# Managing a just transition in the coal value chain

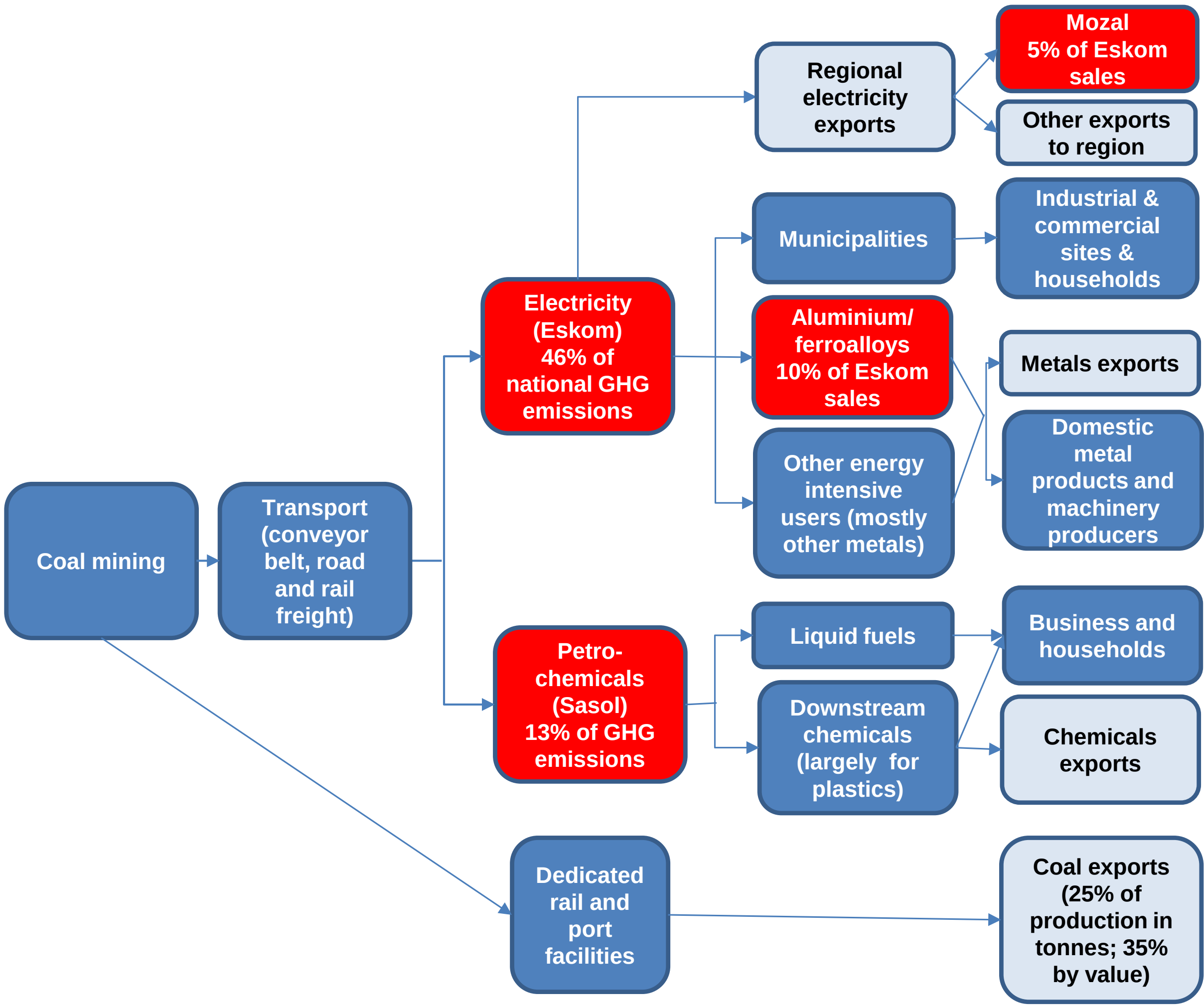
Input to PCC session on the just energy transition

July 2021

v1a

# The coal value chain

- SA produces 7 times as much carbon from coal per person as the international average
- Coal accounts for over half of SA emissions but contributes around 5% of GDP
- Generates 80% of electricity and 20% of liquid fuels (through Sasol)
- Economic challenges:
  - ➢ Renewable technologies now out-compete on generation costs even without counting emissions – although can't ignore transition costs
  - ➢ Burdens on the economy from increasingly uncompetitive electricity system - soaring Eskom tariffs and loadshedding
  - ➢ Investors and financial institutions divesting from coal
  - ➢ Result: declining demand for coal in SA and even more in exports – with shift in rents on domestic sales to mines
  - ➢ Sasol less affected now but will face falling demand in coming years



