# Sustainable Transformations in Coal Regions of the **Global South: Challenges from a Resource Nexus Perspective (NEXtra Core)**

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# NEXtra Core scoping study

Analyzing the environmental legacies of the carbon age and developing perspectives for the energy transition in coal regions from a Resource Nexus Perspective



### SUSTAINABLE TRANSFORMATION IN COAL REGIONS OF THE GLOBAL SOUTH:

Challenges from a Resource Nexus Perspective (NEXtra Core)







# The report in figures





# Structure

#### General **Overview**

- **Energy sector**
- Coal sector
- Coal value chain dynamics
- Climate change and the coal sector
- Environmental impacts
- A just transitition

Challenges and opportunities for the coal regions

- Environmental impacts
- Energy transition
- Employment

#### Lessons (to be) learned

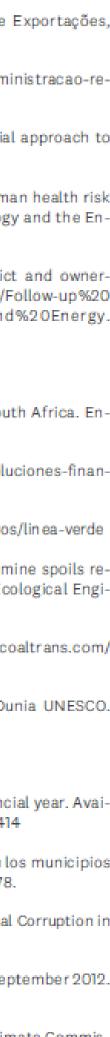
Geopolitics, political will and corruption, financial mechanisms, markets, new closure, mine etc.



#### Recommendations

- Colombia •
- Indonesia •
- Mozambique •
- South Africa

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# **General Overview**



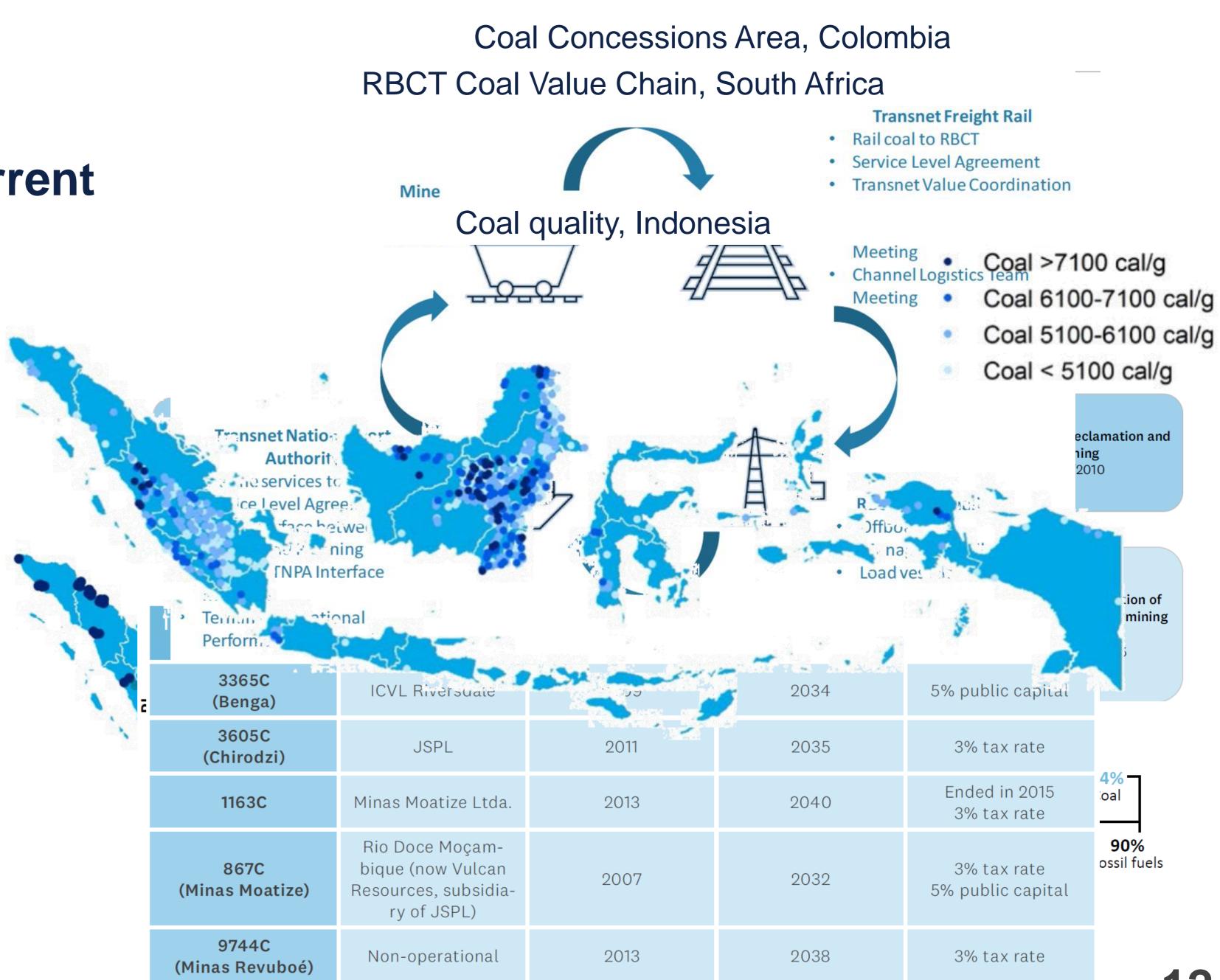
Machinery in CFPP By ArturNyk, iStock



# **General Overview**

# Historic and current information by country

- Regulations and Policies
- Energy Infrastructure
- Energy matrix
- Consumption by Sector
- Installed Capacity
- Consumption Projections







# Challenges and opportunities for the coal regions



Maputo, Mozambique By Jacek Sopotnicki, iStock



#### **CHALLENGES**

**Incorrect Policy Focus** CPD / CPO and CCS, not reduction

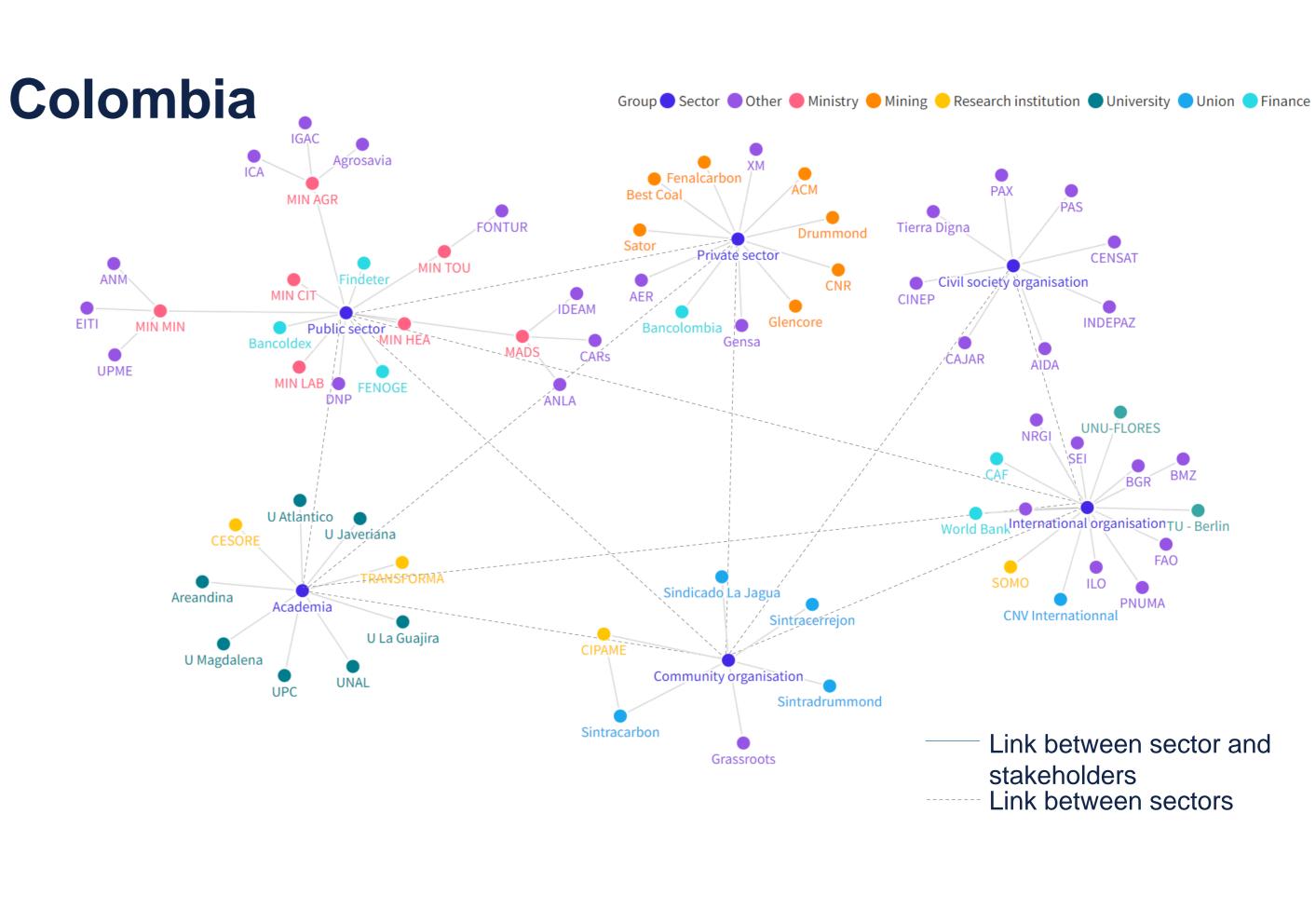
Lack of conceptual frameworks (Environ. liability, perpetual impacts, etc.)

