



**National Employment Vulnerability
Assessment (NEVA) & Sector Jobs Resilient
Plans (SJRPs): Coal value chain**

Unravelling South Africa's Just Transition: Stakeholder Perspectives

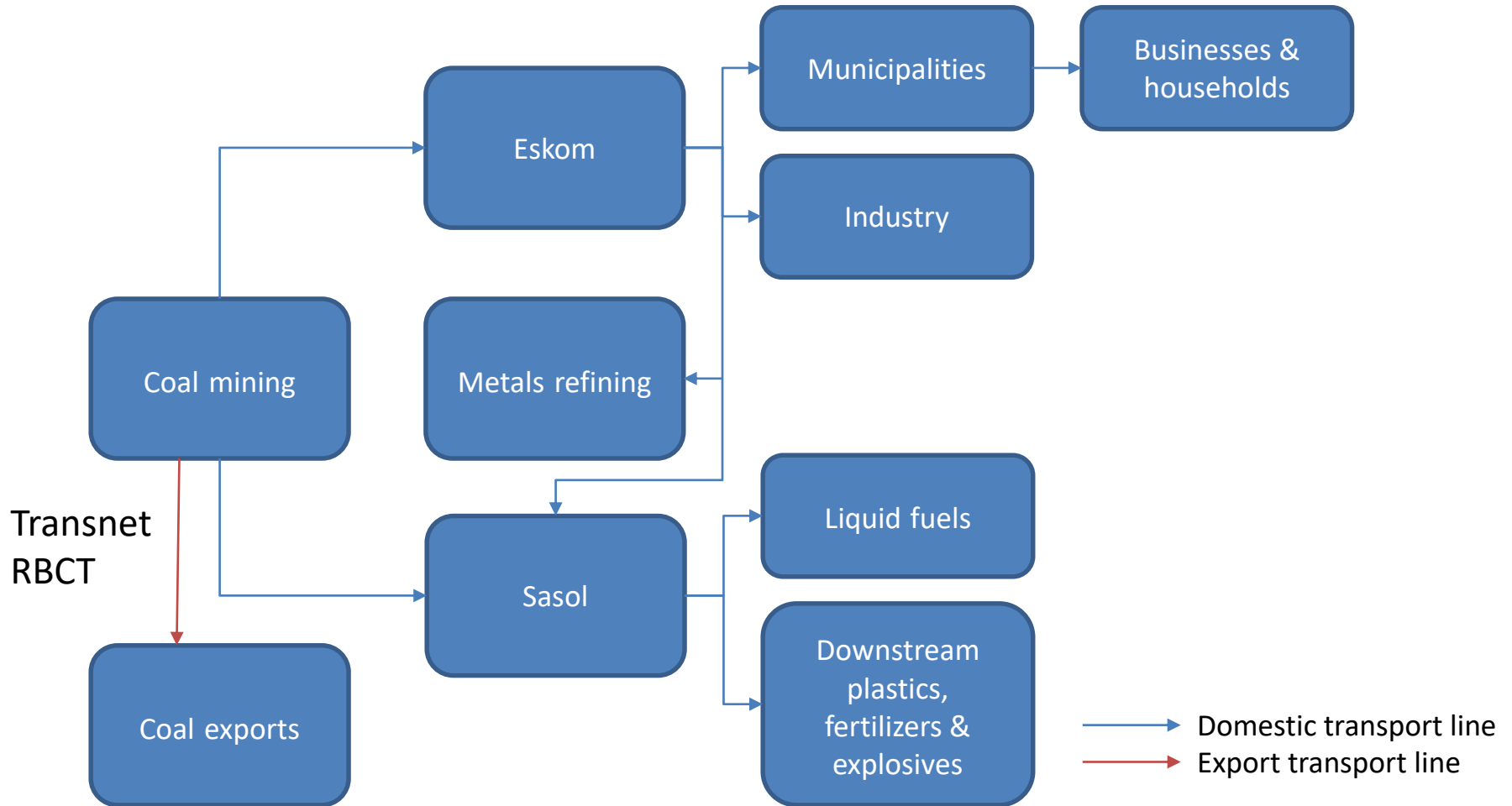
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Context analysis

