Symposium on a just coal transition for South Africa
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Industrial policies for a just transition in South Africa's coal industry

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Trade and Industrial Policy Strategies (TIPS)

TIPS

Overview

- Defining the problem and its causes from an industrial-policy standpoint
- An industrial policy approach to the just transition
- Way forward

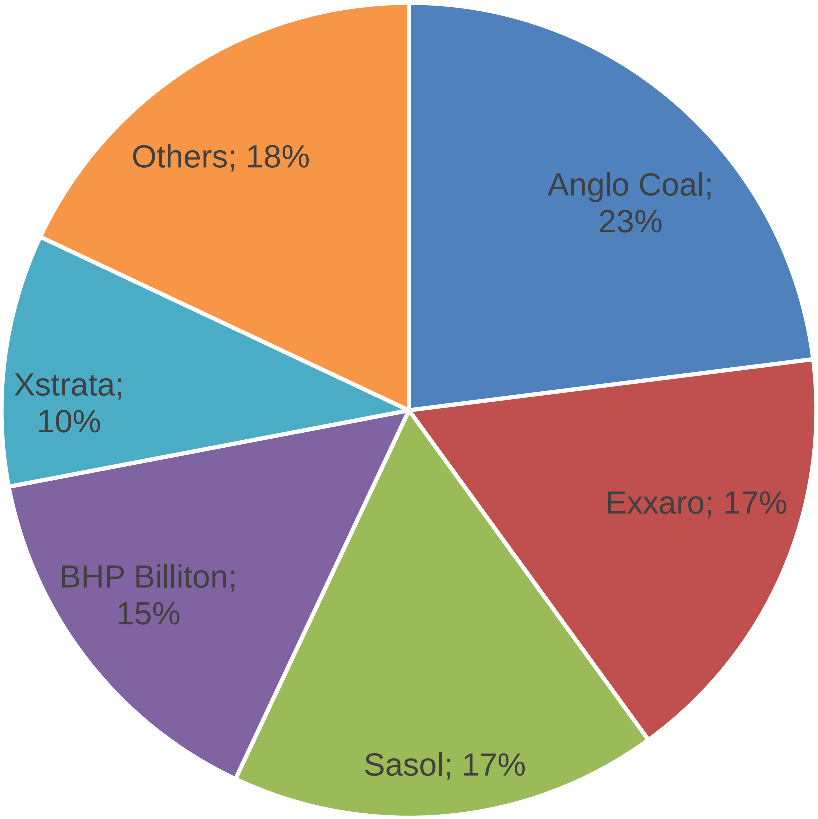
The problem

- Decline in demand for coal due to growing internalisation of external costs domestically and internationally and the emergence of new, cheaper power generation technologies
- Immediate impacts along the value chain
  - ➢ Downsizing in coal-based production (Eskom, Sasol, some metals) and consequently fall in coal prices/production
  - ➢ Direct impacts: Job losses for workers in mines and electricity plants, severe impact on smaller mines, disinvestment from communities, empowerment issues
  - ➢ Indirect impacts:
    - Producers of capital goods and logistics suppliers, both local and national, see lower demand
    - Long term decline and joblessness unless able to get into other value chains