#### **OPPORTUNITIES**

#### Renewed political will (National level)

NCRE pilot projects for impacted communities







#### **CHALLENGES**

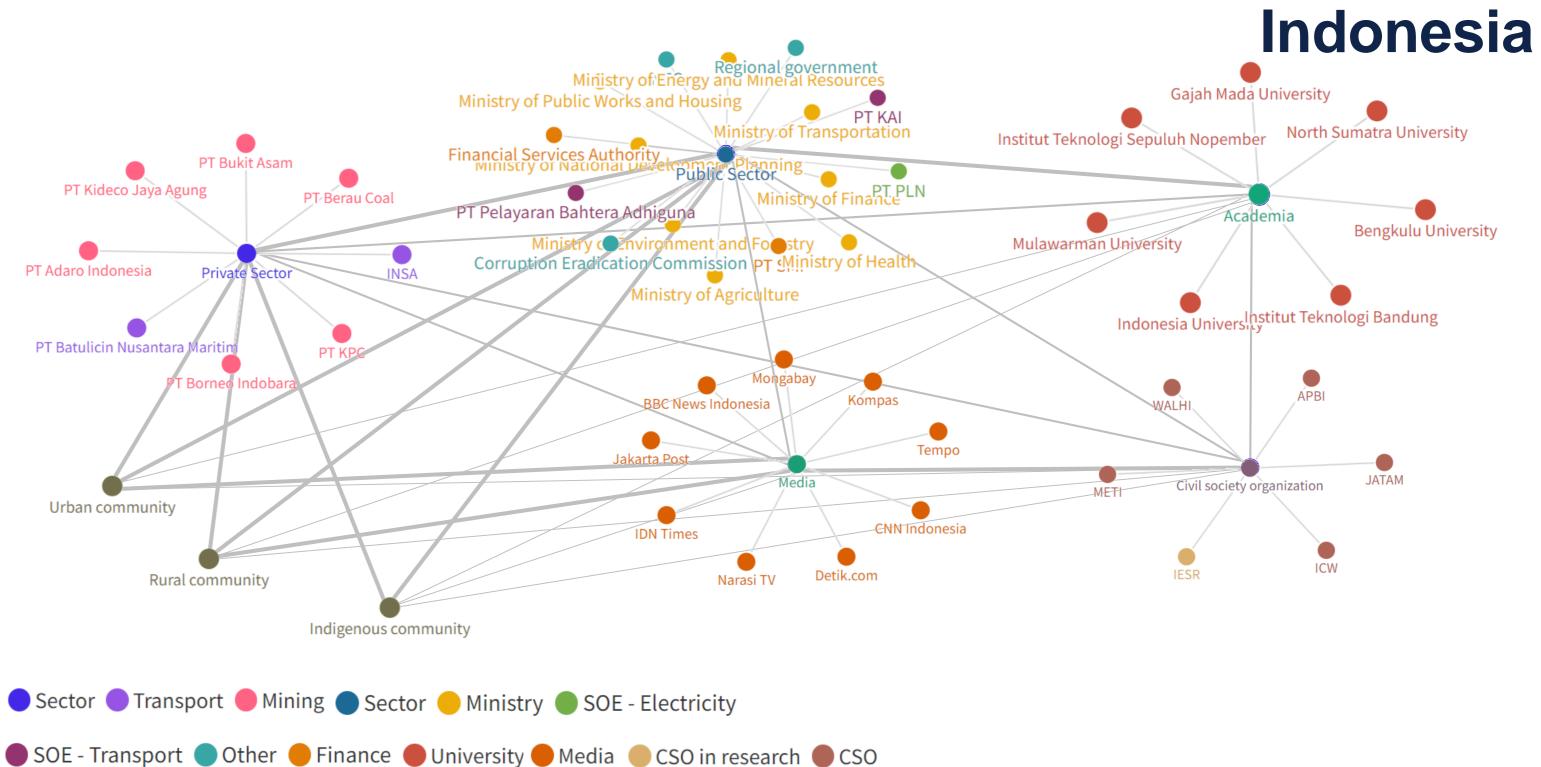
Sustainability through optimization, not reduction (coal quality, gasification, etc.)