- The coal VC has been a vital input into energy, petro-chemicals and metals refineries value chains, for over a century.
- Exports provide the industry with high degree of profitability as higher grade coal is exported.
- Coal mining employs almost 80 000 (65%) people, Eskom generation 12 000 (10%), and Sasol, 26 000 (22%). Just these three elements account for a total of **118 000** people.
- On average, 80% of the production of coal mining is located in two districts in Mpumalanga - eMalahleni (formerly Witbank) and Gert Sibande.
- Eskom historically located its plants near the mines, although Medupi is in Limpopo near newly opened coal fields there.

Value chain



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:

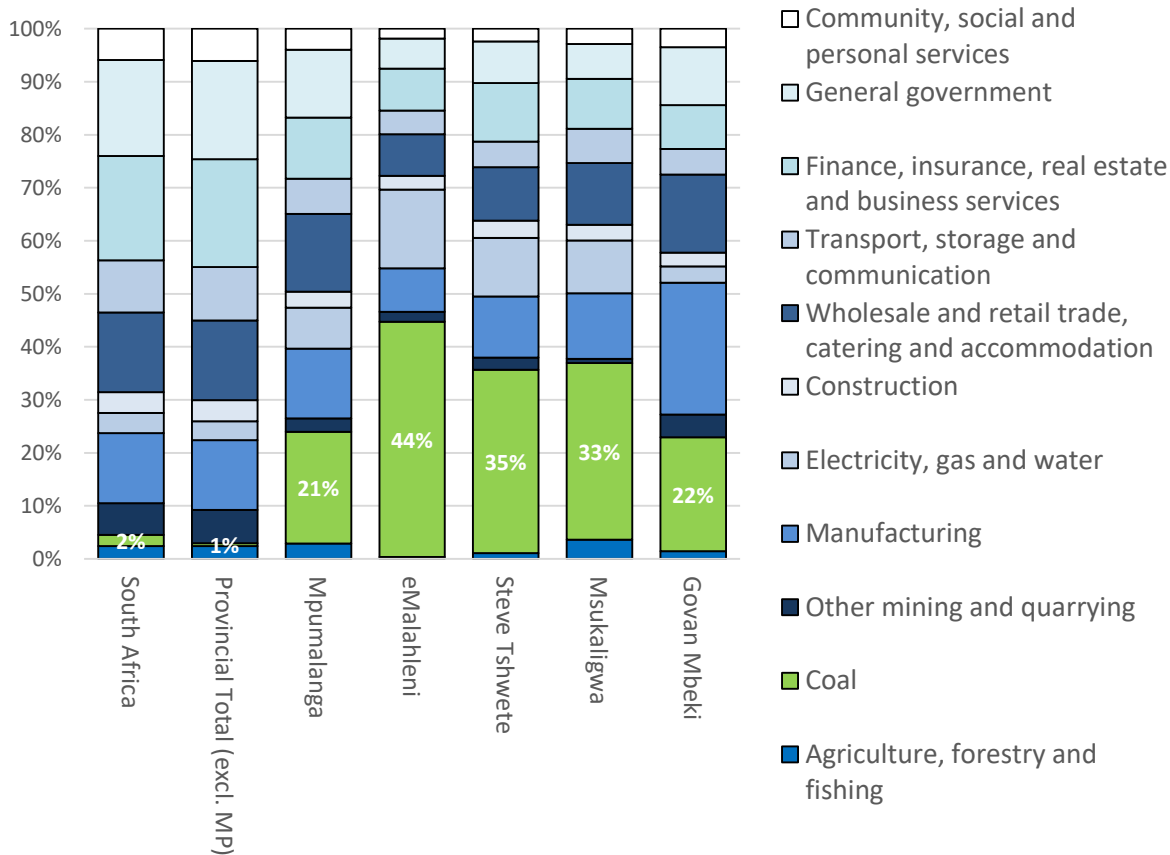
- Export demand is expected to decline in the long term due to policies in large export customers and global CC policy
- Domestic demand for coal anticipated to decline in the long term due to energy policies (IRP, carbon tax)
- Impacts are difficult to disentangle from the effects of the slowdown in 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)

