are socialised despite benefits having been (and remaining) privatised.
- ▶ A genuine JT agenda aims to achieve a more equitable repartition of costs and benefits between stakeholders.

A JT is not achievable without all parties contributing

Government

- ▶ Provide the direction of travel and drive action
- ▶ Structural and catalytic role (investment)
- ▶ Broker consensus and build evidence
- ▶ Implementation: setting up prog., institutions and financing mech., green and just financial reform

Business (public and private)

- ▶ Carry a responsibility in the implementation of a JT
- ▶ Generally at the root of the JT problems (legacy + present)
- ▶ Investment in new, sustainable activities

Workers and communities

- ▶ Co-design and co-implementation of the JT process
- ▶ Organised structures, esp. unions, also have in many cases the ability to invest in initiatives

Policies for restorative justice

Socio-economic empowerment

- Access to modern housing and services (energy, water, etc.)
- Access to new technologies
- Access to economic opportunities
- Social ownership

- ▶ Social dialogue
- ▶ Industrial policy
- ▶ Social protection

Socio-cultural restoration

- Non-predatory use of land
- Consider the true value of land, nature and ecosystem
- Respect for local, indigenous culture, heritage and practices
- Access to health, education, safety, etc.

- ▶ Social dialogue
- ▶ Social protection
- ▶ SEIAS and socio-eco assessment of land use

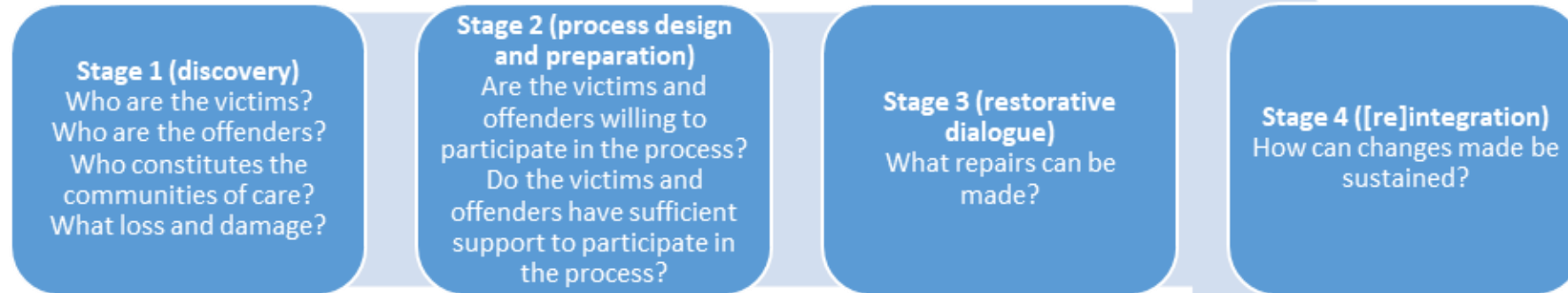
Environmental restoration

- Land (mine) rehabilitation
- Safe, clear air
- Safe, clean water

- ▶ Social dialogue
- ▶ Policy / regulatory enforcement
- ▶ Rehabilitation entity

Restorative justice – Key issues

Stages of a restorative justice process



Restitution

- ▶ Financial compensation vs alternative remedies
- ▶ What should be covered?
 - Relocation, resilience costs, emergency finances, remediation, upliftment, etc.
- ▶ Who should be liable? Question of historical responsibility

Litigation vs restorative justice

- ▶ Restorative justice requires an acknowledgement of wrongdoing
- ▶ Role of litigation as last resort
- ▶ Litigation has been much more effective in avoiding future (new or additional) damages than in addressing issues of past damages.

General policy implications

A just transition is a complex and multifaceted process

- ▶ Requires all stakeholders to acknowledge the need for such a (just) transition.
- ▶ Calls for all to agree on a working definition
- ▶ Lack of consensus should not prevent action // solution-orientated approach,
- ▶ A JT is only truly effective and transformative in its most ambitious versions

Policy tools

- ▶ Effectively, the tools necessary to design and implement a just transition are not foreign to governments and social partners.
- ▶ In most cases, they are already in use.
- ▶ However, they are yet to be harnessed and coordinated to foster a just transition.
- ▶ The question of financing must also be answered as financial flows can enable or choke off transitional justice ambitions.

- ▶ Achieving a JT will be an incremental process made of small progress, important breakthroughs and some setbacks.
- ▶ Political will from all stakeholders, notably to reach consensus and engage with diverging views, is here the main driving force, for the opposition of only one group can derail the process.
- ▶ Whether a just transition can be achieved depends on it.