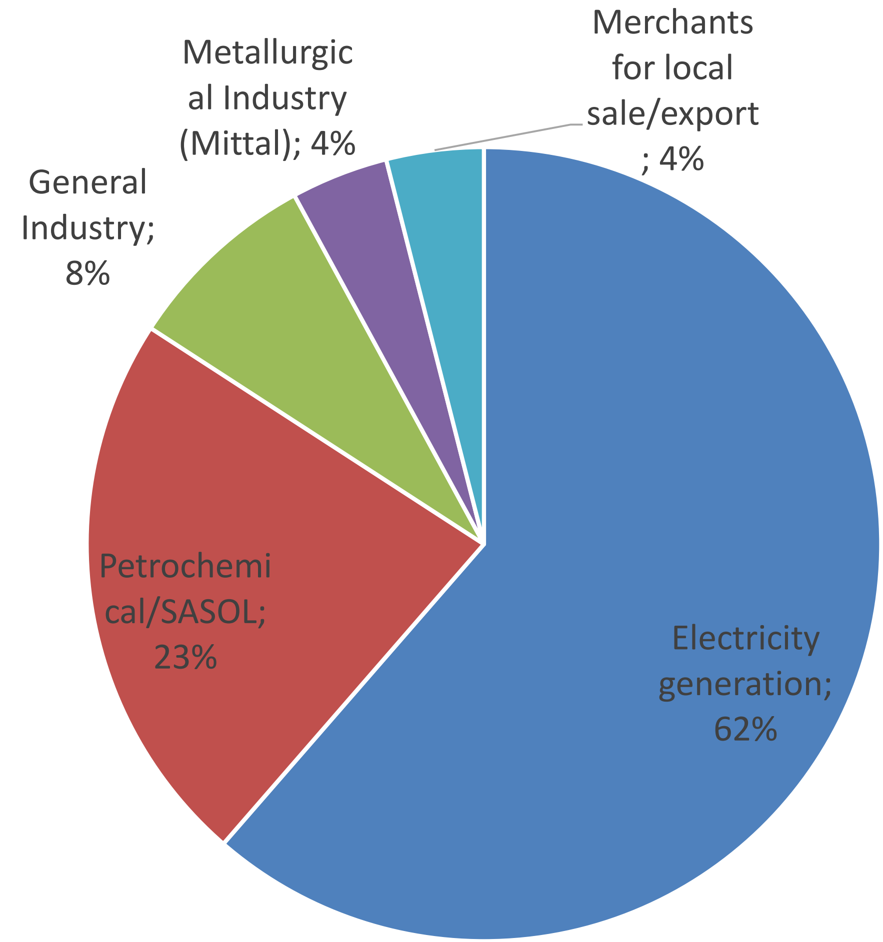
- Creative destruction *vs* preserving existing production
- Requires a just transition – that is, ensuring poor and working people do not bear the costs
- Especially in a democracy

The coal value chain

- The industry is highly concentrated with a handful of firms sharing majority of the market.