Vulnerable Regions

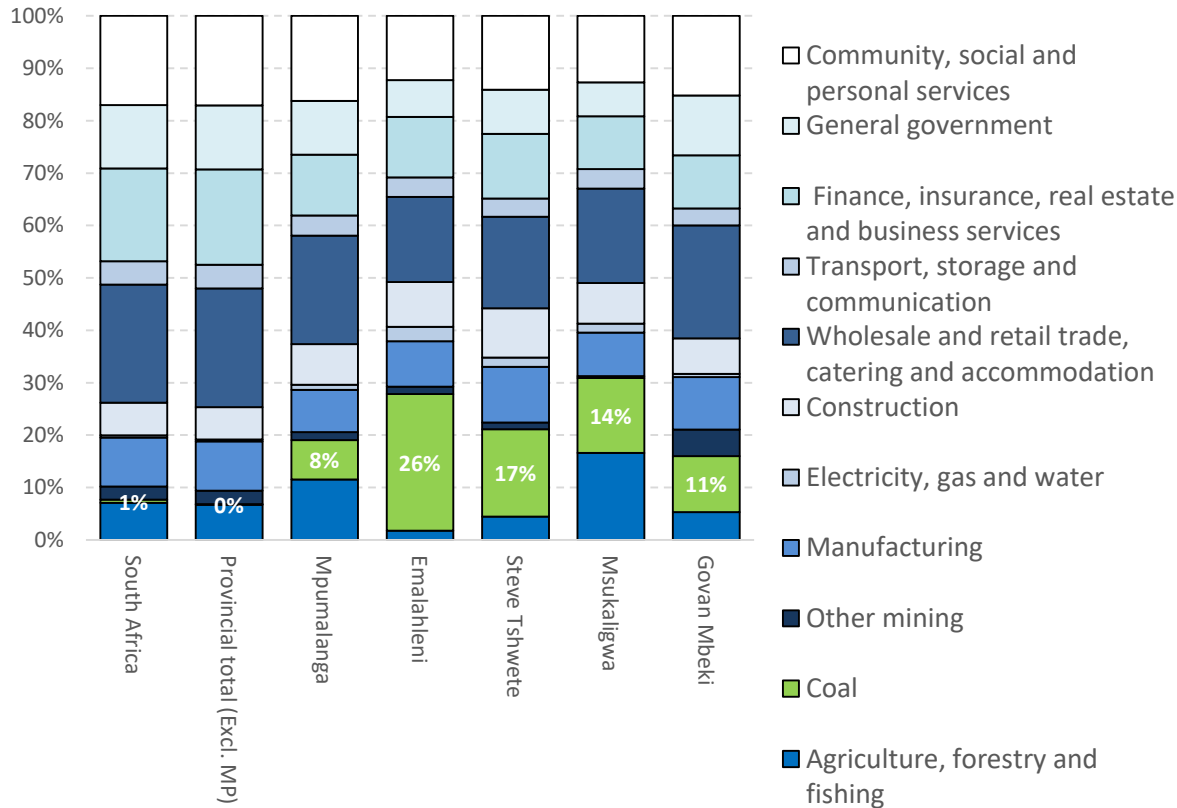
GVA segmentation for selected locations, 2018



- Four munics rely heavily on coal
- eMalahleni is most at risk given heavy investment in coal (44% of GVA)
- Other high risk munics are Steve Tshwete, Msukaligwa, and Govan Mbeki

