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Just Transition, Employment and Skills in South Africa

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Trade & Industrial Policy Strategies (TIPS)

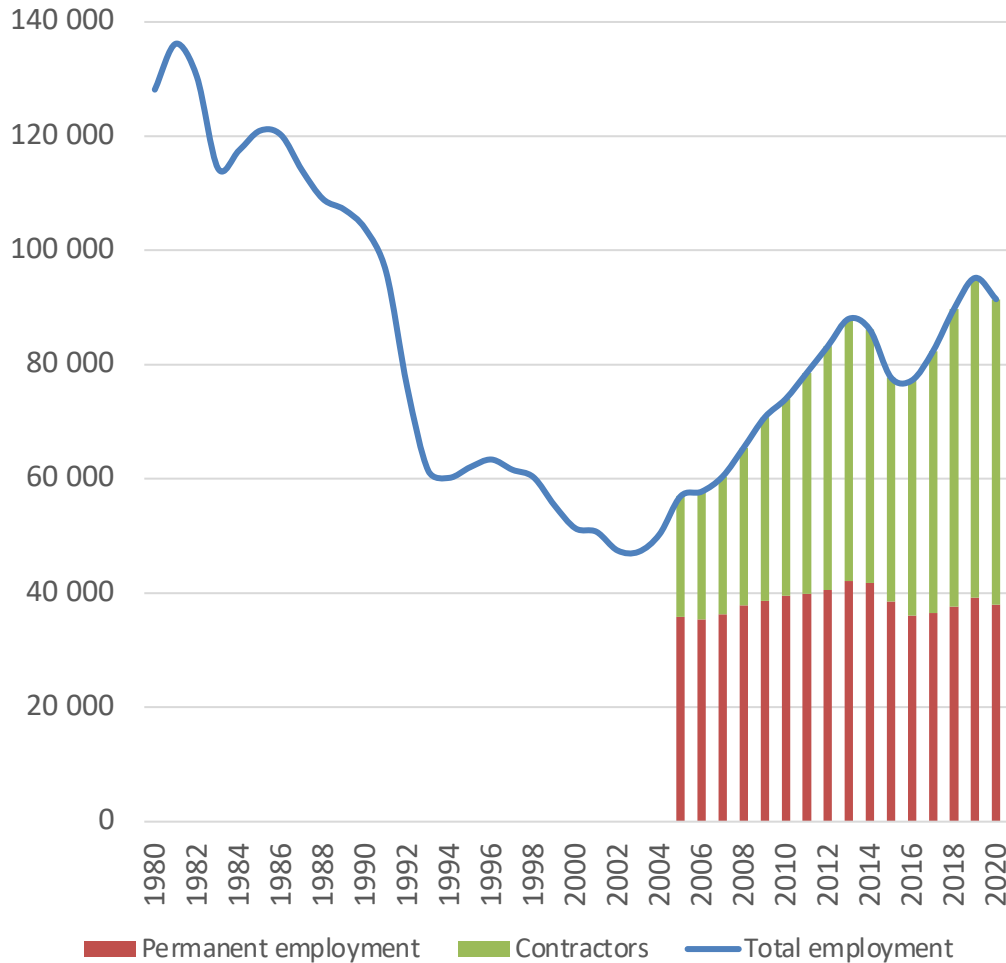


TIPS



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have historically relied on abundant and affordable electricity supply, based on a coal beneficiation strategy that is no longer valid.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%)