Coal value chain in SA: Diagnostic

Problem:

- ▶ Climate change impacts (primarily policy) will negatively impact workers, communities and small businesses relying on the coal VC
- ▶ Important for the industry to prepare for the long term demise of coal
- ▶ While climate change impacts have not affected the industry substantially long term risks are evident
- ▶ Existing social and labour plans are not adequate to cushion workers

Nature of the impact:

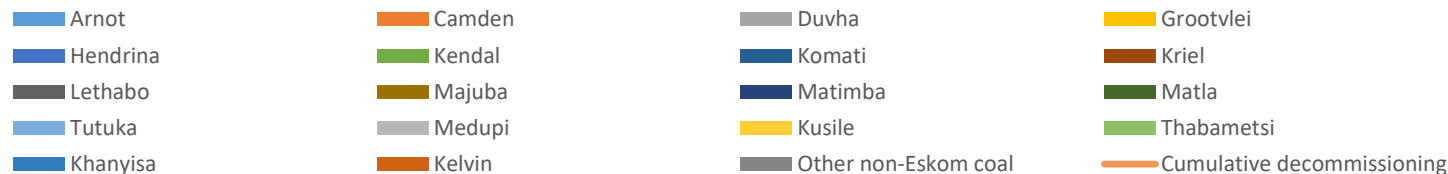
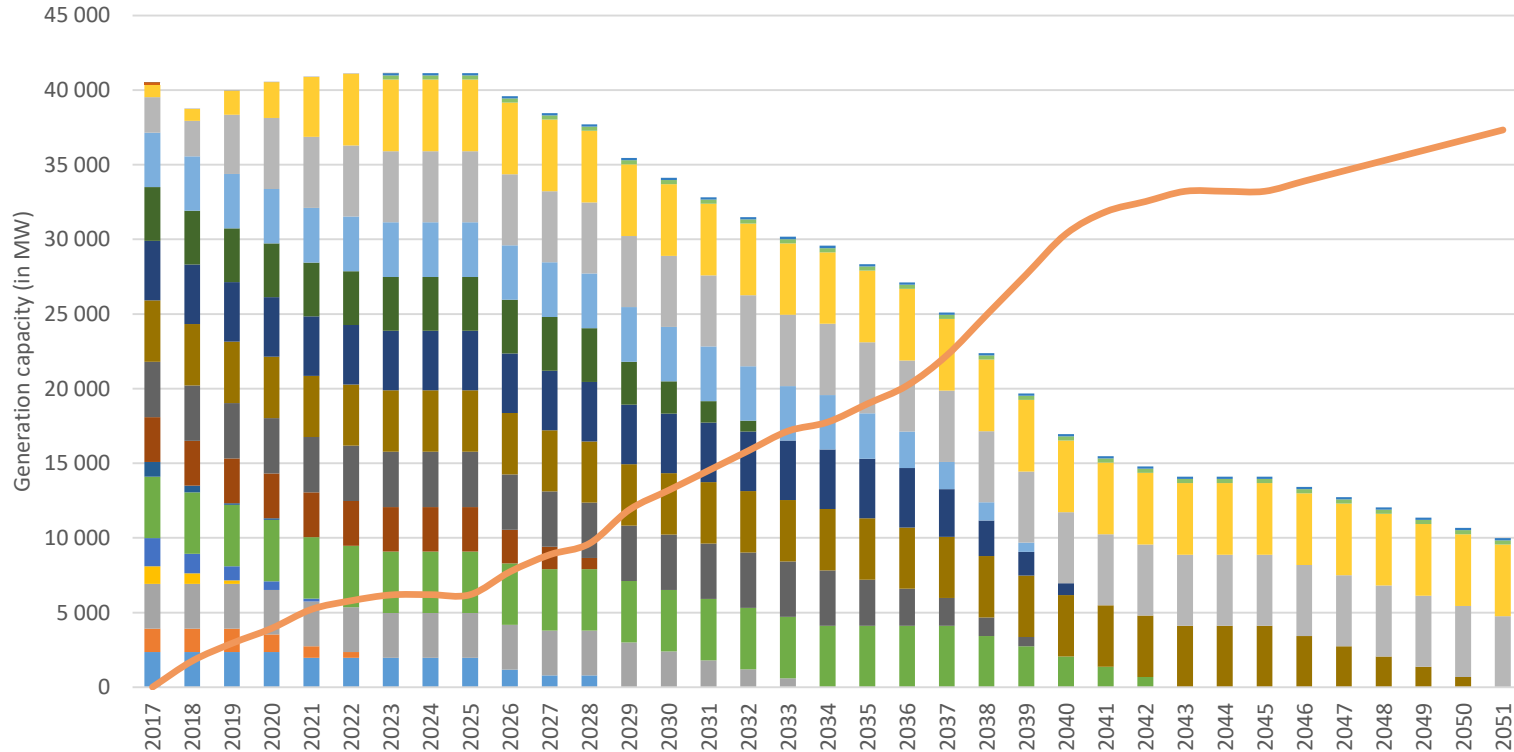
- ▶ Export demand is expected to decline in the long term due to policies in large export customers and global CC policy
- ▶ Domestic demand for coal anticipated to decline in the long term due to energy policies (IRP, carbon tax)
- ▶ Impacts are difficult to disentangle from the effects of the slowdown in SA and global economy over the past five years in some cases.