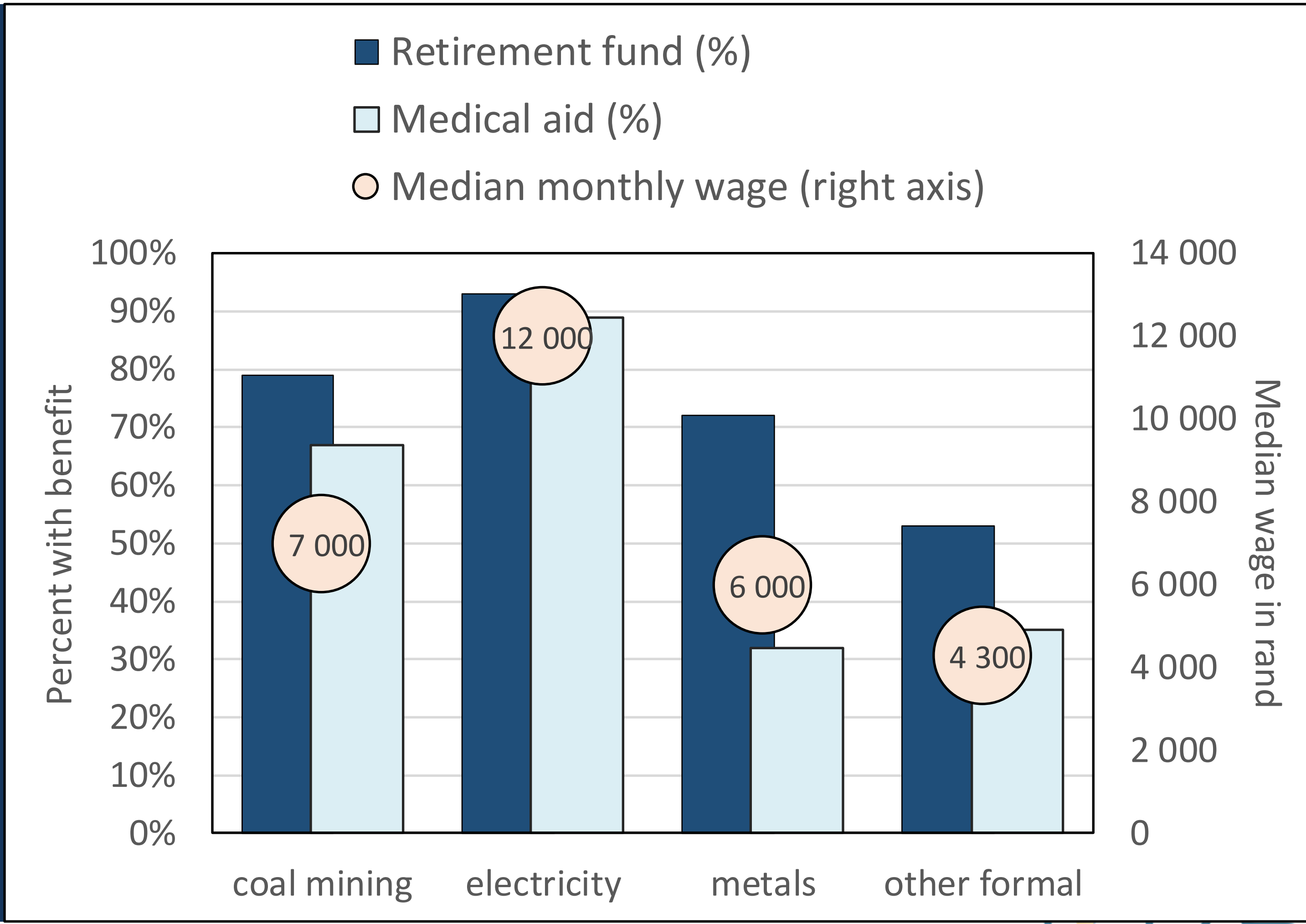
# Why the just transition?