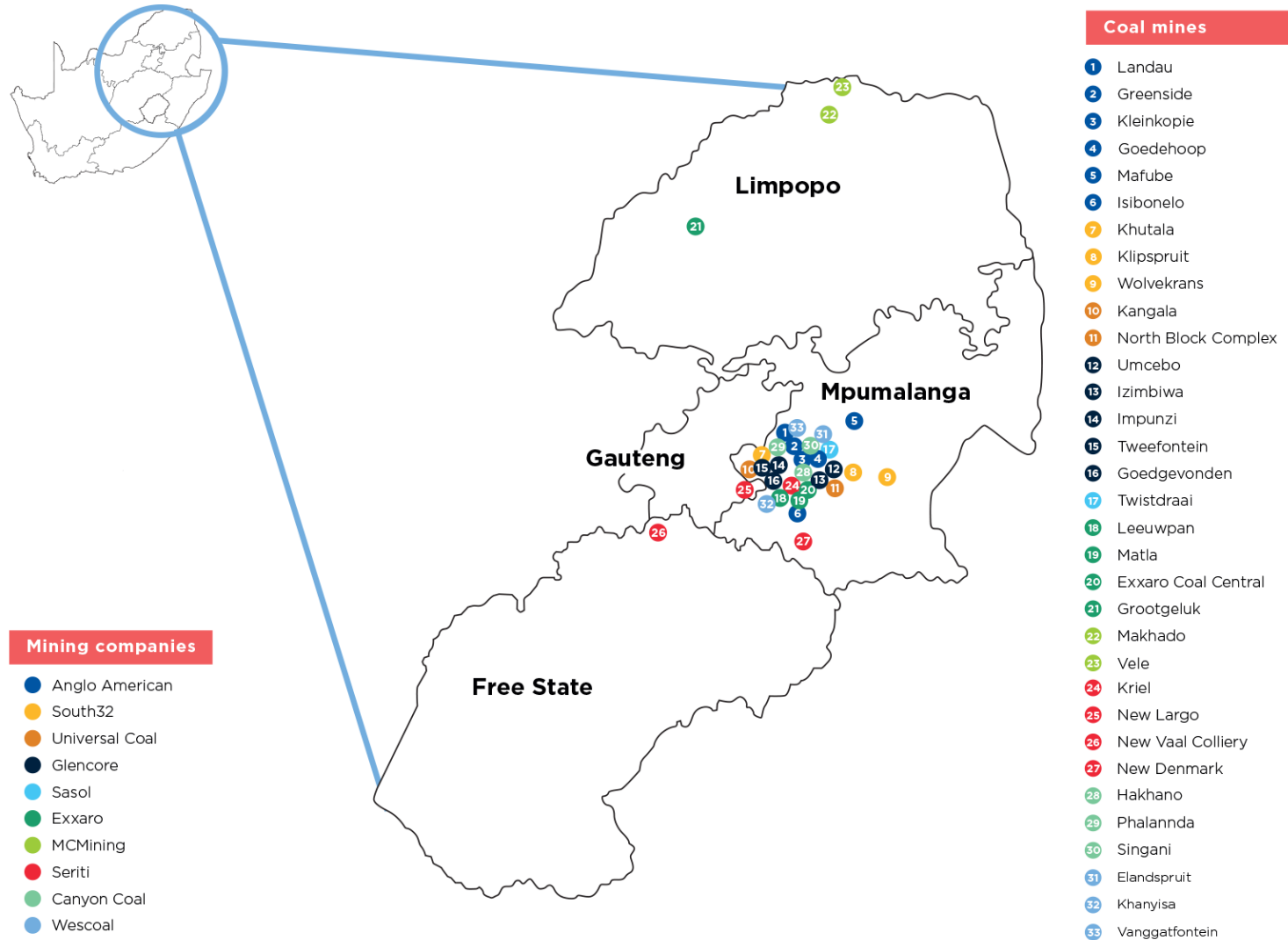
Vulnerability – Human capital

- ▶ 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: Communities

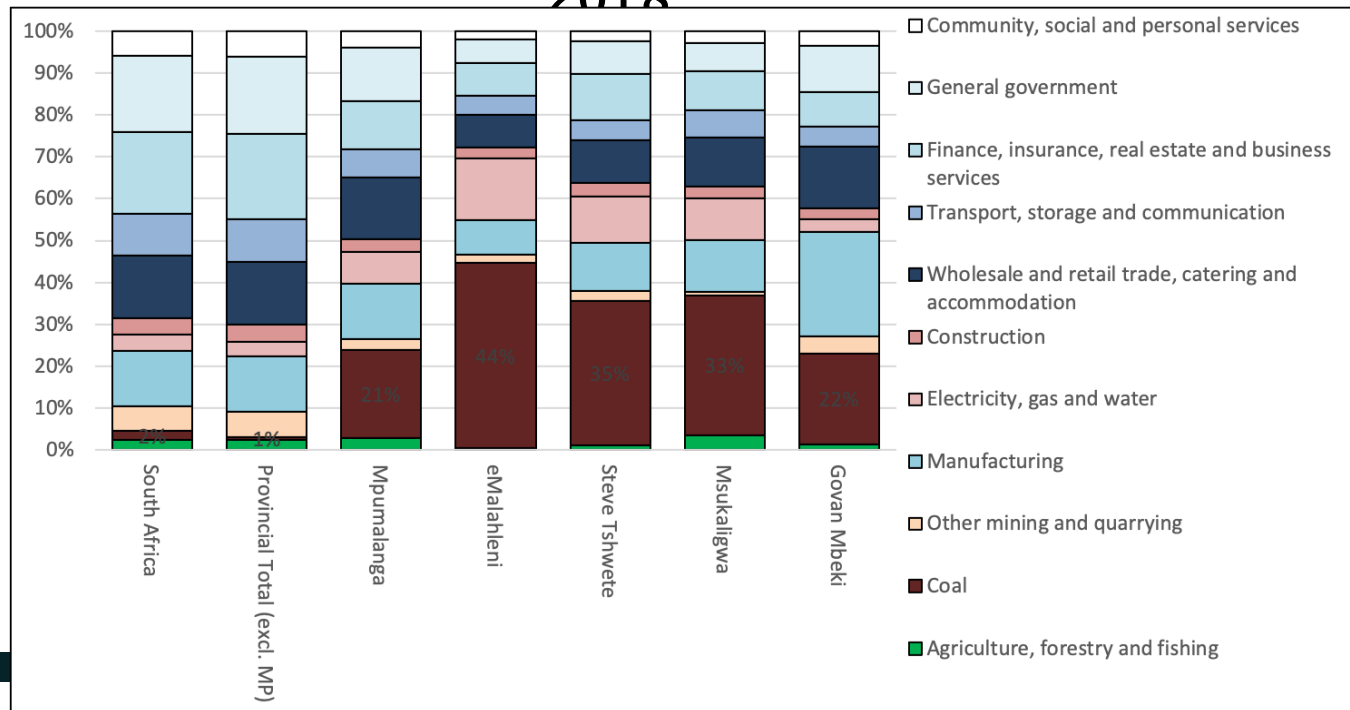


Coal value chain in SA: Communities

Four local municipalities in Mpumalanga emerge as highly undiversified and at risk

- ▶ eMalahleni, 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%)

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



▶ Government and private services, transport and retail activities are essentially serving the people (and their households) that work in the coal VC.