Key impacts:

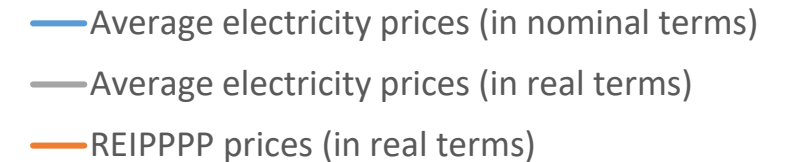
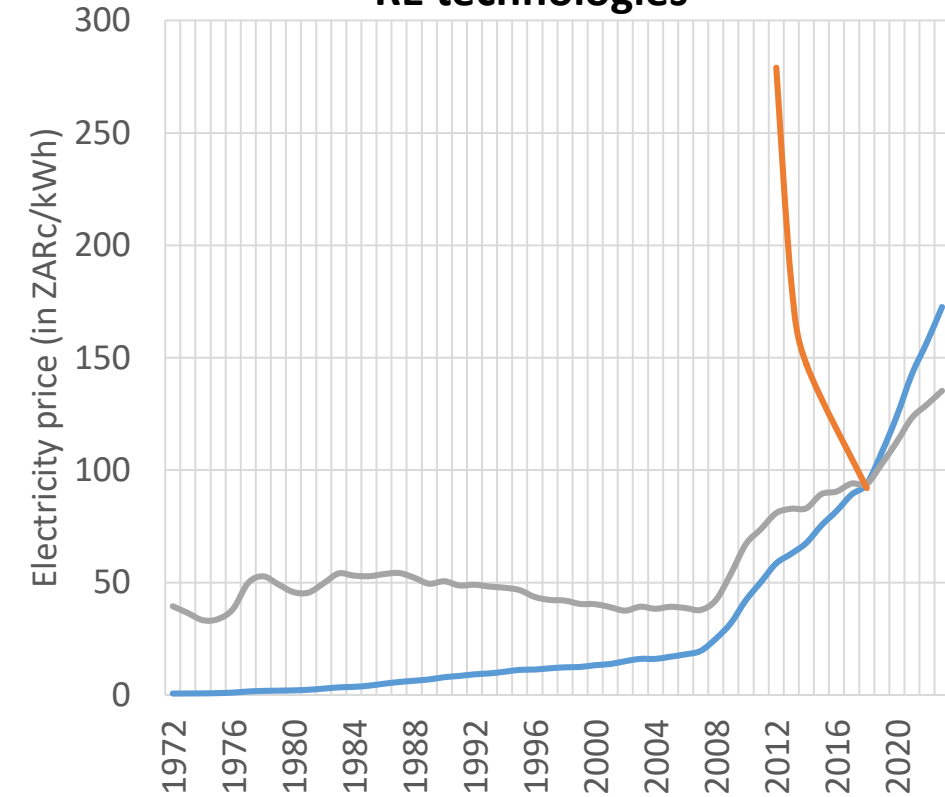
- ▶ Coal mining industry is at risk (already manifesting due to funding withdrawal)
- ▶ Mine/facility closure especially in small rural towns (e.g. eMalahleni, Steve Tshwete, Govan Mbeki) would lead to job losses as well as 'ghost towns' due to geographical concentration
- ▶ Limited employment alternatives for affected workers (specialized skills + relative high earnings given education levels)

Coal value chain in SA: Diagnostic

SA's coal decommissioning plans from 2017-2051 (IRP 2019)