- Basic logic:
  - Creative destruction due technological change is unstoppable
  - Big business has resources to find alternative opportunities, although may have to write off some assets
  - Other groups do not have similar financial, social or educational resources
- Especially important in SA
  - Unusual inequalities in ownership, access to qualifications, and economic networks
  - Slow growth even before the pandemic
- Main questions:
  - Timeframes
  - Who should benefit
  - What are viable and sustainable opportunities, and what are blockages to them?
  - Measures to realise opportunities
  - How to ensure coordinated action in the state and with stakeholders?
  - Resourcing

- 2020 SJRP identifies main groups requiring assistance as:
  - Workers
  - Small business
  - Communities
- Coal VC is mostly capital intensive, so numbers are limited
  - Only 1,5% of formal employment (around 200 000 people, with almost half in mining)
  - Relatively few small businesses in the VC itself (mostly transport companies, some repairs and maintenance, some professionals
  - More serve the communities that depend on coal
- Spatially concentrated – coal VC is the main source of income in four Mpumalanga districts:
  - eMalahleni (Witbank)
  - Steve Tshwete (Middelburg)
  - Govan Mbeki (Secunda)
  - Msukaligwa (Ermelo)

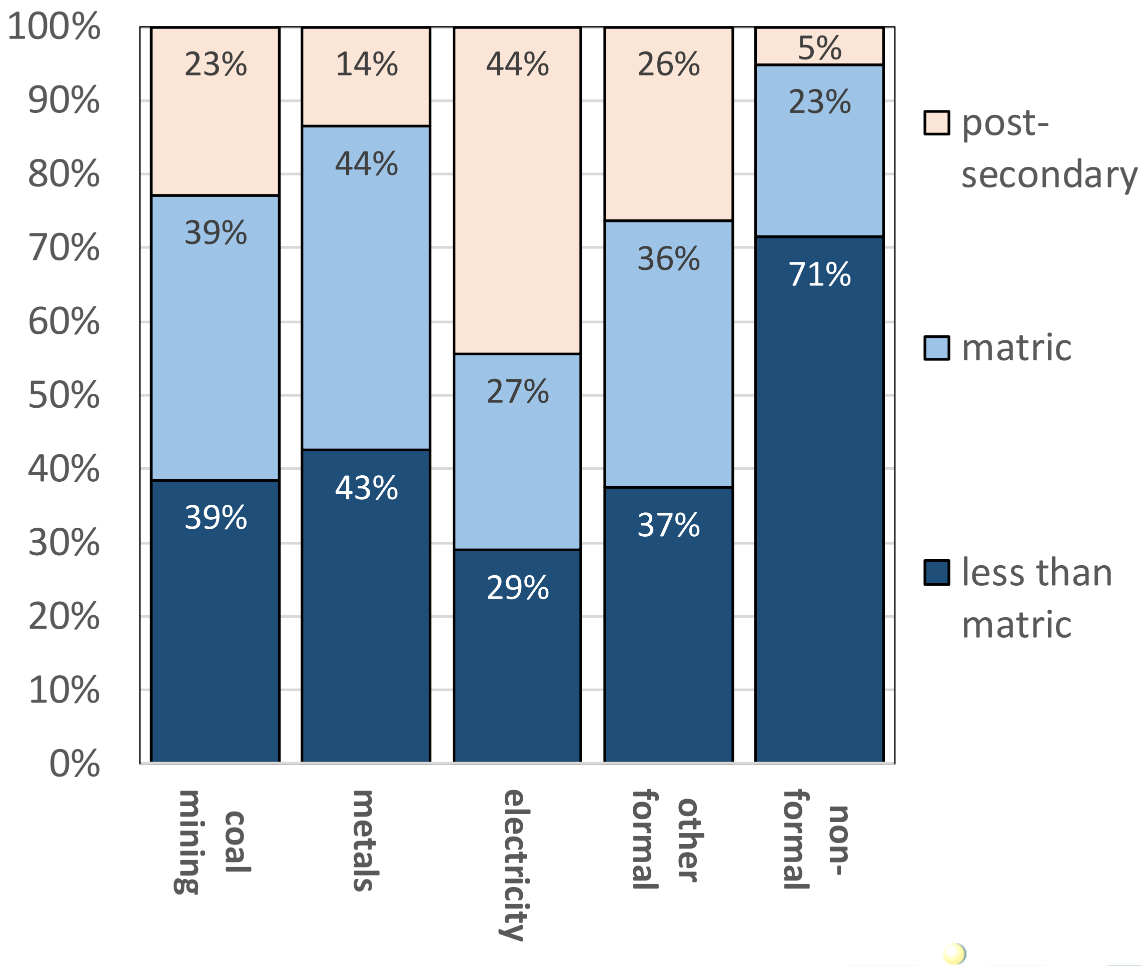
# Employees: Financial resources

- Mines: 90,000
- Eskom: 47,000
- Sasol: 25,000
- Base metal refineries: 47,000 (down from over 70,000 in 2008)