▶ In some cases (e.g. Hendrina), Eskom even provides basic municipal services such as water, sanitation, and waste management

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
- ▶ Proximity to the economic hub of Gauteng

▶ Built infrastructural assets

- Electricity grid (for RE notably), transport networks (road and rail), broadband infrastructure and bulk water supply

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 industry

Tourism

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

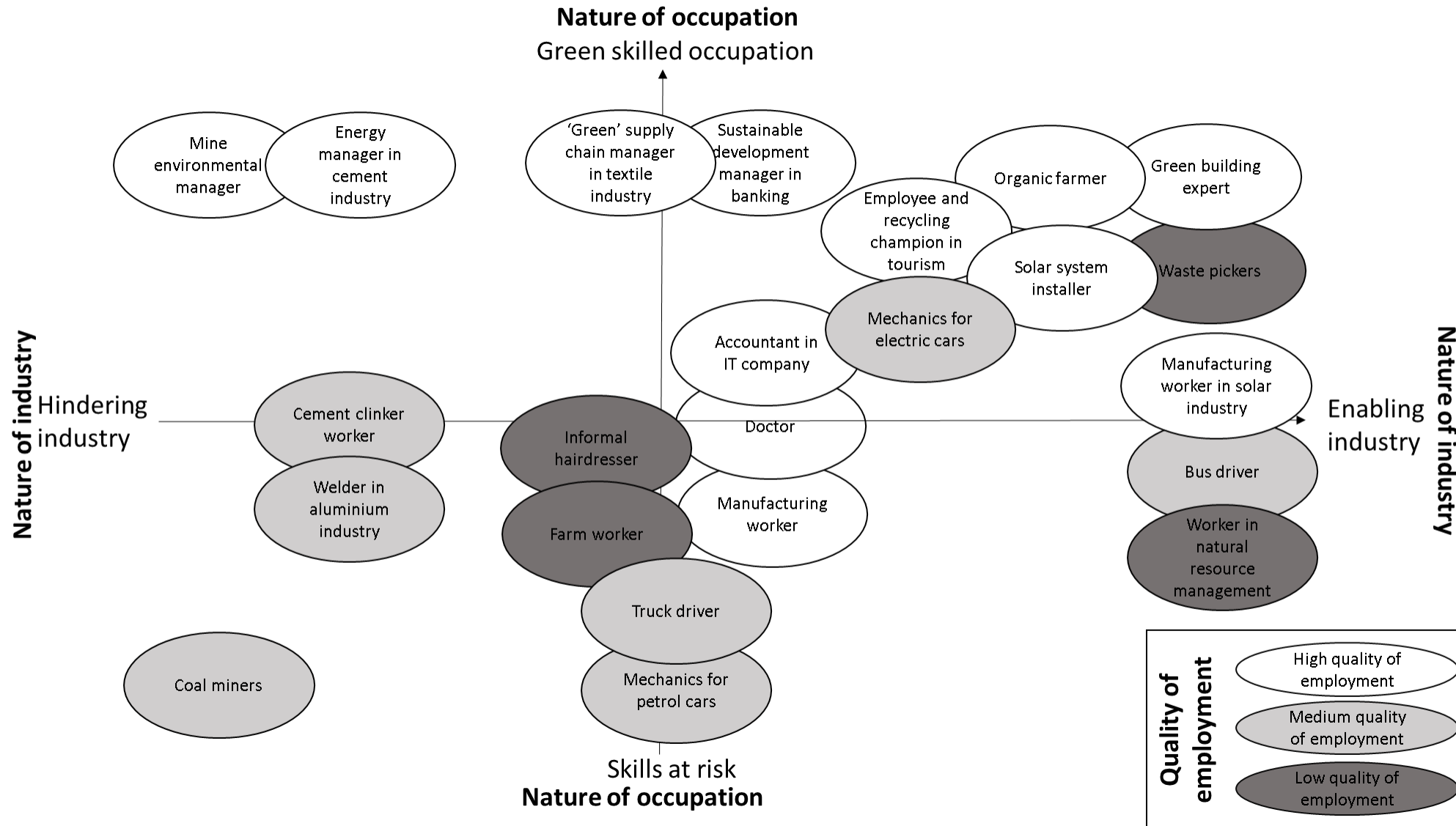
Current coal-driven social-ecological liabilities