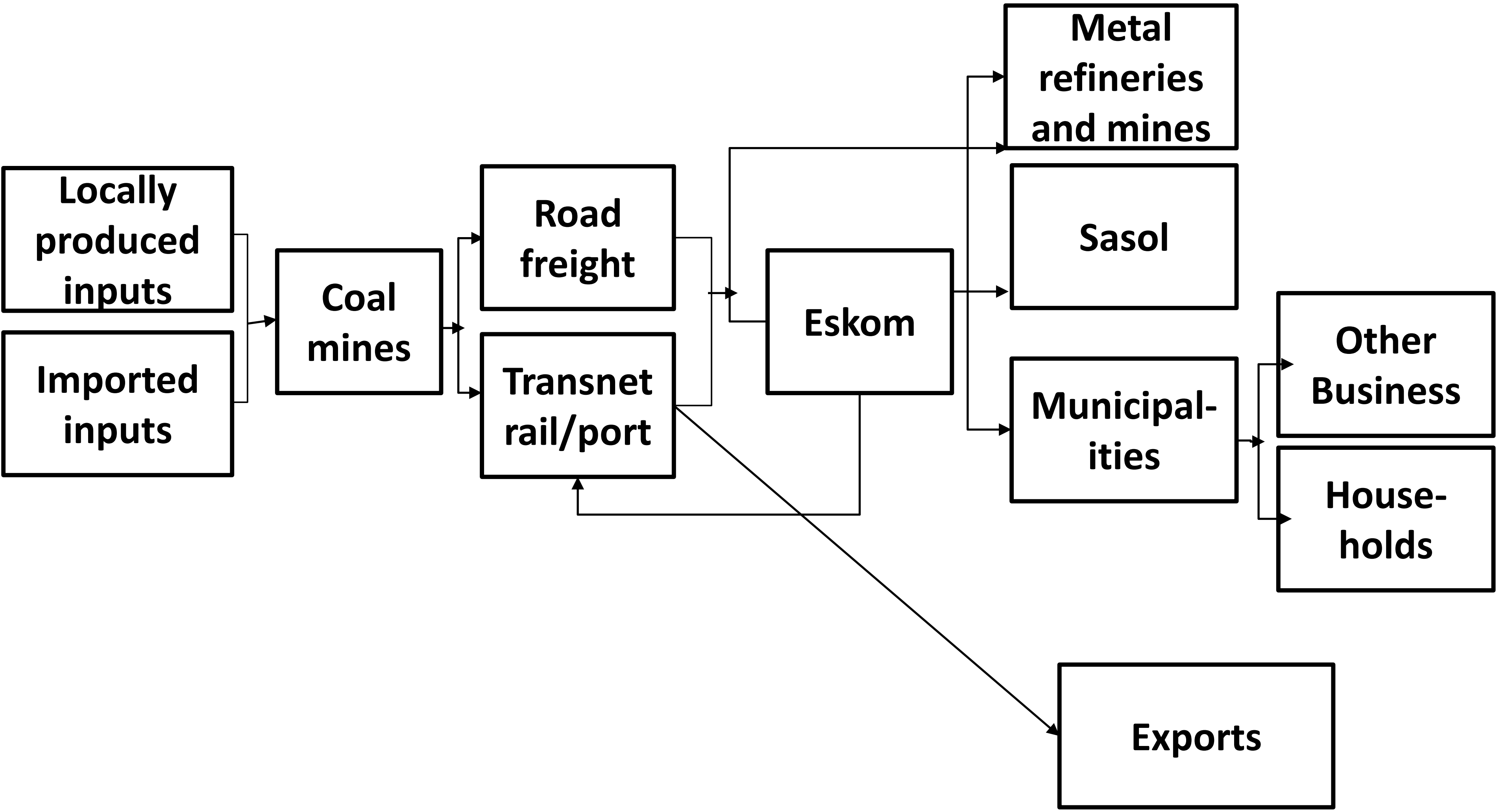


Source: Fossil Fuel Foundation, 2011, p. 33



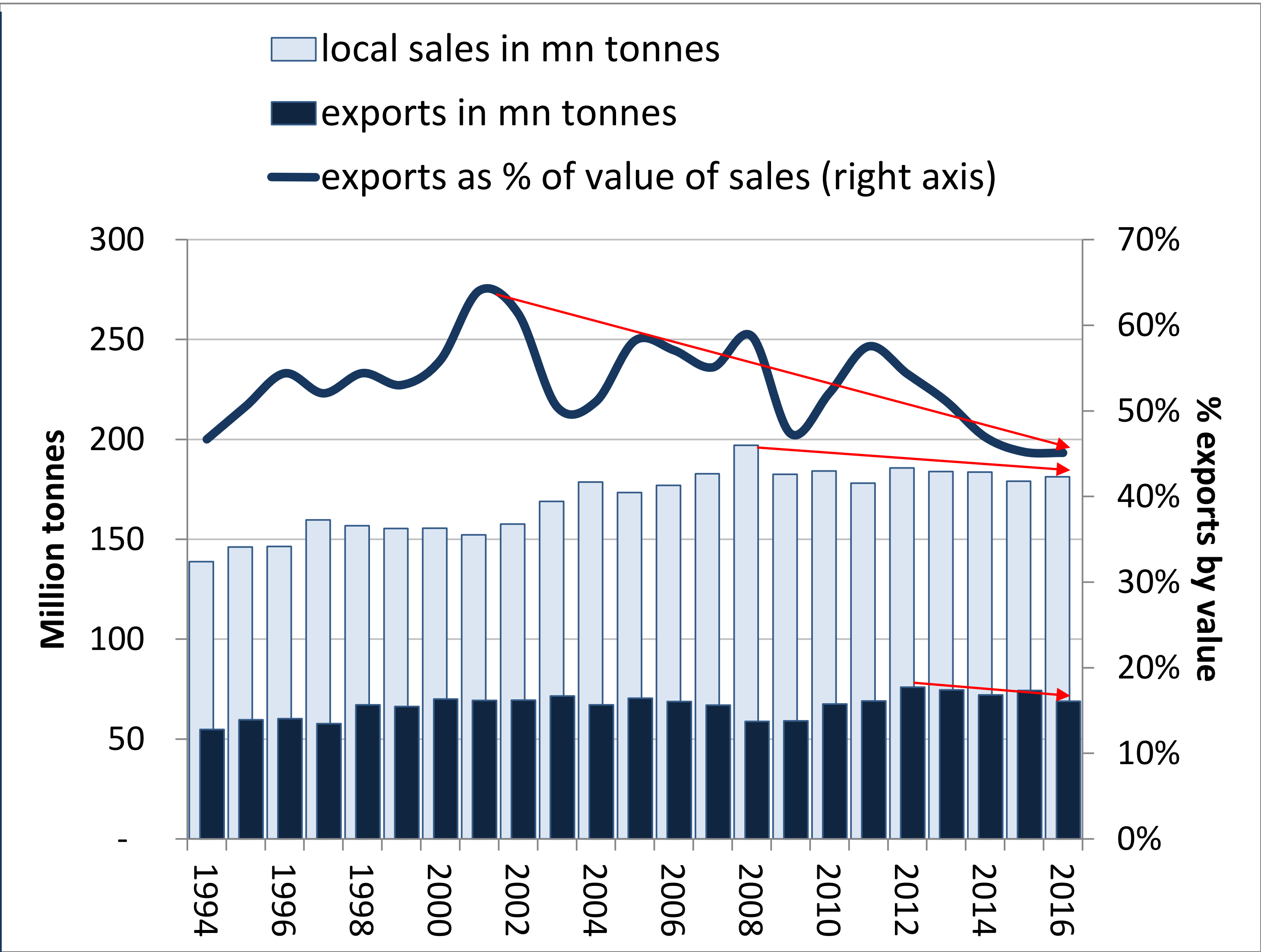
Source: DoE, 2018

The coal value chain