SA's average electricity price compared to RE technologies

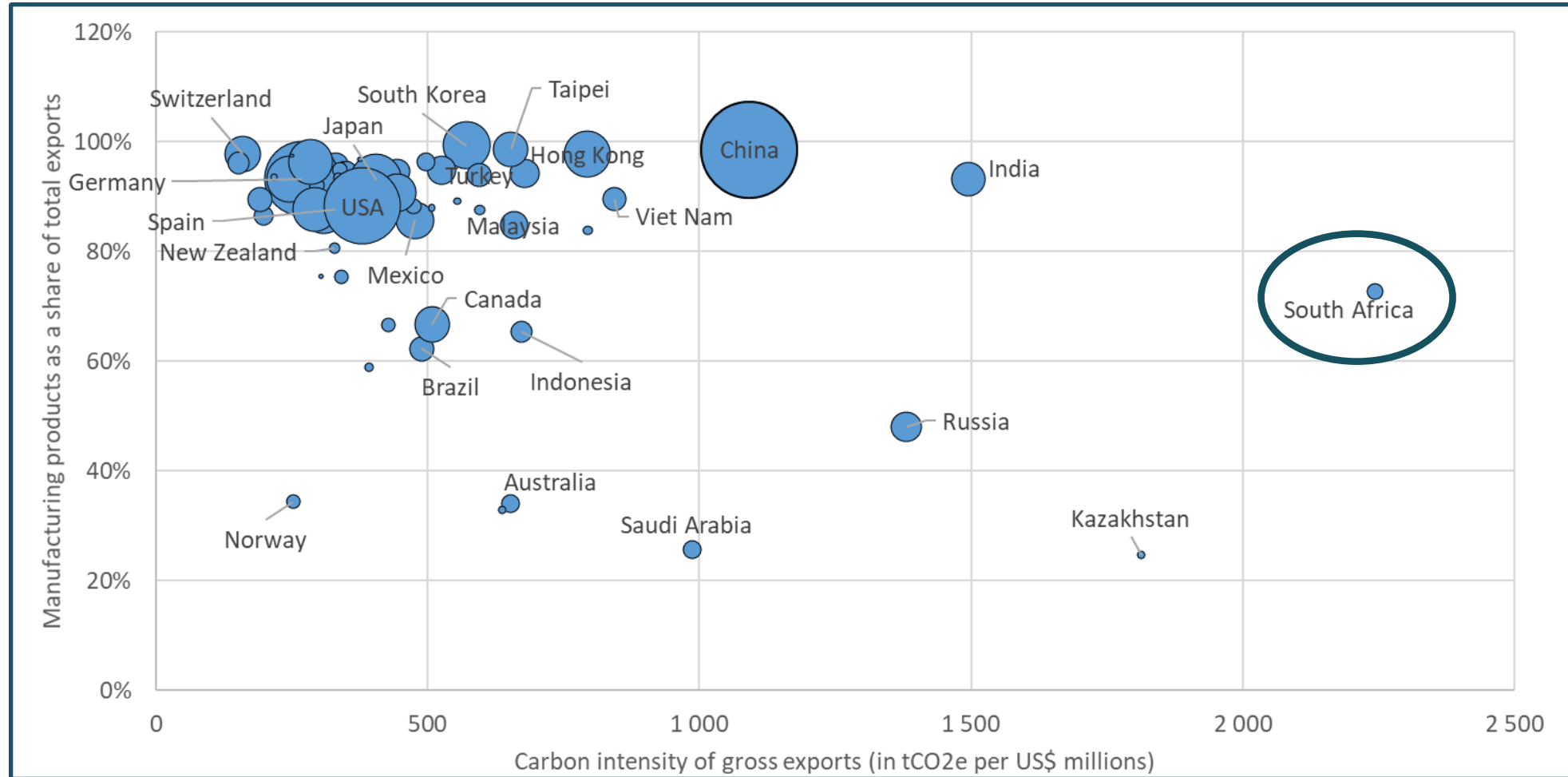


Coal value chain in SA: Diagnostic

Manufacturing export per country per carbon intensity (in tCO₂e per US\$ million), share of exports (in percentage of the country's total exports) and export value (relative scale)

Border Carbon Taxes are coming

- ▶ SA is one of the most carbon-intensive economies
- ▶ Pricing carbon domestically vs. being taxed by trading partners



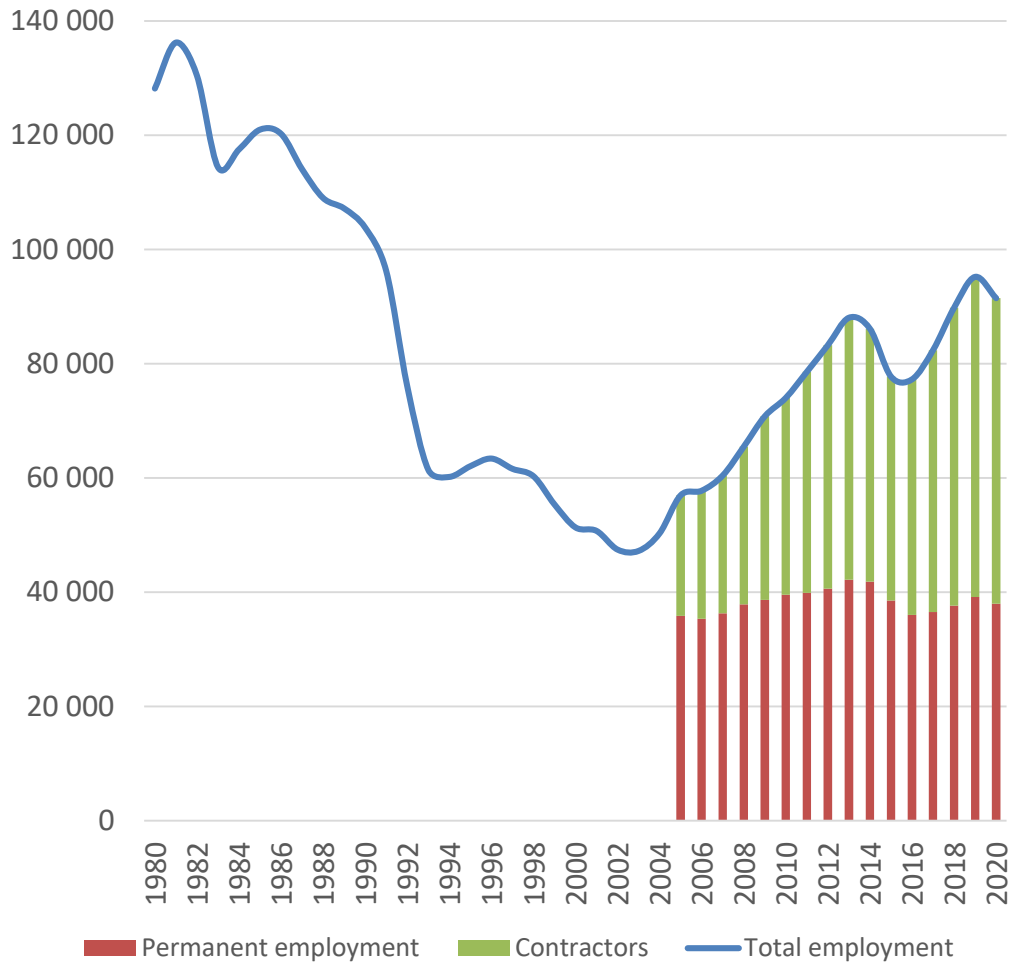
[Access the full climate and trade report here](#)