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

Cross-cutting interventions

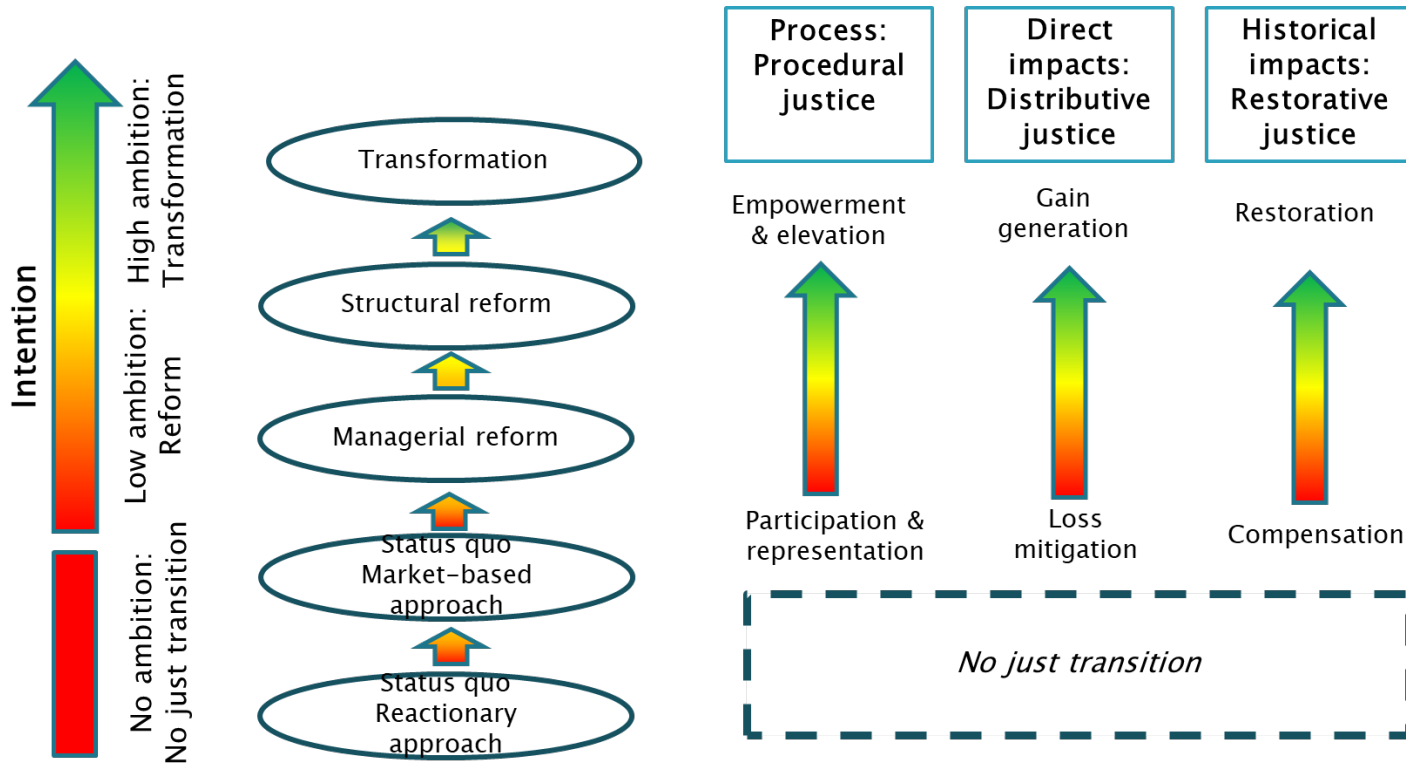
- ▶ Development of manufacturing operations, from RE components (already being explored), to construction machinery and agricultural equipment.
- ▶ Provision of services, from energy (RE), water, sanitation and waste management to (public) transport, health, education and security