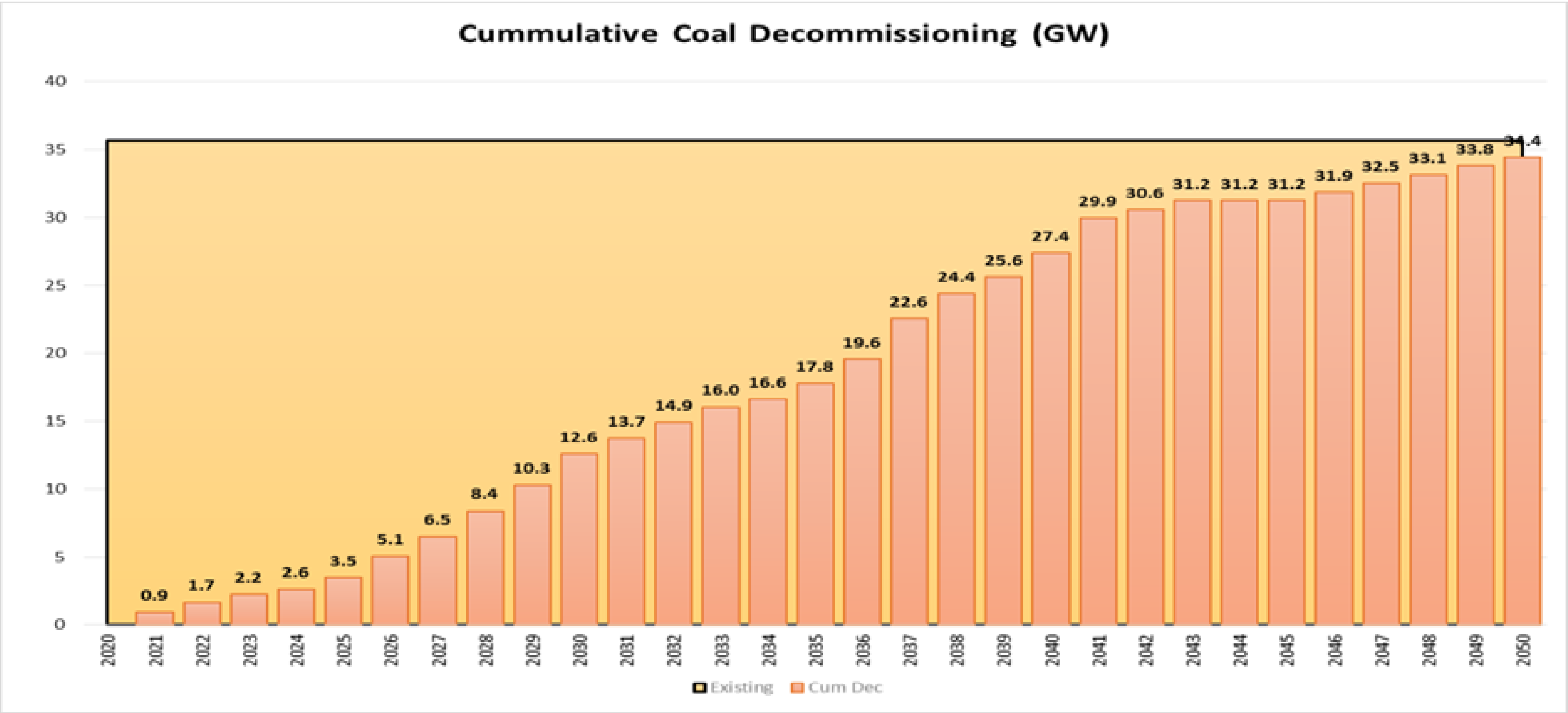


The coal value chain

- Decline in coal sales by volume:
  - Domestic use – 8% since 2007
  - Exports – 9% since 2012
- Ended run of growth from 1994