Source: TIPS, based on data from the OECD, dataset on carbon dioxide emissions embodied in international trade



Coal value chain in SA: Workers

Direct employment in coal mining in SA



Direct employment across the coal value chain stands around 150 000 workers

Overall, workers in the VC fare better than the rest of the economy, despite lower qualifications

Coal production and transport

- ▶ Mining (91 459 workers, including 7 433 at Sasol)
- ▶ Road transport (~2000–4000 people)
- ▶ Richards Bay Coal Terminal (532)
- ▶ Transnet Freight Rail (~12 000 people)

Coal use

- ▶ Power generation (~10 000 at Eskom)
- ▶ Petrochemical production (17 814 at Sasol)
- ▶ Steelmaking (6 622 employed at AMSA) and
- ▶ Cement production (about 7 000 employees).

- ▶ Some industrial activities (e.g. aluminium smelting) have historically relied on abundant and affordable electricity supply, based on a coal beneficiation strategy that is no longer valid.

Coal value chain in SA: Workers

Vulnerability – Financial resources

- ▶ Workers in the VC are better paid than other formal workers
- ▶ Coal miners = most at risk as ~80% have only a matric (38%) or less (42%)
- ▶ Median pay for coal miners is approx. x2 the median for other formal workers (R12k vs R6k)
- ▶ Median wages across the VC are somewhat similar – coal mining (~R12k); electricity gen. (~R13k); petroleum and basic chem. (~R9k)
- ▶ Workers in the coal VC also fair better compared to other formal:
 - Retirement fund contrib. (~80% vs ~55%)
 - UIF contributions (~80% vs ~65%)

Vulnerability – Human capital

- ▶ Higher dependence on semi-skilled workers than the rest of the formal economy
- ▶ Skills level highest in electricity gen. (23%), and petroleum and basic chem. (22%)
- ▶ Mining displays the lowest skills profile
- ▶ Coal miners emerge as the most at risk in education terms: ~80% have only a matric or less vs. ~74% for the rest of the eco.
- ▶ Electricity gen. employs the highest % of individuals with a diploma or more (47%), followed by petroleum, basic chemical and plastic (27%), followed by coal mining (20%)

Vulnerability – Social capital

- ▶ Unionisation rates: mining (69%); 68% in electricity gen. (68%); petrochem. and basic chemicals (47%), other formal ind. (34%)
- ▶ High levels of worker organisation in mining
 - Workers virtually invariably get an annual raise
 - Salaries more likely to be negotiated between employers and unions than in other ind.
- ▶ In the coal VC, workers fair better in terms of permanency of employment, existence of a written contract, employment conditions, paid vacation leave and maternity/paternity leave.