A sustainable employment matrix



Towards a just transition

Just transition and degrees of ambition



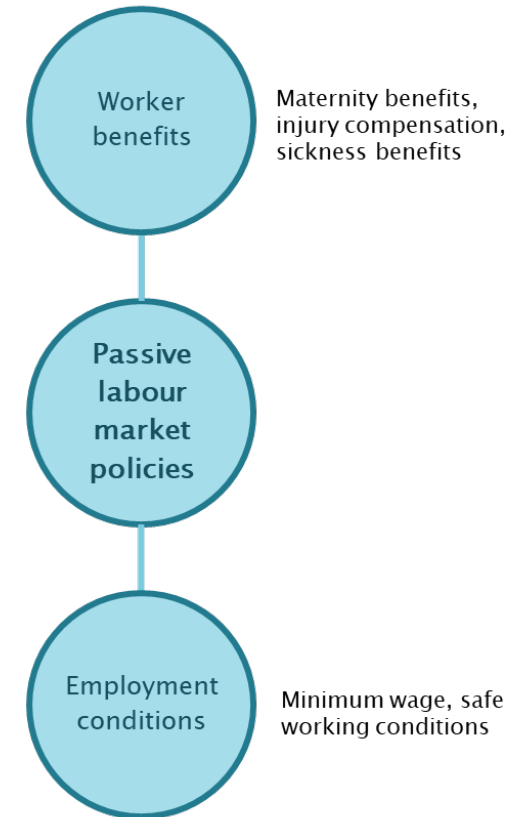
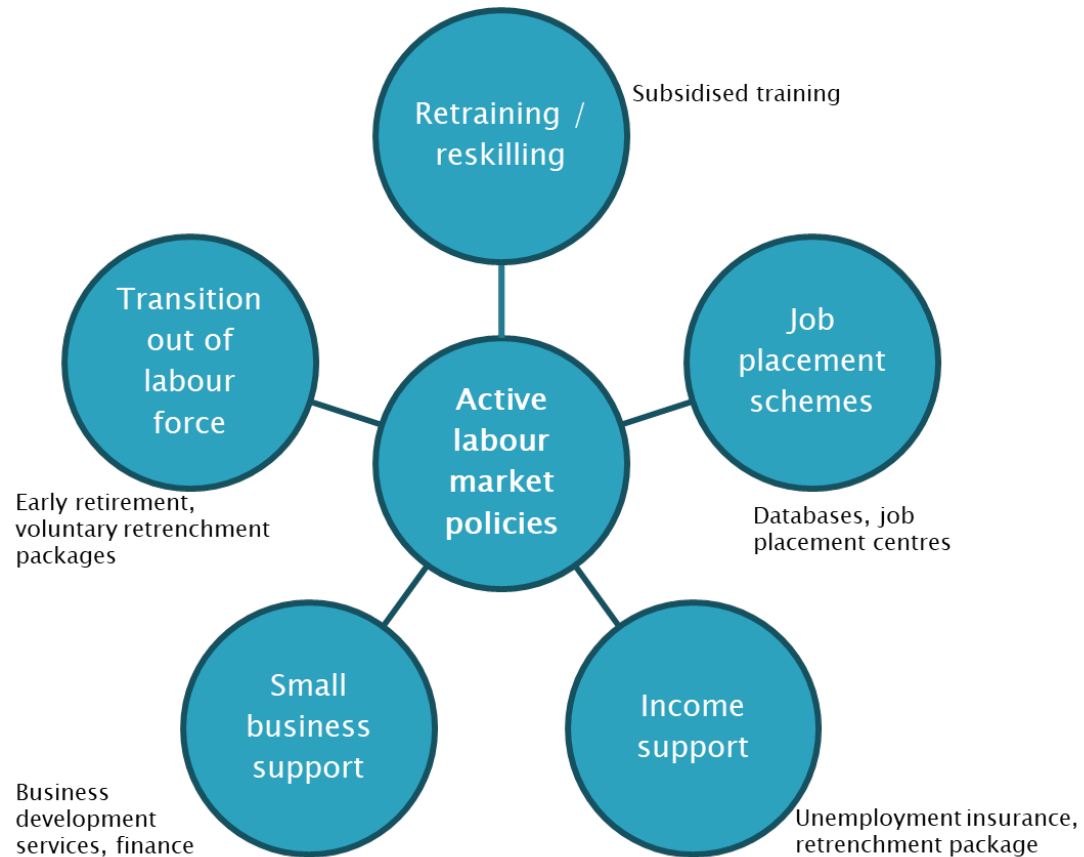
A JT process is only truly effective and transformative in its most ambitious versions,

- ▶ when striving to bridge the three dimensions of transitional justice
 - Procedural justice
 - Distributive justice
 - Restorative justice

- ▶ with a transformative agenda that overall integrates social, environmental and economic justice.