The coal value chain
Local demand



Source: DoE, 2018

The coal value chain
Export Market

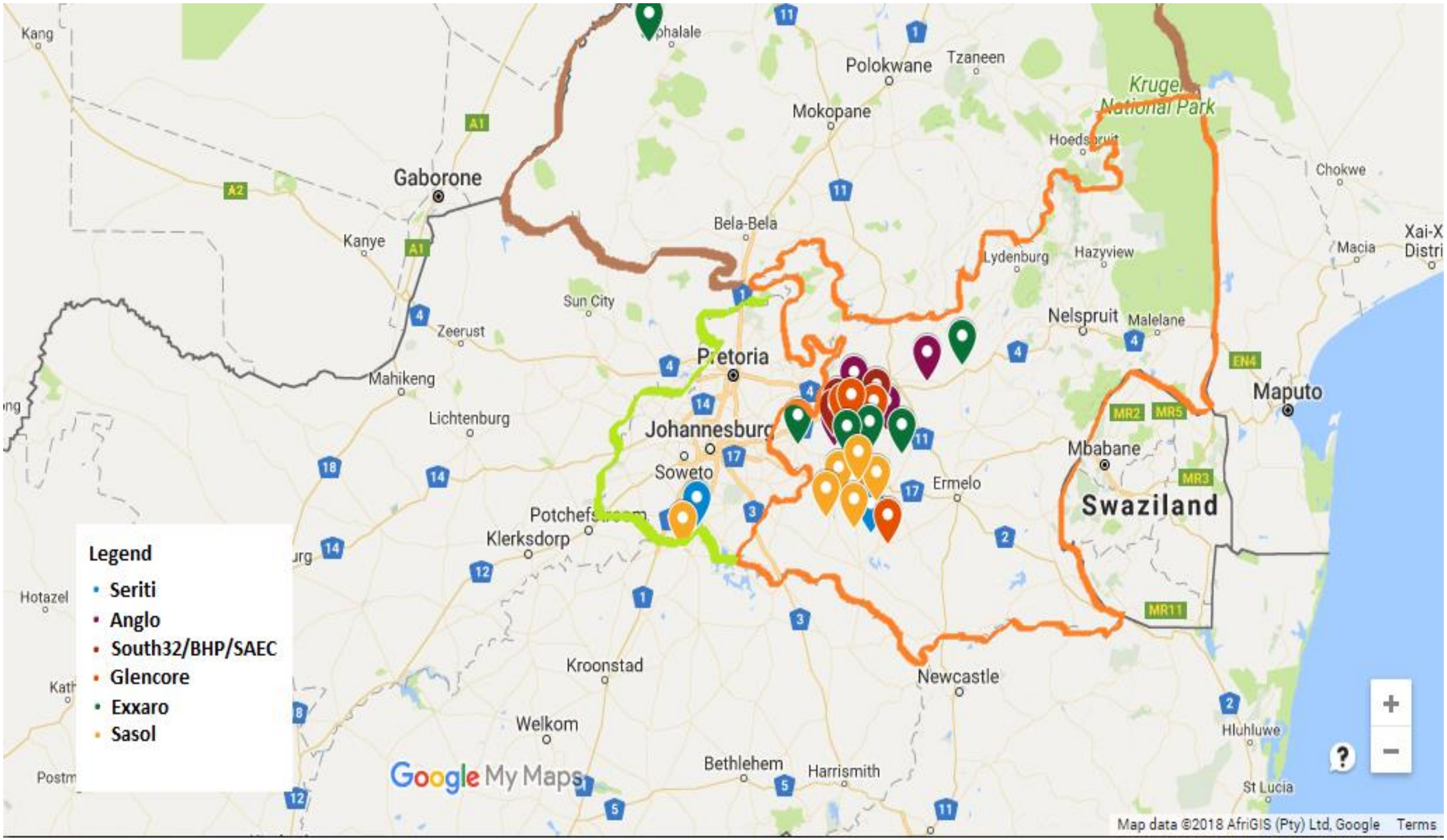
- Approximately 50% (in value terms) and ~30% (in volume terms) of coal is exported
- Most SA coal exports are destined for India, which takes up about 45% of coal export volumes. India started to become an important market for South African coal in 2007 with increasing coal capacity additions
- Developed countries have been reducing demand for coal
  - Netherlands consumed more than 20% of South Africa's coal export volumes, in 2011 this went down to approximately 5%.
  - The UK reduction appears sudden, from 17% in 2004 it has averaged 1% since 2009.
  - France, Spain, Denmark, Germany have had similar reductions in coal imports.
  - India announced plans to stop coal imports
- China taken drastic measures to reduce CO2 emissions. Mine closures and reduced operating days

Why can new opportunities not be assumed?