Regulatory rollbacks in EIA ToRs, CFPP air quality standards and monitoring and coal transport regulated as a separate activity

#### **OPPORTUNITIES**

Potential litigation opportunities challenging regulatory rollbacks (royalties, standards)

Other commodities (transition and critical minerals)







### **CHALLENGES**

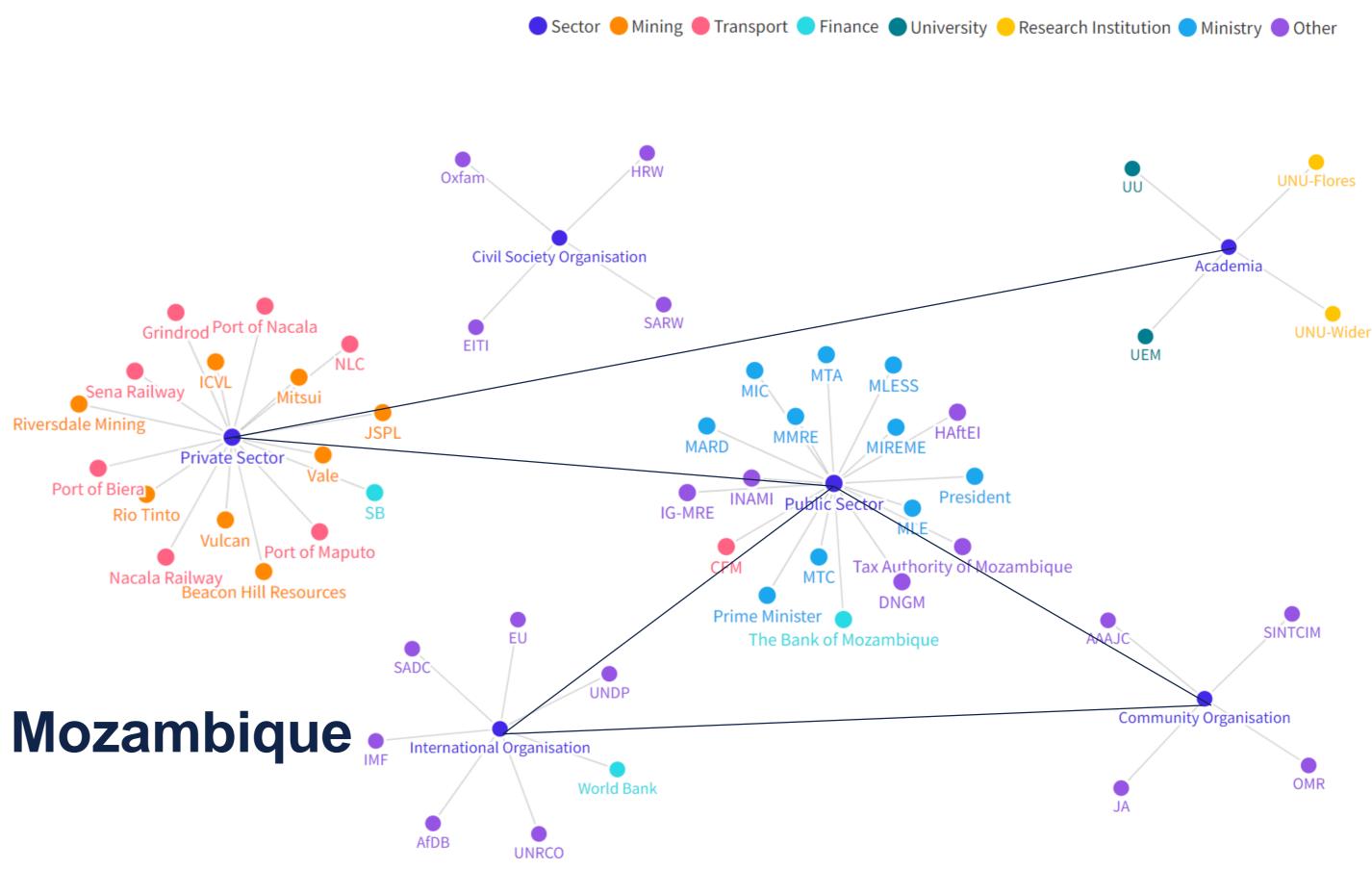
Environmental data availability and transparency