Towards distributive justice

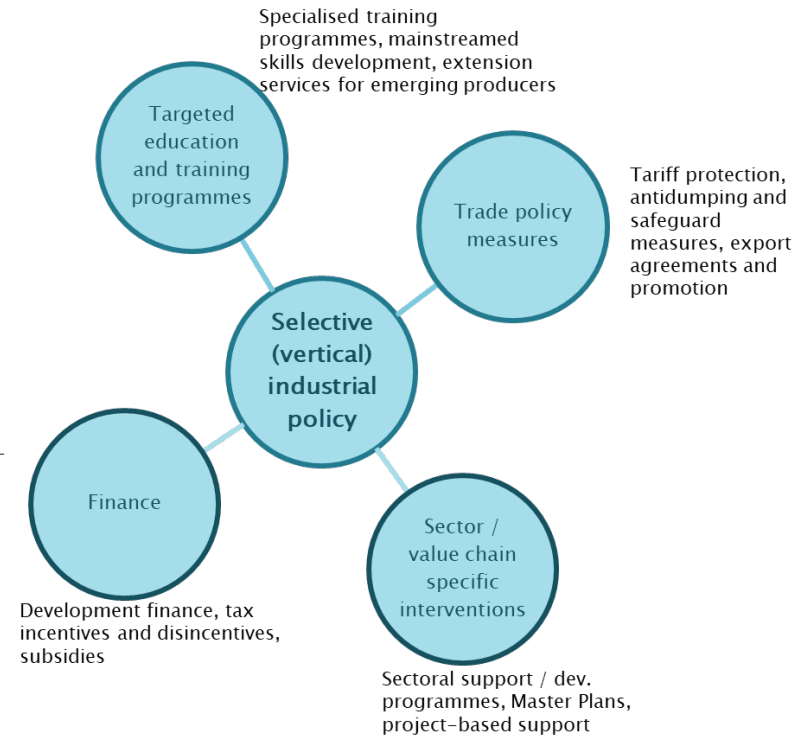
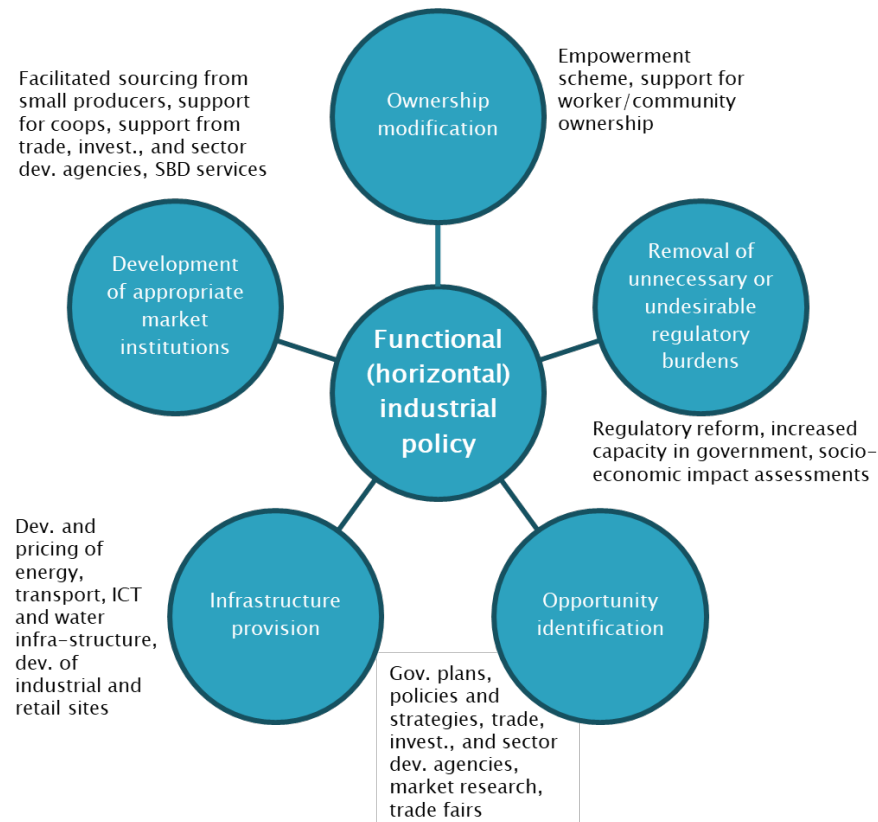
- ▶ As the transition disrupts the economic structure, labour market policies are critical to foster employment and decent work.
- ▶ But labour market policies are mostly effective in an environment characterised by low unemployment, high job creation and economic dynamism.
 - In SA, they have been unable to deliver adequate levels of worker protection
 - Standards are also too low to ensure the promotion of decent work or constitute a