- Slow growth/high unemployment nationally means fewer options for communities and workers
- Differentiated impacts:
  - ➢ Big business (mining conglomerates, 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 opportunity cost of moving industries/homes, knowledge of opportunities
  - ➢ Communities: capacity to diversify depends on infrastructure, education and skills, business capacity and proximity to economic hubs

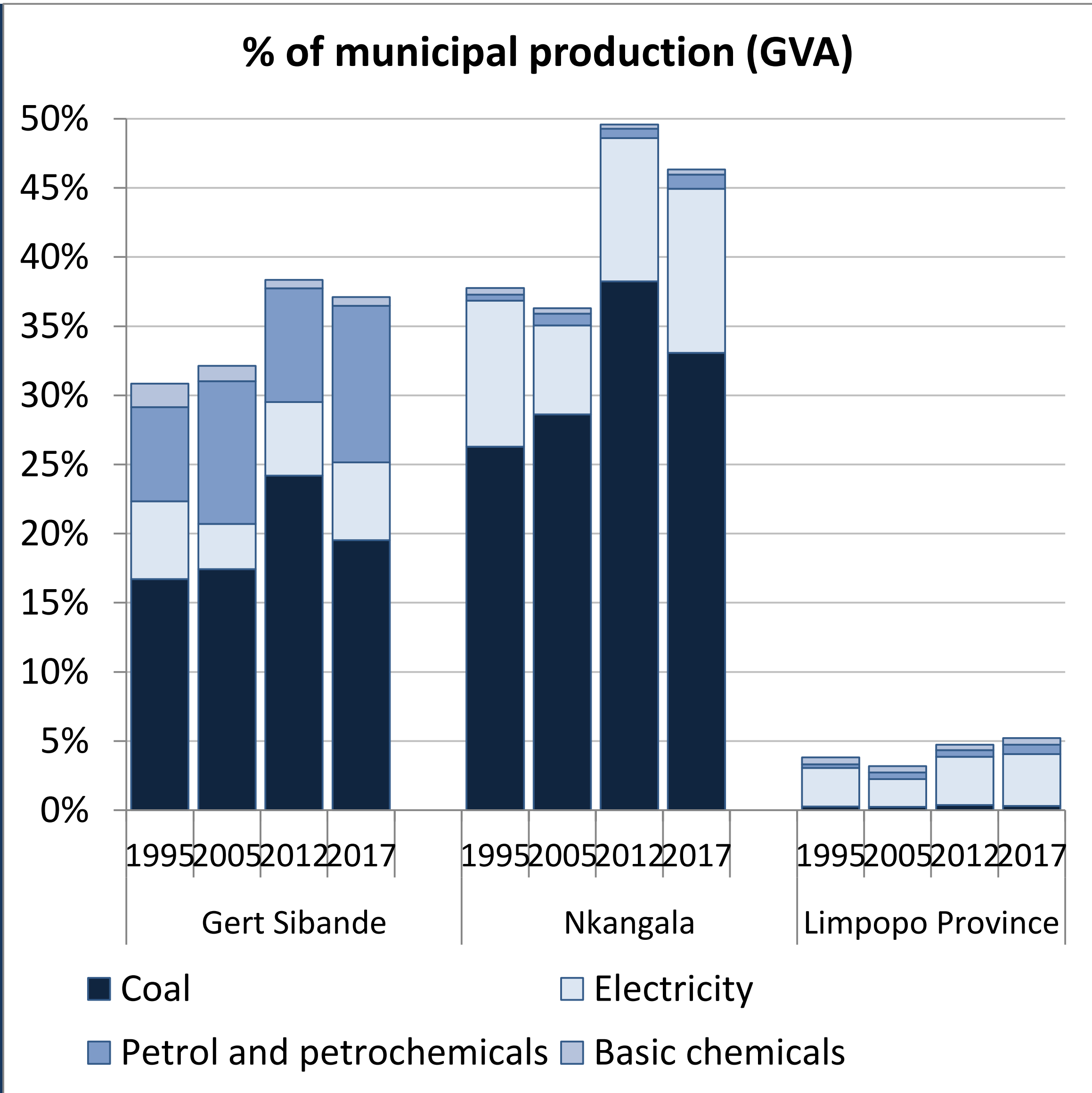
- Power:
  - ➢ Risk that stakeholders use economic, political and social power rather than adapting – but lose in the longer run
  - ➢ Who has power in the coal mining value chain?
    - Eskom
    - Mining companies (but larger ones can leave)
    - Logistics players – Transnet, road freight
    - Communities (municipal governments, province)