Coal value chain in SA: Coal Truckers

- ▶ Coal truckers are a vulnerable group with strong political sway
- ▶ Approximately 200 small black-owned truckers service the coal mines and power stations in Mpumalanga
- ▶ These truckers employ approximately 2 000 to 4 000 workers
- ▶ Truck drivers receive a net salary of ~R11 000 per month after deductions
- ▶ These truckers capital are currently geared only for coal transport with limited alternative uses given the current setup
- ▶ Competition in adjacent markets also concern them when thinking about transitioning

- ▶ Options do exist for truckers to shift to other products but these involve capital expenditure
- ▶ Possible alternatives include:
 - Transport of manganese or iron ore (same truck) – no additional cost
 - Transport of groceries or cement (conversion to a flat-bed): ~R200–300k
 - Transport of liquid fuels: > R1m

Coal value chain in SA: Communities

- ▶ 4 local municipalities in MP emerge as highly undiversified and at risk
 - eMalahleni, Steve Tshwete, Msukaligwa, and Govan Mbeki
- ▶ These coal-dependencies are evident through GVA analysis :
 - eMalahleni relies heavily on coal mining in its economy (44%)
 - Steve Tshwete (35%)
 - Msukaligwa (33%)
 - Govan Mbeki (22%)
- ▶ Employment in the coal VC is concentrated in these 4 municipalities, where 76% of employment occurs
- ▶ eMalahleni is most at risk followed by Steve Tshwete, Msukaligwa and Govan Mbeki

- ▶ These municipalities have a disproportionately high share of employment in the coal VC, essentially in mining.
 - eMalahleni (26%)
 - Steve Tshwete (17%)
 - Msukaligwa (14%)
 - Govan Mbeki (11%)

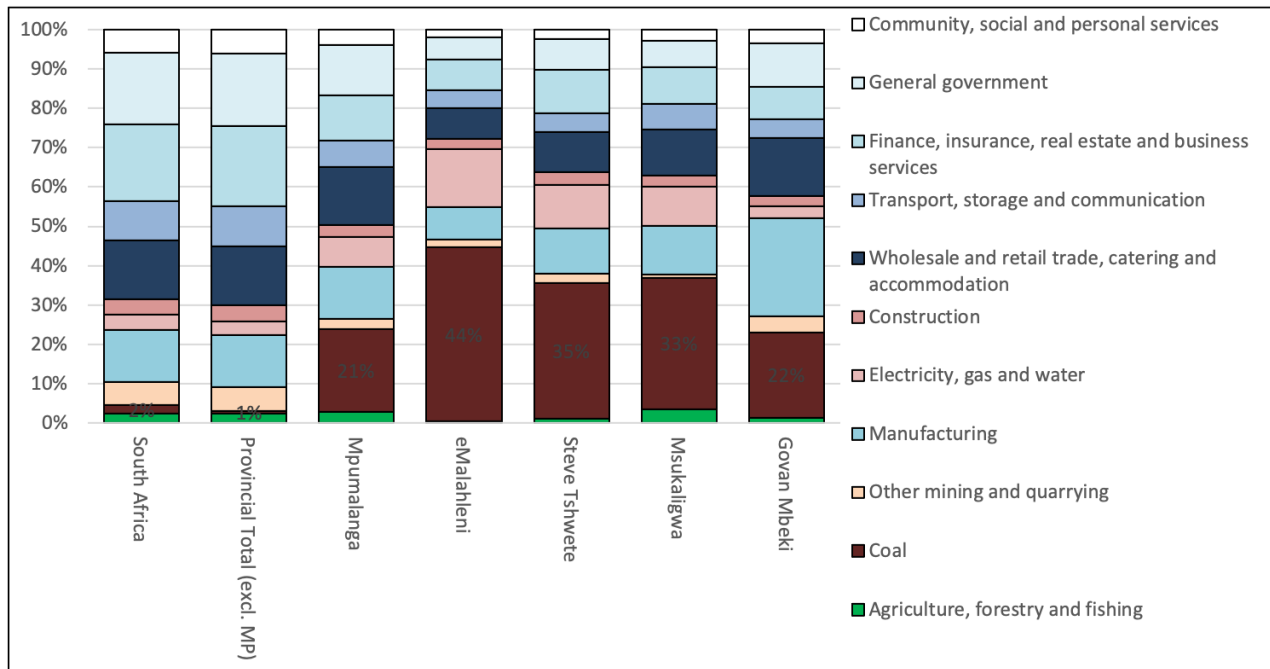
Coal value chain in SA: Communities

- ▶ Geographical concentration:
 - Deep consequences for the communities relying on such activities, particularly rural areas depending on mining, power generation and upstream petrochemical (Sasol) operations.
- ▶ Possible spillover impact on other regions:
 - Despite the efforts of firms to employ people from local communities, a large share of workers in mining operations come from other parts of SA as well as neighbouring countries.
 - Some elements (e.g. Eskom) tend to hire from the surrounding communities