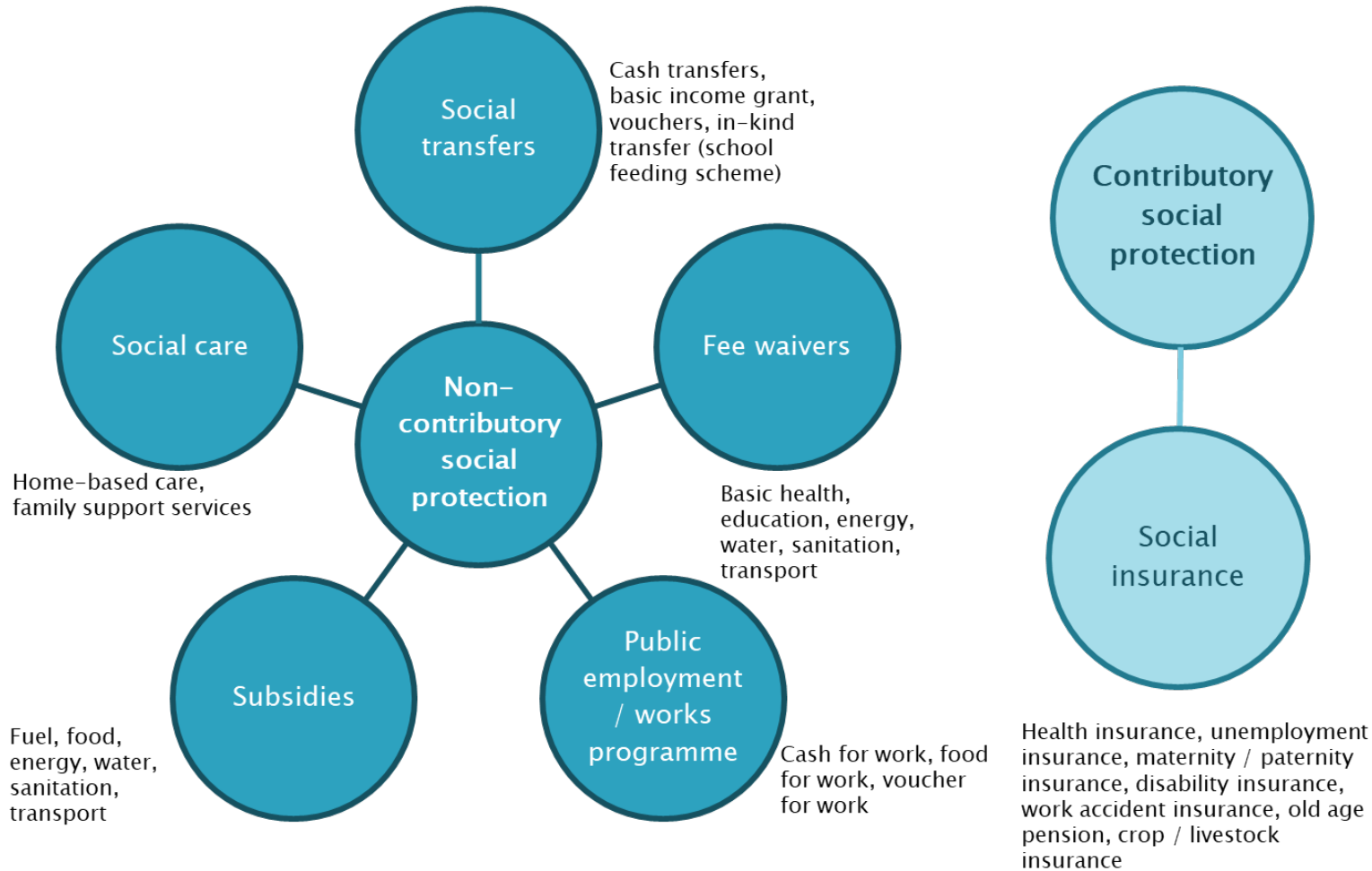
Robust safety net

Towards distributive justice

- ▶ Industrial policy is required to drive investment and support the emergence of new opportunities
 - Numerous policy measures have been implemented in SA to foster a (just) transition to a green economy
 - However, the mix of measures lacks internal coherence, long-term certainty and alignment with other public policy areas.
 - Some interventions still being counter-productive