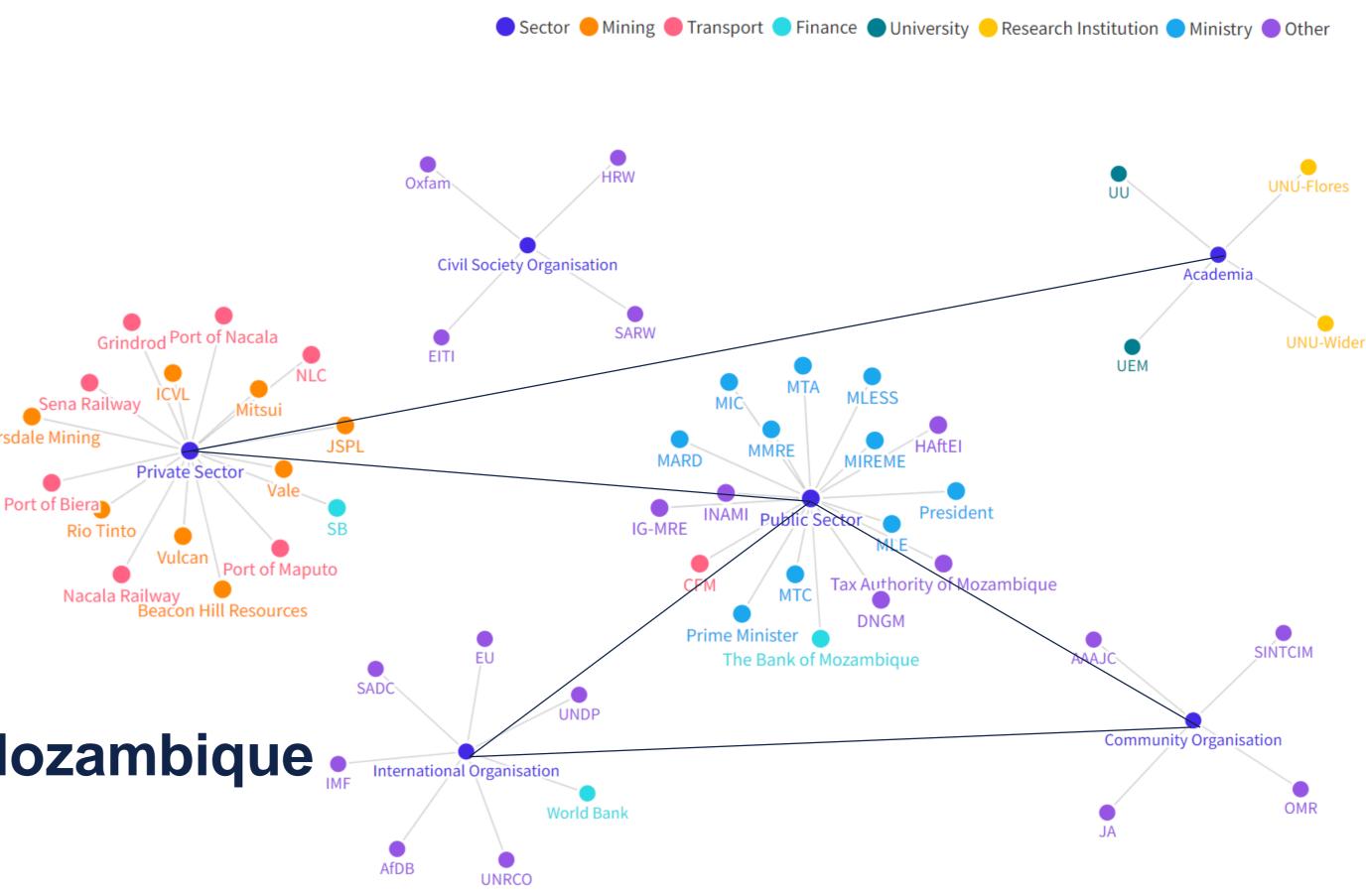
Procedural times preventing effective participation in environmental decisions