# Employees: Educational and social resources

- Educational levels in the coal VC are around national norm for formal sector, although pay is higher
- Union organisation:
  - 65% in coal mining
  - 80% in electricity
  - 40% in metals
  - 35% for other formal workers
- Around a fifth are aged over 50 – the same as the rest of the formal sector
- Gender:
  - A fifth in coal value chain
  - two fifths in the rest of the formal sector
  - almost half in informal + domestic work
- % African:
  - 80% of miners
  - 70% in the rest of the value chain
  - 70% in the rest of the formal sector
  - 90% in domestic + informal work

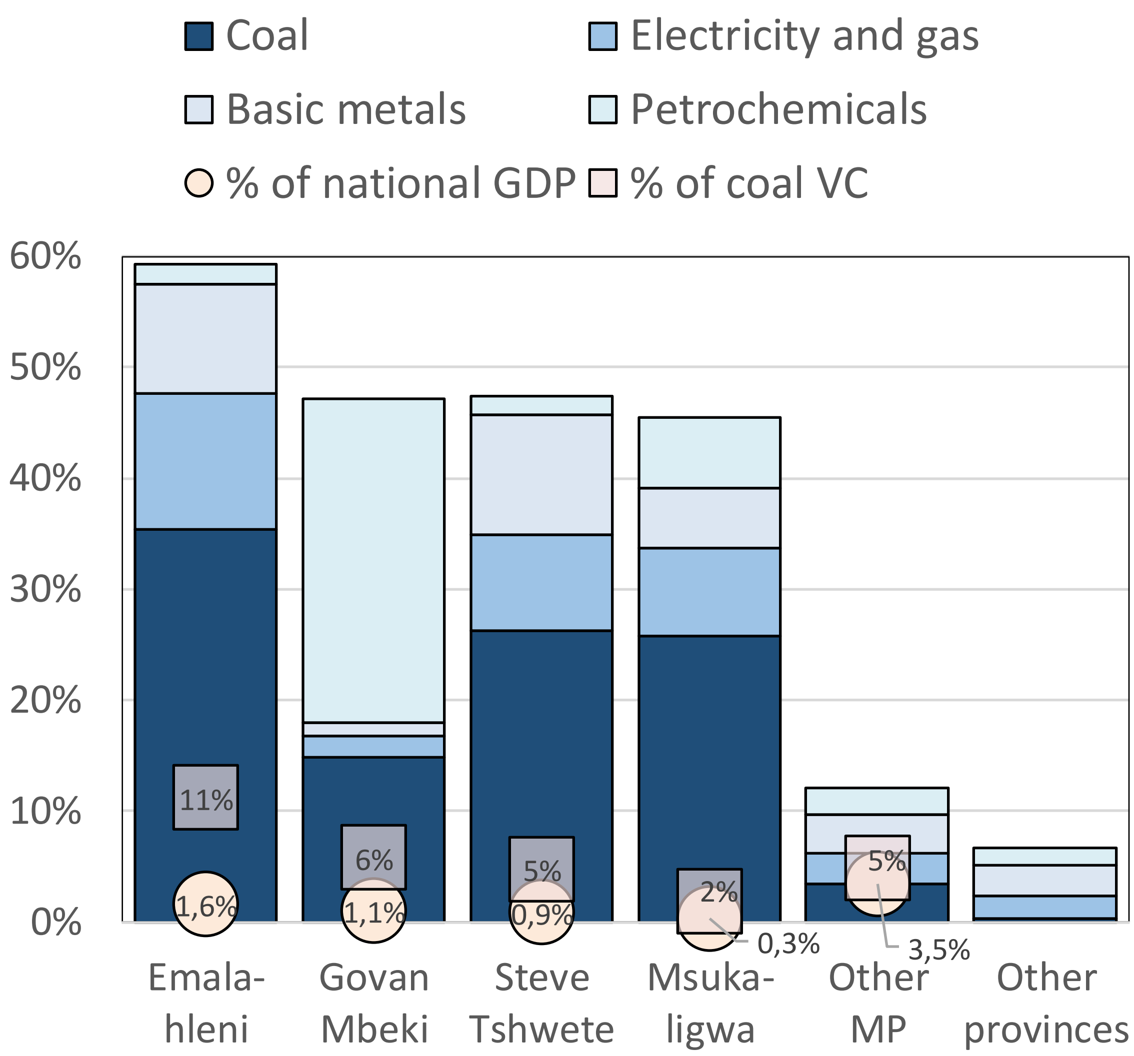


# Coal truckers

- Wide variation in estimates of numbers
  - Eskom estimated 1500 subcontractors transported coal to plants in the mid-2010s
  - In March 2020 Eskom had contracts with 54 companies
- Engagement with coal transporters in 2019:
  - 200 companies, 2000 to 4000 workers
  - Hard to move into other kinds of freight because of configuration of trucks
  - Also harder to get long-run contracts in current Mpumalanga environment

# Communities

- In four Mpumalanga towns, coal value chain contributed around half of economy in 2019 (Quantec estimates) and over a quarter of formal employment
- Coal towns account for around 4% of national GDP and 2% of population, but 25% of coal VC
- Average household income: 25% above national average (was 35% higher in 2000; biggest fall in Emalahleni)
- Share of working-aged population with formal employment in 2019:
  - ➢ Coal towns: 37%
  - ➢ Rest of SA: 32%



# Initial challenge: Foresighting impacts

- Policy on reducing emissions has not been translated into consistent actions
  - ➢ Even IRP not consistently implemented (e.g. procurement plans, Musina Makhado plant)
  - ➢ Carbon pricing and budgets not finalised
  - ➢ Result: Unclear planning timeframes
- Governance of the coal value chain is fragmented
- Main regulatory departments do not have mandate to drive just transition

| National departments | State-owned agencies | Mpumalanga and Limpopo | Municipalities |
|---|---|---|---|
| DMRE: Regulate mining; IRP; electricity market structure; IPP procurement | Eskom: Manage and supply the national grid; transmission lines and purchases from IPPs; pricing subject to NERSA | Promote economic development vision, but limited resources or powers; manage SEZs | LED, but mostly focused on infrastructure provision; manage municipal budgets and local infrastructure provision |