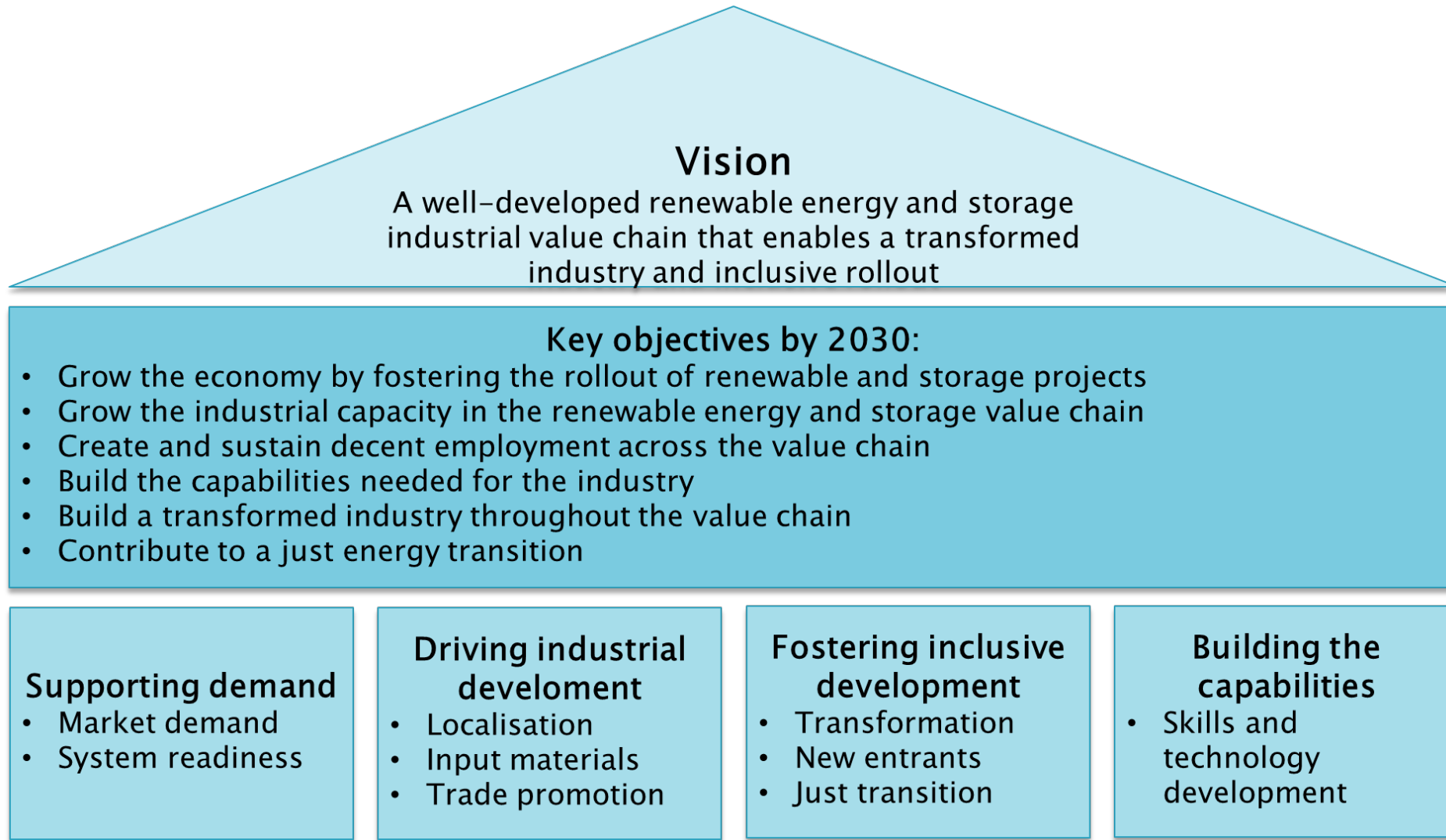


Towards distributive justice



- ▶ **Social protection policies are necessary to provide a genuine safety net to workers and citizens in general and improve the resilience to (climate change) impacts of many people.**
 - SA has a widespread social protection system,
 - Gaps in coverage and insufficient levels of support have however hampered its impact, leaving vulnerable stakeholders in jeopardy of climate impacts

Building the RE and storage value chain



Building the capabilities: Skills & Technology Development

The development and retention of skills is a key pillar which, if not addressed, will constrain the growth of the value chain. Skills development and technology commercialisation are complementary avenues to address this challenge

Mapping and building skills

- ▶ Mapping foundational skills vs. existing skills development (incl. DHET Skills Masterplan process)
- ▶ Amend and/or develop new qualifications

Activating skills

- ▶ Match-making platform between PSETs and industry (PowerUp)
- ▶ Demand-led training programmes (contribution to Yes4Youth, internship, learnership, apprenticeship)

Fostering technology commercialisation

- ▶ Collaborative platform for review of emerging technologies, technology demonstration and trials
- ▶ Match-making platform to accelerate the adoption of new technologies
- ▶ Business incubation and capacity building support to emerging suppliers
- ▶ Re-establish a Manufacturing Technology Centre for RE technologies
- ▶ Set up Solar Research Facility
- ▶ Build a system to enable technology transfer

Trade & Industrial Policy Strategies

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