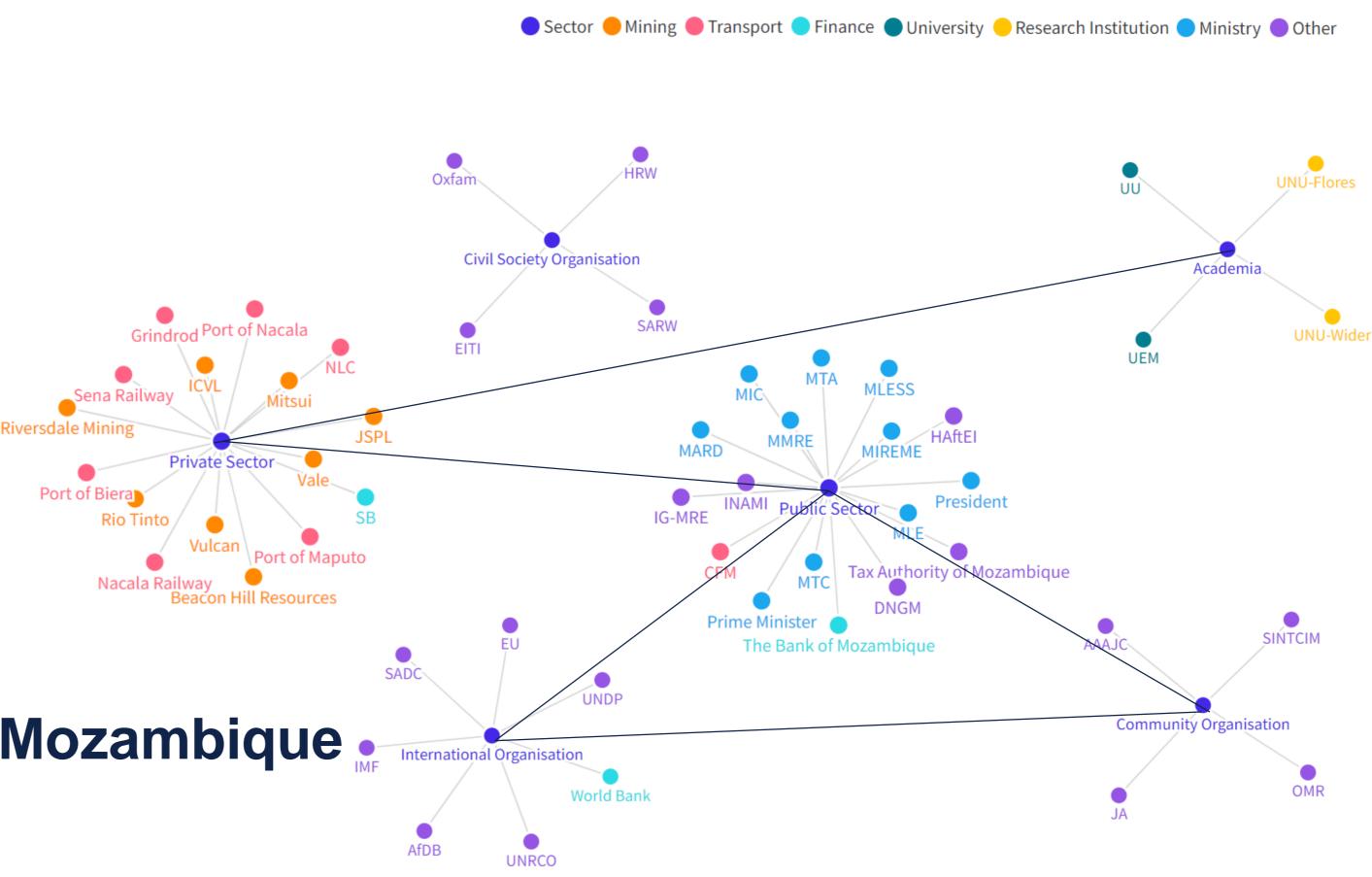
#### **OPPORTUNITIES**

Institutional auditing by the Tribunal Administrativo (MTA)

