

TIPS FORUM 2023

INDUSTRIAL POLICY IN AN ERA OF GLOBAL STRUCTURAL CHANGE: IMPLICATIONS FOR SOUTHERN AFRICA

Nipping economic stagnation in the bud: the role of transmission infrastructure in South Africa's green economy industrialisation

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Industrial Policy in an era of global structural change: Implications for Southern Africa

Situating the grid in SA's economy

*A greener grid is different from a decarbonized one
Technologically, spatially, operationally*

Industrialization
opportunity

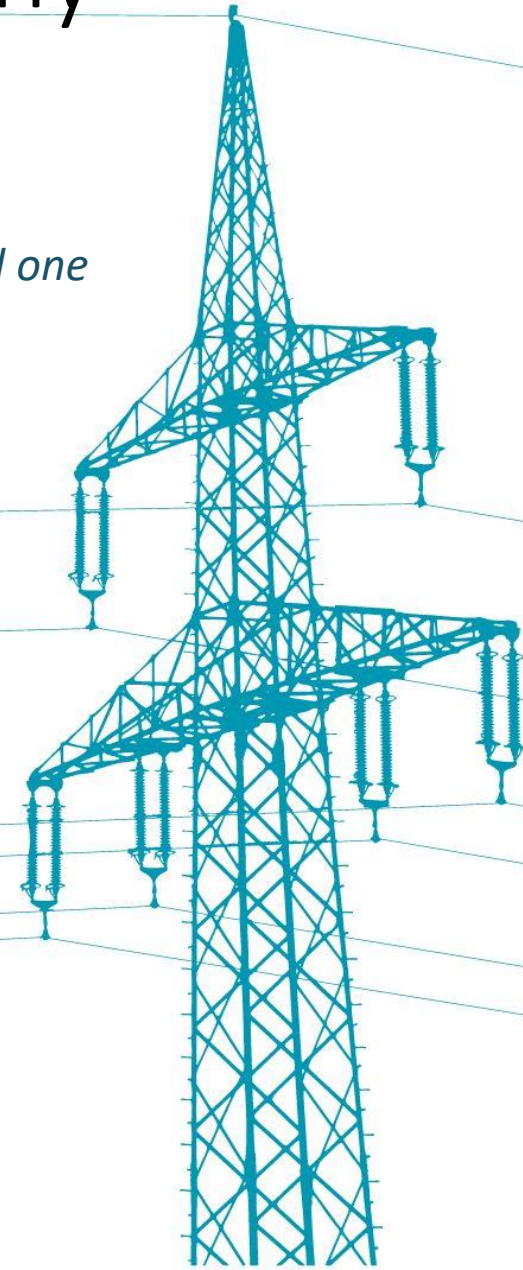
Enabler of new green industries

NDP

NIP2050

Backbone of the economy

Common good






Quantifying the opportunity

Overhead lines and transformer capacity required to facilitate + 53 GW of capacity by 2032

Average yearly rate of transmission line build-out

Km

	 Transformer Capacity	 KM of Overhead Lines	 Cost Estimate
2023-2027	27 GVA	2893 km	48 bn ZAR
2028-2032	79 GVA	11325 km	~187 bn ZAR
Total	106 GVA	14218 km	~235 bn ZAR

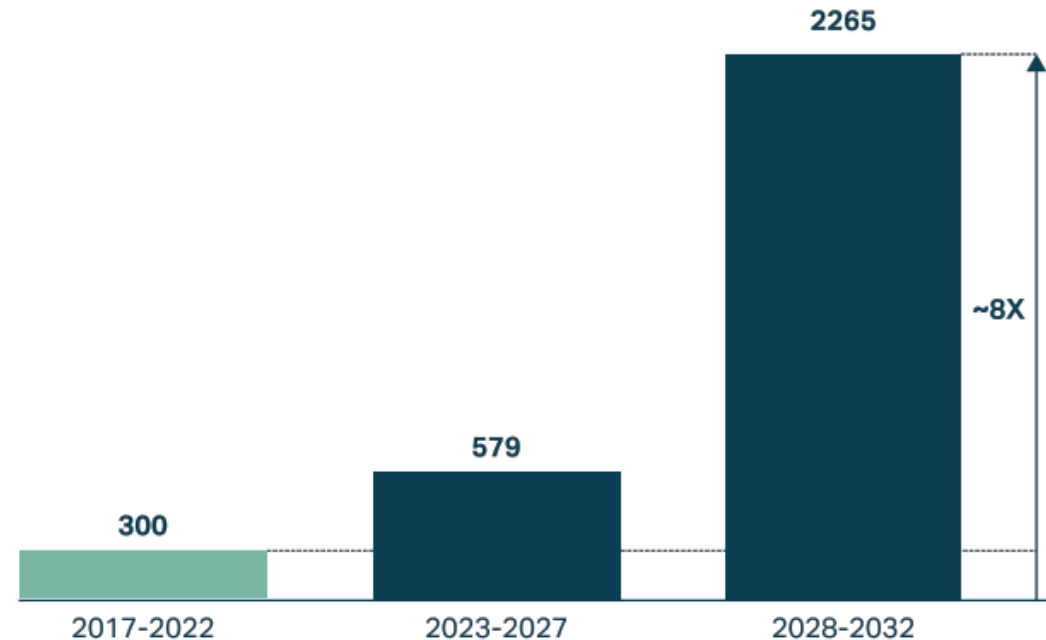


Figure 9: Required transmission line build rates 2023-2032, based on Eskom's TDP

[Source: Better Finance, Better Grid report](#)

What will it take?