Vulnerable Regions

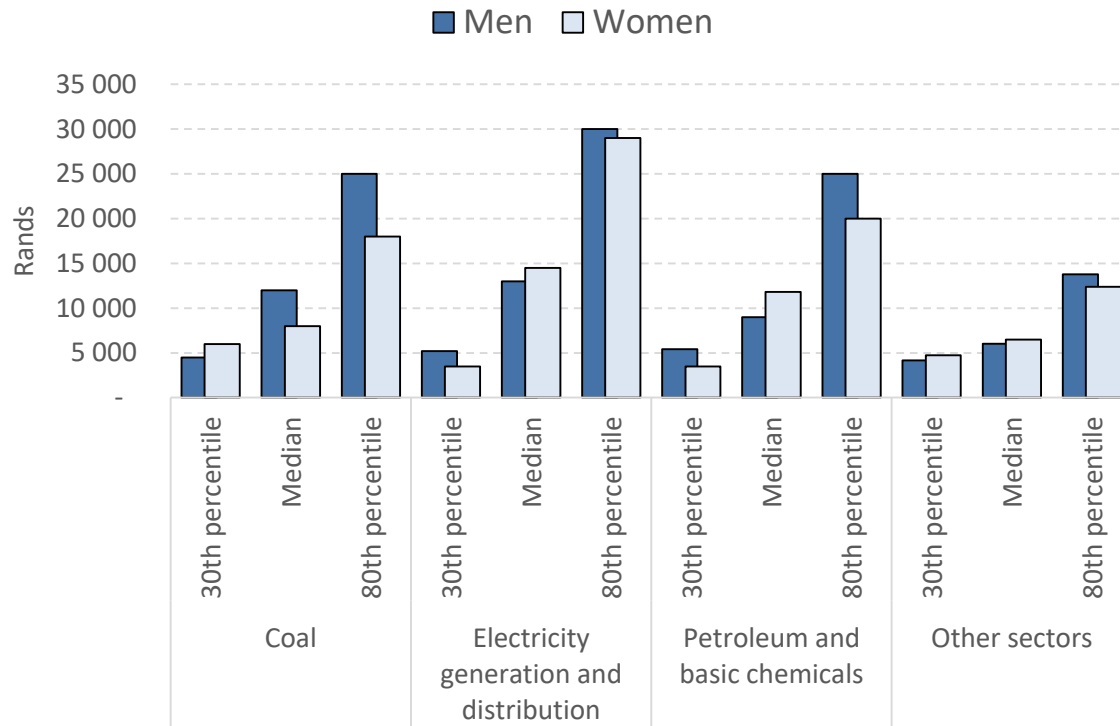
Employment by industry in selected municipalities, 2018



- Similar dynamics from an employment perspective
- eMalahleni is most at risk given substantial employment in coal (26% of formal employment)
- Other high risk munics are Steve Tshwete, Msukaligwa, and Govan Mbeki

