# Post-covid industrial policy in the context of the climate crisis

**TIPS Development Dialogue**

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# Key take-aways

- Industrial policy must contend with broader structural inequality, the climate crisis, and ongoing domestic challenges (e.g. loadshedding)
- Heavy dependence on coal means success of industrial policy is interlinked with emissions reduction
- Emissions reduction across Eskom, Sasol, steel and the automotive industry
  - In line with the JET-IP
- Emissions reduction efforts and the industrial project depend on getting key cross-cutting strategies right

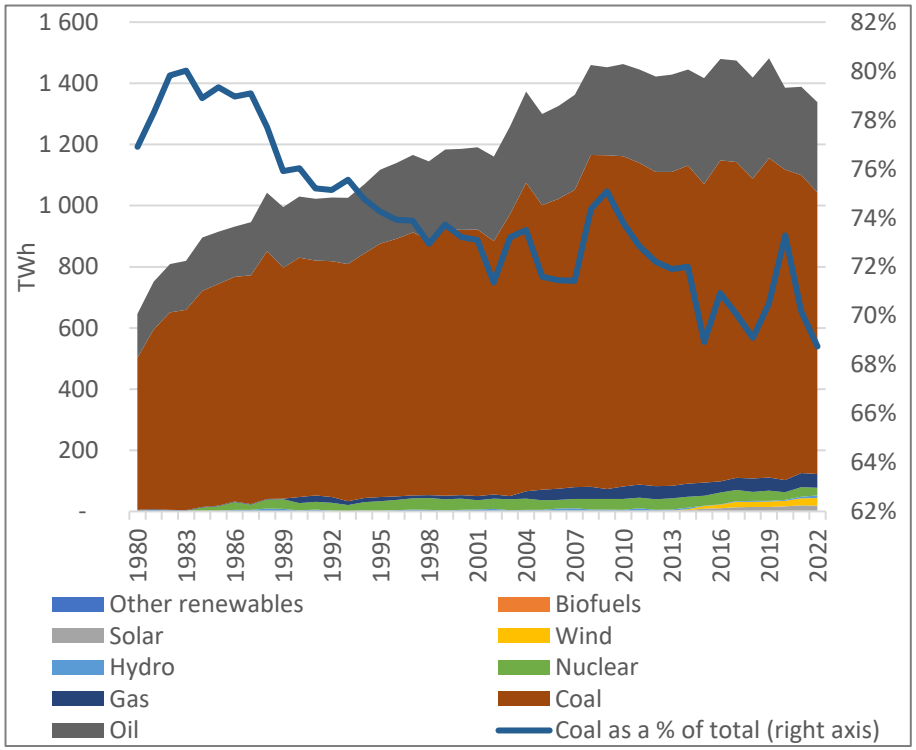
# Nature of the problem

- The biggest challenge for SA industrial policy is contending with climate change within the context of deep structural problems
  - High joblessness, structural inequality etc.
  - Rents from mining have not fundamentally changed the structure of the economy
  - Production and export earnings are still largely linked to mining industry
- How key economic partners respond to climate change will affect South Africa's industrial policy
  - i.e. impact of CBAM given SA's heavy coal dependence