### Decommissioning Fund (Law 12/2022 -NEL)









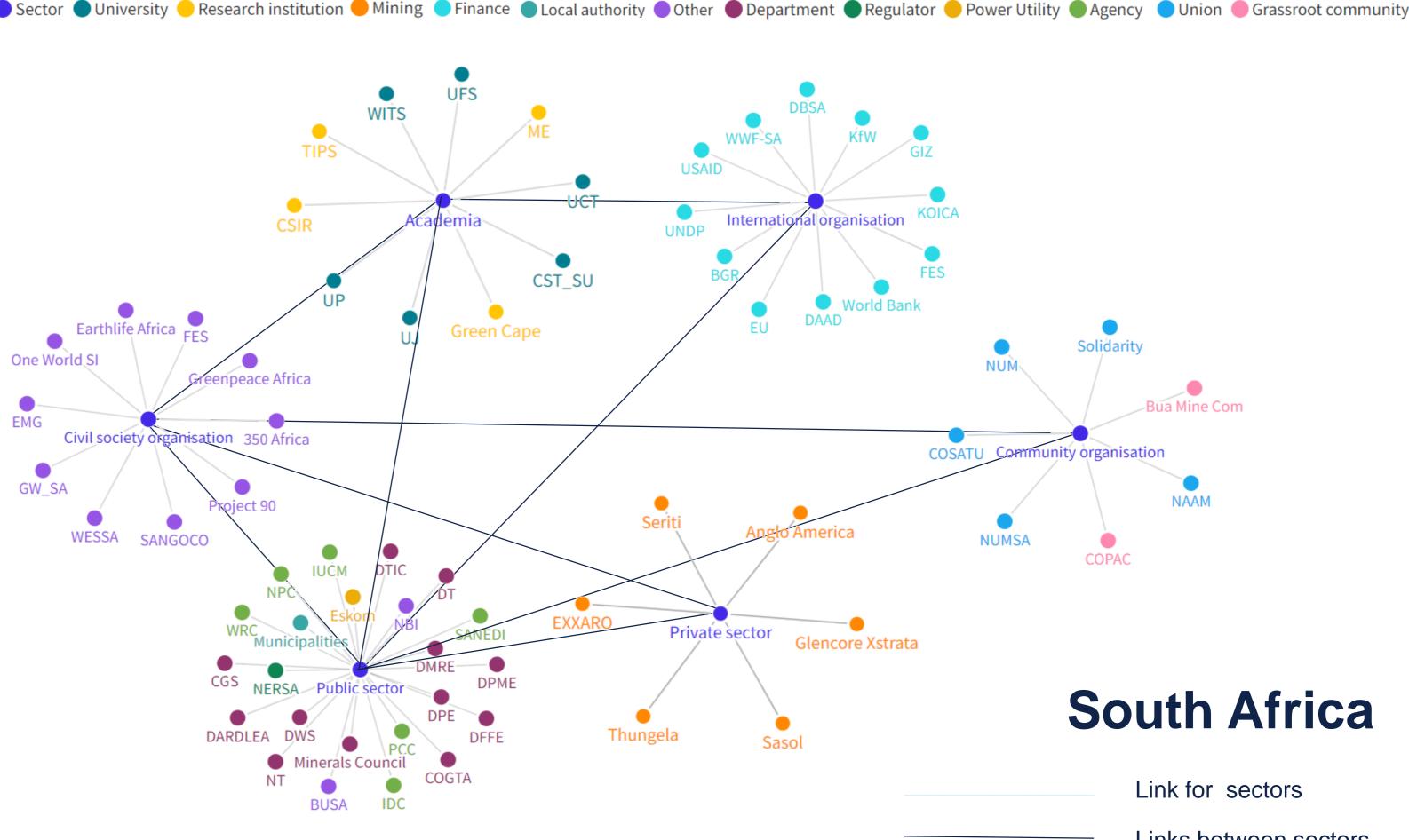
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### **CHALLENGES**