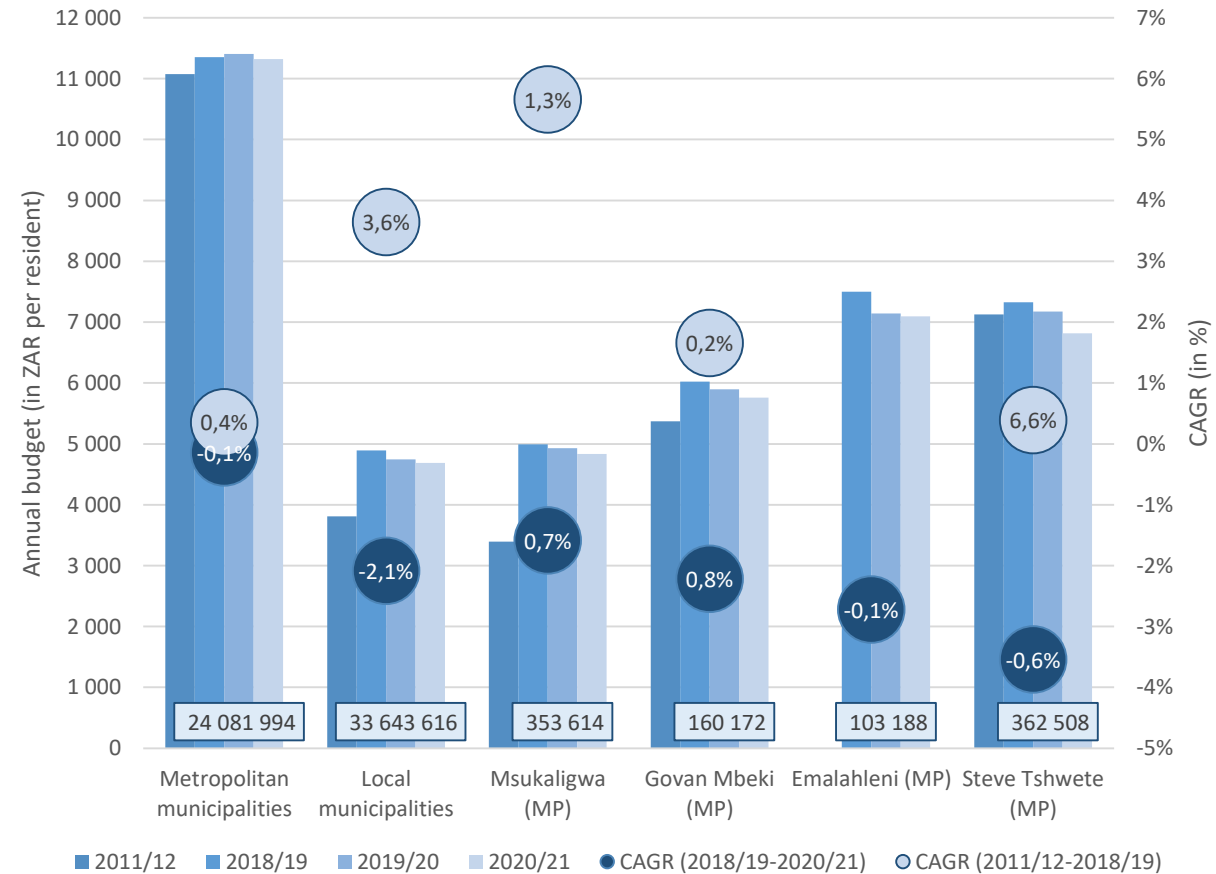
- ▶ Economic dependency:
 - In the vulnerable towns in Mpumalanga, substantial economic activity ultimately depends on the coal VC.
 - Government and private services, transport and retail activities are essentially serving the people (and their households) that work in the coal VC.
 - Agriculture and other manufacturing activities are minimal
 - In some cases (e.g. Hendrina), Eskom even provides basic municipal services such as water, sanitation, and waste management
 - Points to weak resources at the local municipality level

Coal value chain in SA: Communities

GVA segmentation for coal-dependent regents compared to South Africa overall for 2018