Mining towns



Mining towns

- Population of just over 1 million in main mining centres (twice as high as in 1996)
- Average household income R6000 – it's R5000 nationally
- Around 55% of working-aged adults employed, compared to 40% nationally
- But only one in seven has formal skilled work, compared to one in five nationally
- Impacts:
  - ➢ Household incomes, with multiplier to business
  - ➢ Closure of suppliers to mines and households
  - ➢ Both affect municipal revenues



Workers

- Coal miners:
  - Around 80 000, mostly in Mpumalanga
  - Lost 10 000 jobs since 2013
  - Median pay: R7000/month – other mining: R9000; other formal: R3500
  - Two thirds have matric, but only a quarter have more
  - Median age is 38 – same as other mining but older than others outside public service and domestic
  - Two thirds are union members, and 90% have a retirement fund

- Eskom
  - Total employment of 50 000 – plans substantial downsizing
  - Not clear how many in Mpumalanga
  - Average (not median) pay: R12 000/month
  - Mostly union members with pensions

- Others in value chain:
  - Construction
  - Capital goods production, maintenance and repairs
  - Downstream chemicals

- Transport workers in Mpumalanga
  - Around 40 000 in total
  - Not clear how many in coal or Transnet (survey found 10 000 in freight)
  - Median formal pay (excludes taxis): R4500/month
  - Median age of 35 compared to 38 in rest of country
  - Around half are union members and have a retirement fund

Workers

Direct employment in coal industry in South Africa, 2013-2017

Province/municipality	2013	2014	2015	2016	2017
South Africa	**88,038**	**86,103**	**77,748**	**77,223**	**82,247**
Mpumalanga	**75,330**	**73,675**	**66,524**	**66,075**	**70,364**
Gert Sibande	**22,412**	**21,881**	**19,728**	**19,564**	**20,804**
Albert Luthuli	1,315	1,297	1,180	1,181	1,266
Pixley Ka Seme	74	72	66	65	69
Msukaligwa	5,346	5,292	4,835	4,857	5,229
Lekwa	2,157	2,076	1,848	1,808	1,898
Mkhondo	1,865	1,860	1,711	1,728	1,872
Govan Mbeki	11,655	11,284	10,088	9,925	10,470
Nkangala	**52,482**	**51,371**	**46,415**	**46,135**	**49,162**
Victor Khanye	1,877	1,848	1,679	1,678	1,797
Emalahleni	36,824	36,002	32,492	32,262	34,342
Steve Tshwete	13,275	13,024	11,793	11,746	12,542
Emakhazeni	506	497	451	449	481
Ehlanzeni	**436**	**423**	**381**	**376**	**398**
Nkomazi	436	423	381	376	398