Financial capital

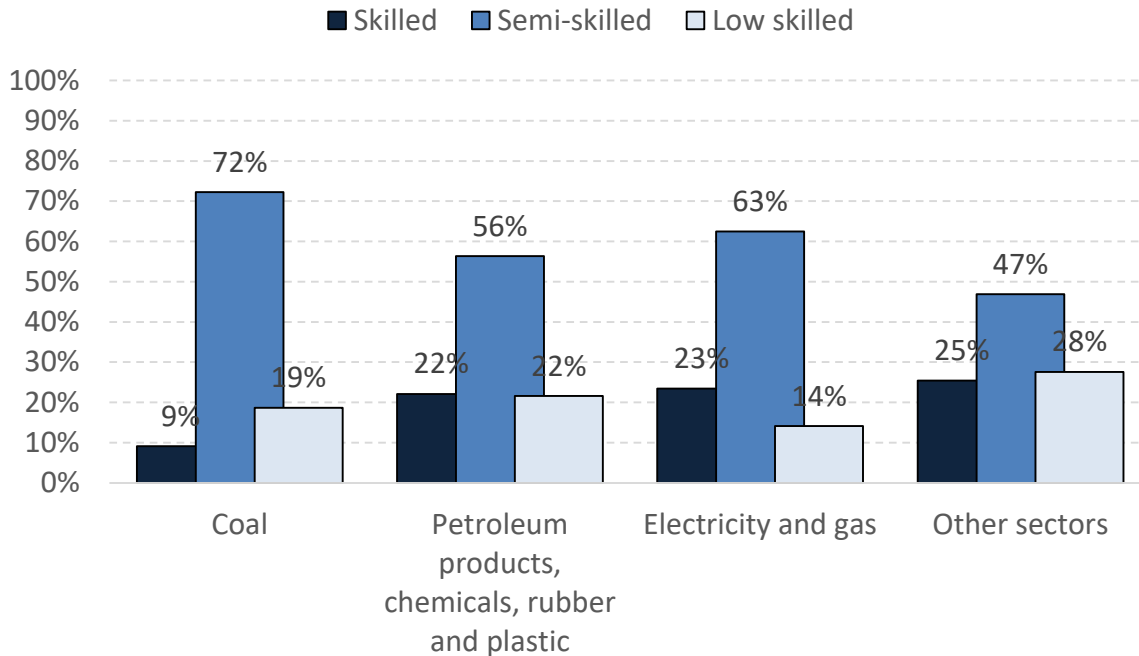
Coal value chain monthly earnings, 2017



- Median pay along the value chain substantially higher than rest of the formal economy
- Lowest median wage among coal miners
- High degree of retirement and UIF contributions compared to rest of economy

Human capital

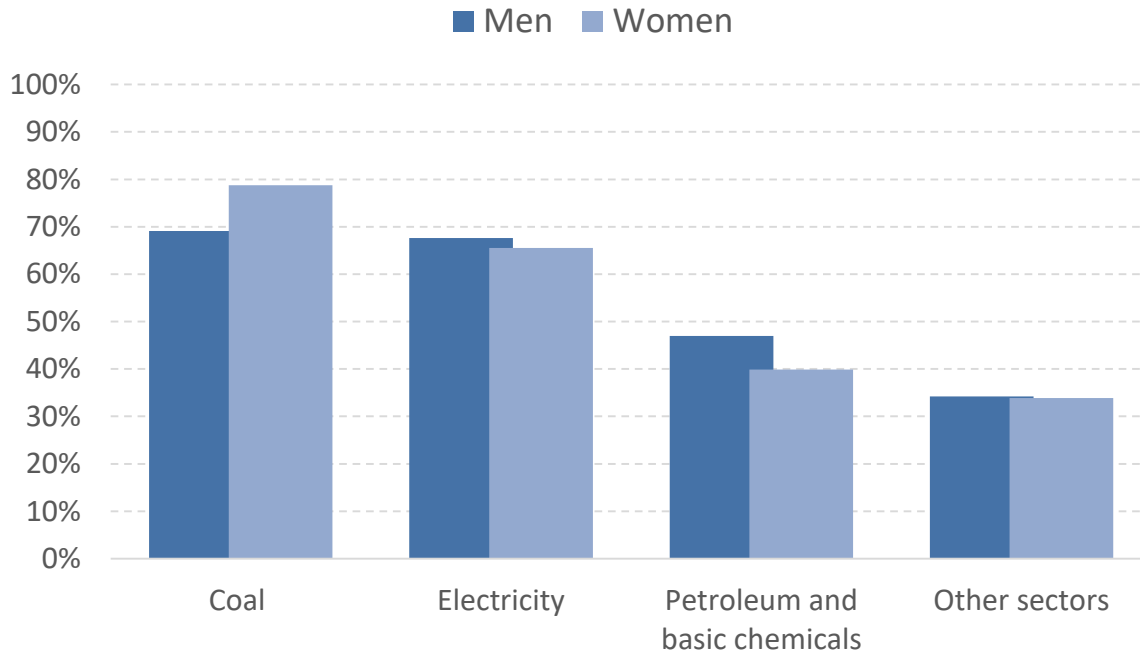
Skills profile of the coal value chain, 2017



- High reliance on semi-skilled workers especially at mining stage
- Workers with matric or less comprised 80% of the coal labour force in 2017
- Relatively high pay for miners with secondary education complicates re-employment in formal economy

Social capital

Percentage of employees that belong to a union, 2017



- High level of union membership in the VC, particularly mining
- Employees in the coal VC also fare better off than the rest of the economy wrt permanency, written contract, and leave

Vulnerable groups – Coal Truckers

- Coal truckers are a vulnerable group with strong political sway
 - Based on interactions with transporters 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

Vulnerable groups – Communities

- Geographical concentration:
 - This concentration has 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 sanitation, and landfill
 - Points to weak resources at the local municipality level