Revenue per capita for selected SA municipalities



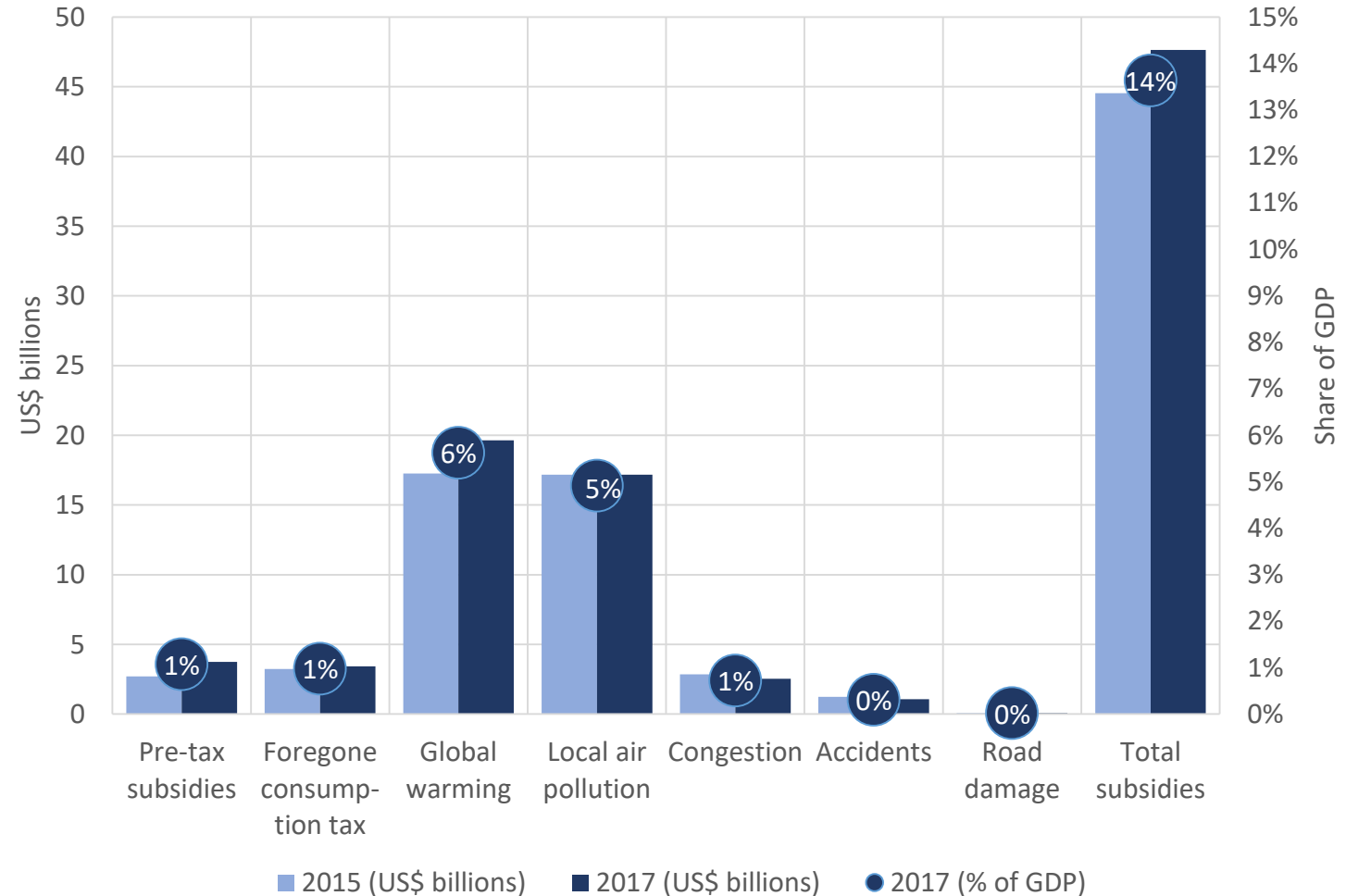
Coal value chain in SA: Fossil fuel subsidies

Direct fossil fuels subsidies:

- ▶ 2.0% of GDP in 2017
- ▶ 13.6% when the cost of externalities is included
- ▶ Dwarfs subsidies towards a green economy (e.g. 12i and 12l tax incentive, RE depreciation, REIPPPP)

Product	Nominal (US\$ billions)	Share of GDP
Coal	31,1	8,9%
Petroleum	11,0	3,1%
Electricity	5,1	1,5%
Natural gas	0,4	0,1%

Fossil fuel subsidies in SA



Coal value chain in SA: Diversification

Opportunities result from the people, ecosystems and economic activities present in Mpumalanga

- ▶ More than 4.5 million residents
- ▶ Young population (>92% are below 60, the highest % in SA)
- ▶ Net positive migration pattern, indicative of dynamism
- ▶ Region rich in culture and natural environments, and
- ▶ Built infrastructural assets
 - Electricity grid, transport networks (road and rail), broadband infrastructure and bulk water supply
- ▶ Proximity to the economic hub of Gauteng

Agricultural and forestry VCs

- ▶ MP accounts for 46% of SA's high-potential arable land.
- ▶ High-value-added horticultural products, crops for industrial uses or food crops (maize, soya beans, citrus, sugar and bananas)
- ▶ MP hosts >40% of SA's area under forestry plantations + links with the timber, pulp and paper ind.

Tourism

- ▶ Vibrant tourism industry, although more in the eastern region

Current coal-driven social-ecological liabilities

- ▶ Environmental rehabilitation of land and water areas, use of coal ash from power plants

Cross-cutting interventions

- ▶ Development of manufacturing operations, from RE components (already being explored), to construction machinery and agricultural equipment.
- ▶ Provision of services, from energy, water, sanitation and waste management to (public) transport, health, education and security

Trade & Industrial Policy Strategies

Supporting policy development
through research and dialogue

www.tips.org.za

Gaylor Montmasson-Clair

Senior Economist: Sustainable Growth

gaylor@tips.org.za

+27 12 433 9340 / +27 71 31 99 504

Linked  |  [@GaylorTIPS](https://twitter.com/GaylorTIPS)