Source: Quantec

Small business

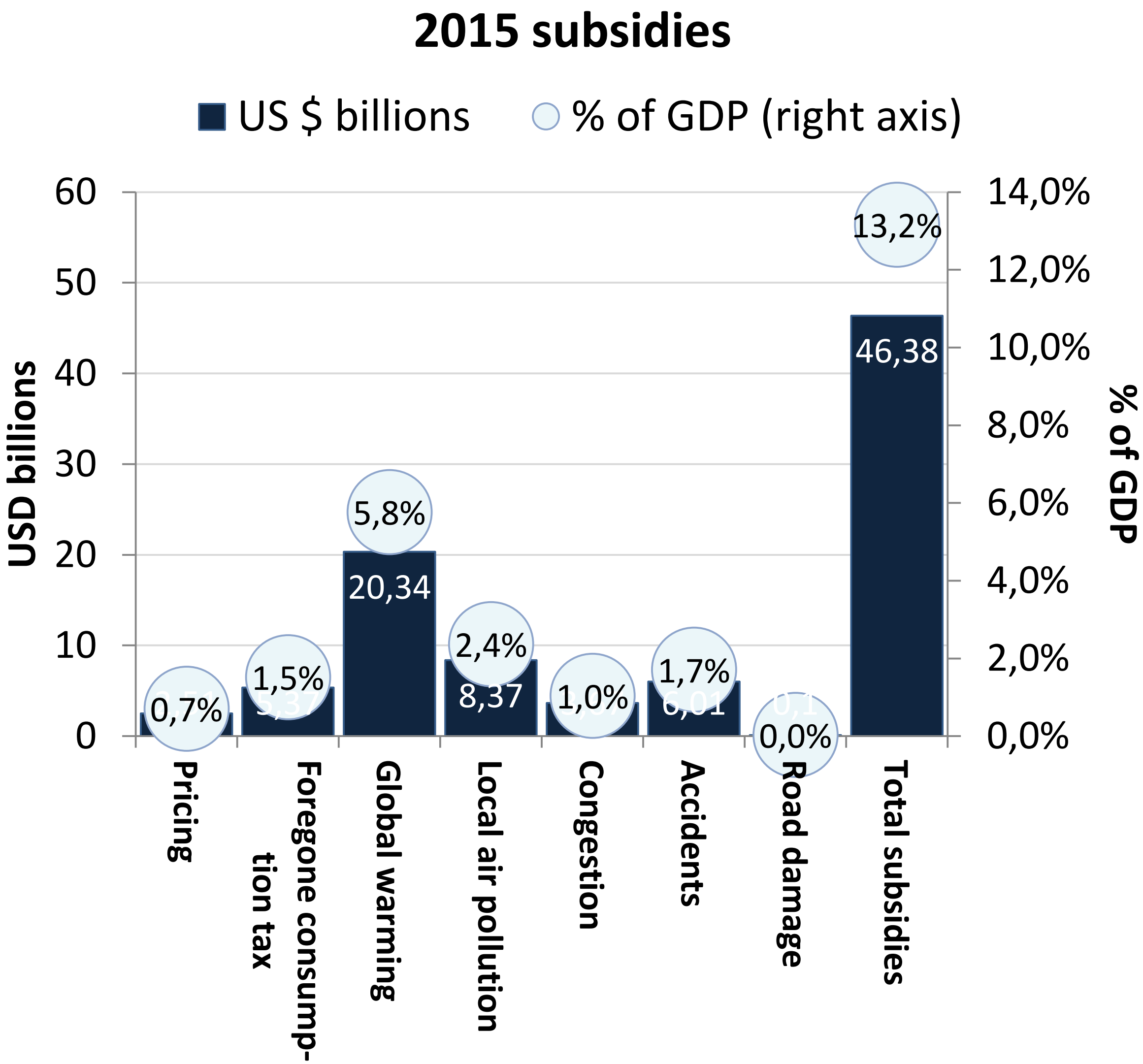
- In the value chain:
  - ➢ Upstream of coal and electricity – maintenance, repairs, adaptation of equipment and production of specialised inputs
  - ➢ Construction – how much is outsourced? To whom?
  - ➢ Logistics – how many small companies are actually involved?

- Companies that depend on mine and electricity labour force
  - ➢ Retail,
  - ➢ Food and clothing producers,
  - ➢ Entertainment,
  - ➢ Housing construction,
  - ➢ Others?

What does not work?

- Rescue packages for companies that enable them to remain longer in coal VC rather than finding new opportunities
- Ignoring the problem and hoping it will go away
- Incoherent state actions at national, provincial and local levels
- Ignoring stakeholders' imperatives and insights – large and small business, workers, communities
- Overstating likely benefits and understating risks
- Over-engineering solutions

Fossil fuel subsidies



- SA ranks
  - 12th in terms of subsidies as % of GDP
  - 23rd in terms of per-capita subsidies
- Mostly due externalities
- Makes SA very vulnerable to external sanctions and market trends
- Are benefits of coal worth more?

Source: IMF

Active labour market policies

- Focused on helping individuals find new opportunities
- Inputs:
  - Information about possibilities
  - Training
  - Support for new and existing small business (incubators, mentoring, training, finance, etc.)

- Assumption that blockages are essentially information and skills and that people are mobile (geographically, intellectually and/or functionally)
- Usually works only if the rest of the economy is growing well

Necessary, not sufficient

Regional development strategies

- Aim to diversify into new clusters oriented toward sustainable demand, building on existing strengths but outside of mining and energy
  - ➢ Identify where can leverage national/ international value chains – where is demand?
  - ➢ What are strengths in terms of
    - Business capacity
    - Workforce skills and experience
    - Support institutions (universities, research centres, financial and development agencies, incubators, etc.)
    - Infrastructure – logistics, water, energy, waste disposal
- Inevitably risky – but unavoidable

- Policy instruments
  - ➢ Information on opportunities
  - ➢ Infrastructure provision
  - ➢ Skills development
  - ➢ Marketing support (producer co-ops? Cluster institutions? Agencies?)
  - ➢ Industrial finance
  - ➢ Leverage BBBEE
- Requires coordination across the state

Way forward

- **Employment vulnerability assessment (NEVA) and resilience plans (SJRPs)**
  - Understanding of the impact and timeframes
  - Stakeholder consultation and engagement
  - Soft-landing strategies

- **Diversification strategies**
  - Leveraging skills
  - Existing infrastructure (transport, energy, ICT)
  - Proximity to economic hub / energy demand
  - Existing supply chains
  - New economic opportunities, e.g. green economy transition, but not necessarily in the energy sector

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