1

Access to sufficient capital

Eskom faces a significant debt-burden which results in difficulty to attract sufficient capital to finance a scale-up in grid build out.

2

Planning & permitting hurdles

Building out transmission infrastructure requires land rights (right of way) and permits, which take significant time to acquire and slow down transmission build out.

3

Procurement of materials

The current procurement system is not set up for acquiring the amount of materials needed for rapid transmission grid expansion, such as copper and transformers. National procurement laws that require local sourcing limit the ability to scale.

4

Qualified workforce availability

South African contractors that can execute transmission line build programs are currently not set up for the scale and speed of the build out programme and need additional qualified personnel and equipment.

[Source: Better Finance, Better Grid report](#)

*The challenges, according Adenco Construction CEO
(SA's biggest black owned EPC doing transmission infrastructure work)*

Technical capacity
& work force

?

?

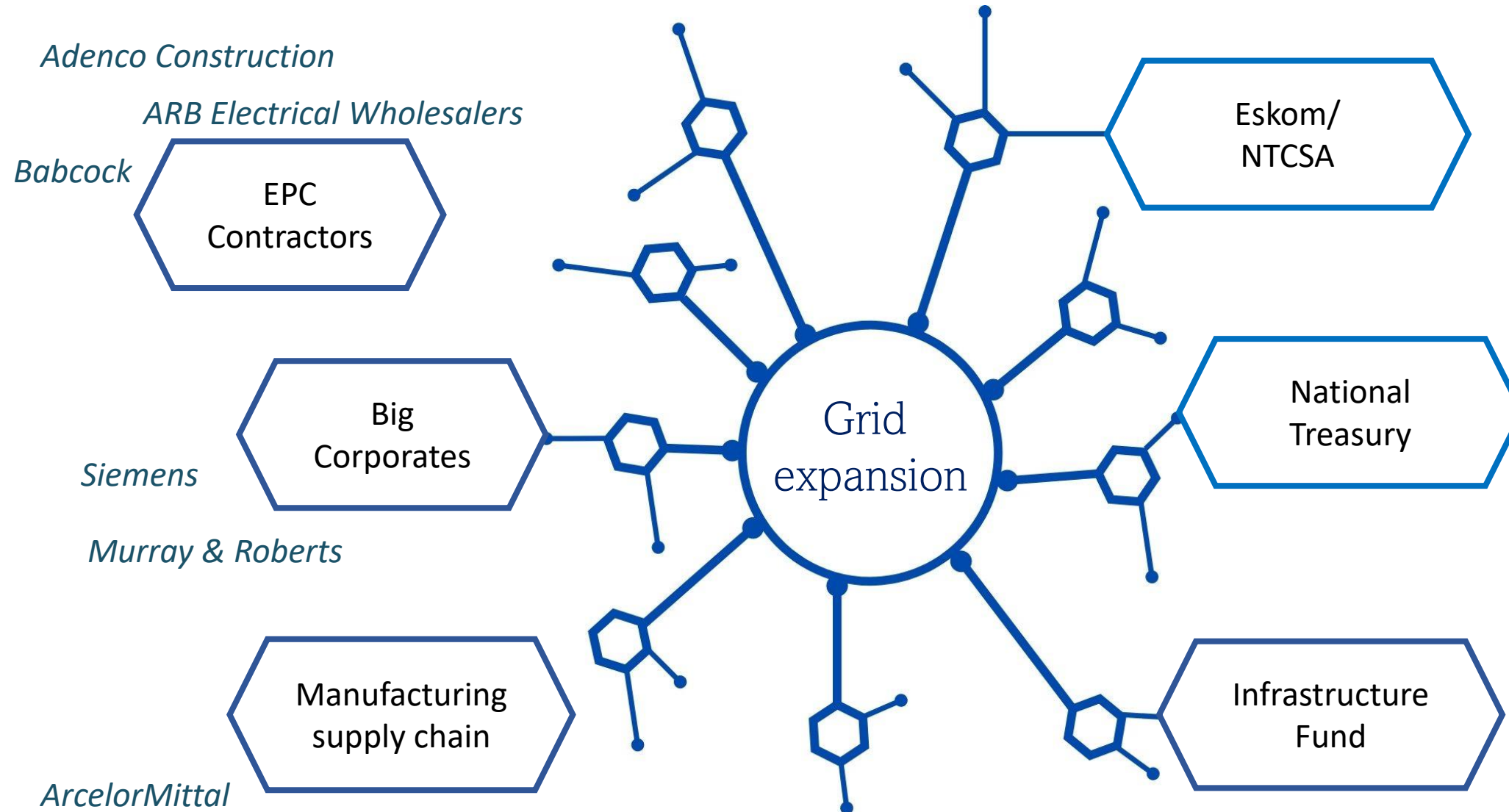
Execution capacity

Guarantee
facilities

Certainty of
project pipeline

?

An industrial strategy for grid expansion?



Trade & Industrial Policy Strategies

Supporting policy development through research and dialogue

The TIPS Annual Forum is a vehicle to help to create and sustain a network of researchers in the area of trade and industry and other related fields. It provides a platform for dialogue between researchers, policymakers and other stakeholders around policy-relevant issues resulting from research.

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