| dtic: IDC and incentives; SEZs (Musina Makhado); BBBEE | | | |
| DFFE: Emissions targets; regulate pollution; promote just transition | Transnet: Coal transport to ports and power stations | | |
| NT: Subsidies to Eskom; carbon and mining taxes | | | |

# SJRP proposals

- **Implementation capacity**
  - ➢ Clarify mandates and KPIs across government structures in the coal VC
  - ➢ Strengthen SLP and accountability
  - ➢ Agency able to drive process across government functions
    - Requires capacity, resourcing and authority
    - Risk management is critical for innovation
    - How to ensure accountability and voice for stakeholders, especially workers and communities?

- **Economic diversification**
  - ➢ 10-year time horizon
  - ➢ Identify viable and sustainable clusters and position in major value chains
    - Build on strengths of the Vaal triangle (capacity, infrastructure, proximity to major markets)
    - But be aware of obstacles to diversification (sunk investments; unequal access to assets and skills, infrastructure, land and water; risk aversion; government licencing and infrastructure)
  - ➢ Test options in terms of both viability and impacts on workers and communities
  - ➢ Manage risks through monitoring and evaluation systems

- **Active labour market policies**
  - ➢ Necessary but not sufficient given unusually high joblessness
  - ➢ Assist individuals and small businesses with skills development and information about opportunities
  - ➢ Start early rather than waiting for crisis
  - ➢ Core risk: Cannot find equally stable and well-paid jobs or business opportunities for workers without post-secondary education

- **Social protection**
  - ➢ Develop early warning systems
  - ➢ Build on existing support systems, especially UIF and employment schemes

# Some tough issues

- Targets and timeframes as basis for determining impacts on different stakeholders and planning transition
- Securing consistency across the state
- Empowering stakeholders without ignoring economic and technical realities
  - How to give voice and agency to marginalised? Requires space to engage but also adequate information sharing
  - How to shape a discourse of reason, not power?
- Managing risk of innovation – means accepting some losses, but ensuring that overall they are smaller than the costs of inaction

# Re a leboha!