Proposals: implementation capacity

Establish an independent, multi-stakeholder, state-led entity to manage the implementation of just transition interventions, including social and labour plans

- Establish an oversight body to take forward the SJRP for the coal VC with a local office in Mpumalanga (possibly eMalahleni).
- Ensure that inclusivity is paramount in stakeholder consultation.
- Key functions include:
 - Mobilise state as well as private resources around projects (identification of hotspots, identification of projects, fund-raising, implementation, M&E)
 - Develop strategies to strengthen support for labour-sending areas
 - Ensure accountability to all stakeholders as well as adequate transition planning
 - Manage closures and downsizing from causes other than climate-change related impacts

Proposals: implementation capacity

Strengthen Social and Labour Plans (SLPs) and rehabilitation plans to respond better to needs of workers and communities

- Coal VC is concentrated in a few municipalities, highly reliant on the coal VC tied to single large operations - workers and communities are at high risk.
- SLPs have failed in their intention to promote meaningful social and economic advancement of communities
 - Implementation lacks consultation, monitoring and alignment with existing structures and the needs of communities - undemocratic
 - Mine rehabilitation system is highly flawed, from the legal and accounting frameworks to the actual monitoring of implementation
- SLPs require restructuring to (a) extend to refineries, (b) ensure stakeholder participation in design and implementation, including communities and workers; and (c) explicitly include climate-change related downsizing and JT

Proposals: economic diversification

Develop plans to diversify vulnerable coal-dependent municipalities with a sufficient planning horizon (10 years)

- SJRP structure to provide resources for substantive, costed planning for economic diversification of these municipalities
- Process is iterative and successive plans to refine plans based on analysis and stakeholder engagement
- Planning should include:
 - Review of all economic diversification possibilities including feasibility given assessment of local skills, capital and infrastructure resources
 - Assessment of benefits for vulnerable stakeholders
 - Indicate regulatory, funding and capacity requirements for implementation
 - Evaluation of principal risks and cost bearers

Proposals: economic diversification

Potential options

➤ Mining rehabilitation

- Restored land for agriculture (maize and soya)

Mpumalanga has a high proportion of arable land which can be leveraged

Other options include repurposing slag heaps (adventure sports), open-cast mines (lakes); mines (museums); land (shopping centres/services/parks)

➤ Renewable Energy

- SEA for wind and solar PV Phase 2 identified solar PV potential for eMalahleni
- Adjacent vulnerable municipalities should be included in further generation plans or developed to supply into RE VC by developing the skills (maintenance and repair, manufacture of components)

➤ Coal waste beneficiation

- Fly ash recycling: Eskom and Sasol potential to sell waste ash and reduce storage costs
- Ash can be used to improve land, manufacture bricks and cements

Proposals: ALM policies

Identification of skills and needs of vulnerable workers

- SJRP Office to conduct in-depth study into skills, experience, age and long-term career plans of workers for next 10 years
- Leverage funds from Mining Qualifications Authority (MQA) or the National Skills Fund
- Age profile - determination of whether retraining and reskilling would be necessary to protect employment of younger workers or whether employees that are close to retirement age can be provided with early retrenchments
- Origin - determines where they would likely relocate to, or where they might have sufficient existing resources such as property or families, given that miners tend to shift resources to their places of origin while they are employed
- Training proposals should be submitted to the MQA and NSF, and resources for career counselling and job search funded by the SJRP structure but managed by municipalities.

Proposals: social protection

Income support available for vulnerable workers and communities during transition to new livelihoods

- Current social protection programmes do not support industries or regions facing a downturn.
- Engage with coal employers and Eskom to establish an enhanced retrenchment package with financial planning for coal and Eskom workers.
- The SJRP structure should engage with the Community Work Programme and the social sector of the Expanded Public Works Programme (EPWP) to establish programmes in all coal towns, providing employment to at least 2 000 workers per town for a minimum of six months each.
- Program to be evaluated and scaled up to other VCs (e.g. metals mining)
- In this process, it can treat the SJRP for the coal value chain as a pilot.