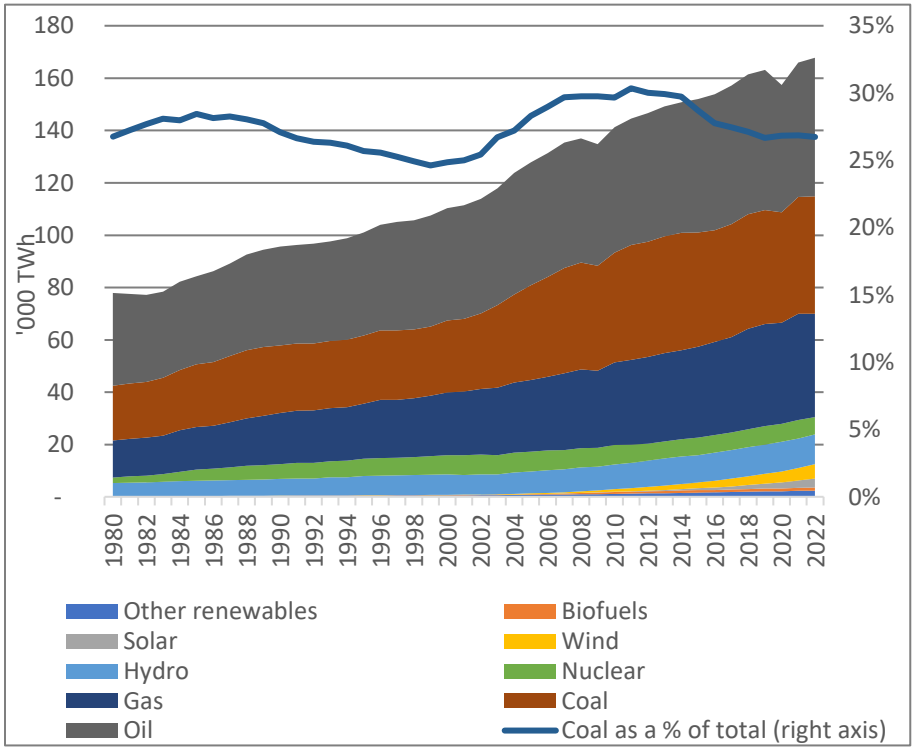
- Paper aims to:
  - Explore how industrial policy will be shaped by, and respond to the climate crisis,
  - Outline some of the actions being taken to respond to climate change in key industries,
  - Briefly outline the implications for cross-cutting strategies like localisation and infrastructure investment.

# South Africa is heavily dependent on coal

**Graph 1: SA energy consumption by source**




**Graph 2: Global energy consumption by source**




Calculated from Our World in Data information downloaded from https://ourworldindata.org/ in November 2023

- Coal is the foundation of South Africa's economy – far above global norms
  - Linked to electricity generation and industries at the forefront of both industrial policy, and carbon emissions
  - The bulk of local emissions come from Eskom, Sasol, other industry (e.g. steel) and transport
  - Significant emissions reduction requires changes in these areas

# Direct and indirect impacts

**Biophysical impacts**

- Increasing frequency of storms, droughts etc.,
- High numbers of internally displaced, injured etc.,
- Damage to infrastructure leading to economic losses
  - An estimated R2.7 billion in economic losses in 2021 (R5.2 trillion globally according to AON)
  - Responses to these more frequent disasters re-directing resources away from policy spending

**Impact from policy responses**

- Key economic partners putting in place policy to respond to climate
  - CBAM in EU, with potential similar policy considered in other countries
- Such policy will increase the cost of SA exports, given heavy use of coal-generated electricity
- Industries relying on coal as feedstock also at risk if they don't explore alternative feedstock
  - SA petrochemicals particularly at risk wrt feedstock

# Local emissions reduction efforts

- Reducing emissions across Eskom, Sasol, other industry (like steel) and transport would significantly reduce SA's carbon footprint
  - Eskom and Sasol account for more than 60% of emissions, 10% for transport
  - Notable synergies between these industries (also in line with the JET-IP)
  - Also key drivers for re-industrialisation efforts

Eskom:

- Increasing use of renewables and decommissioning coal-fired power stations
  - Electricity Regulation Amendment Bill (2023) – to remove licencing requirement for embedded generation
  - Komati decommissioned

Sasol:

- Securing 1200 MW of renewable energy by 2050
- Producing green hydrogen in Sasol
- Feasibility of green hydrogen hub in Northern Cape (in partnership with AMSA)
- Developing a fine coal briquetting technology to reduce the use of coal as a feedstock

AMSA:

- Increased used of scrap
- Increased use of renewable energy etc.

# Implications for cross-cutting strategies

- The energy crisis
  - The ongoing energy crisis redirecting resources from energy transition,
  - Can't produce without electricity – increased diesel spend for Eskom and for businesses (those that can't spend on renewables)
- Localisation and other industrial policy tools
  - Industrial policy tools must be redesigned to support decarbonisation goals
    - Requires alignment of infrastructure project to achieve benefits from scale
    - SA could benefit from local production of renewables, but already falling behind, with imports rising
    - Freight emissions reduction could benefit localisation by making imports more expensive, and local production more competitive
- Infrastructure
  - SA has faced significant infrastructure damage since 2020 – especially rail (for scrap)
  - Similarly, roads and ports face problems, impacting local exporters
  - New investment is needed to support emissions reduction and re-industrialisation
    - The shift to EVs will require wide-scale installation of charging infrastructure
    - Benefits from local EV and charging ports manufacturing

**Thank you!**