Weak inter-institutional coordination and limited regulation enforcing

Impared management of over 6000 abandoned mines



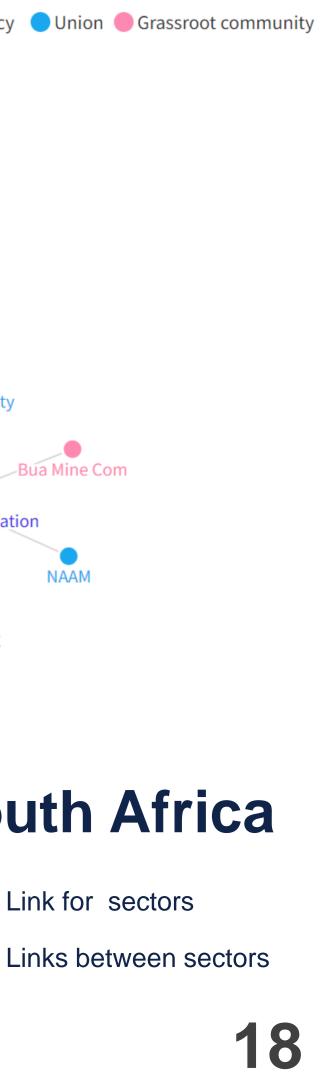


#### **OPPORTUNITIES**

\*\*Energy Transition Investment Plan (from COP26)

Presidential Climate Commission and Just Transitional Framework





# Lessons (to be) learned



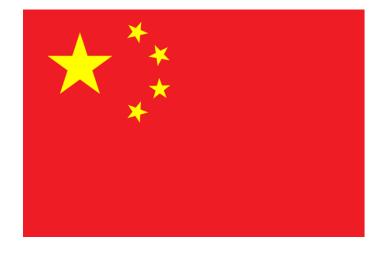
Coal train By traveler1116, iStock



# Lessons (to be) Learned



# Australia



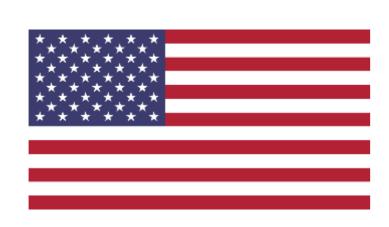
# China (PRC)



## Germany

# Poland





U.S.A.

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# **General findings**

Integral cost of the coal value chains

Unknown or neglected

Identification and quantification of substitute revenue sources

Some advance but many support opportunities

Assessment of stranded assets, CFPPs repurposing and know-how transfer - - - Highly technical – Private sector involvement?



NCRE pilot projects for the impacted communities

Low hanging fruit

Financial resources for the transition Grants, not loans



### Colombia

### National

**Reform Law** 2099/2021 and CONPES 4075/2022 (CPD to CPO)

Creation and implementation of new closure and post-closure regulations

Independent environmental data collection

Unusual revenue and ta used for



	Local		
Institutional capacity building in the use of the RNA	Local economy reorientation guided by CPO (international cooperation)	NCRE Access for communities near coal mining projects	
Unusually high revenue (royalties and taxes) used for the JT	Trade-offs accounting at the regional level	Land-use planning instruments alignment	



### Indonesia

### National

### Regulatory

Improving EIA conditions, oversight provisions, and regulations (UU 11/2020)

### **Know-how**

Assistance in updating knowledge on JET and CPO





Assistance in mine closure and postclosure procedures improvement

Identification of sectorial substitution pitfalls

Funding academic research on local impacts in affected communities



### Mozambique

### International

Put pressure on consumer countries to avoid further lock-ins Supporting the role of oversight institutions like the Tribunal Administrativo Push for concrete improvements in environmental information Access (binding decisions, proactive publication)

Investing in highlevel cooperation for independent studies on the environmental impacts of coal

Continue supporting institutional capacity building



### National

### Local

Facilitating NCRE deployment for rural communities

Advocting for revenue sources substitution (other sectors)

Foster community monitoring in the areas impacted by mining



### **South Africa**

### National

Advocate for regulatory changes (Elect. Regul. Act 4 / 2006) Financial support in the form of grants and new instruments for JET are key

Fostering mitigation of technical and environmental impacts with citizens participation



Consider supporting changes in alternative economic sectors

### Local

Push for measures to increase resilience in communities affected by the transition



# **Final Remarks** Acknowledgement

We would like to thank the BMZ for funding the project NEXtra Core.

We would like to thank colleagues at BGR and GIZ for the consultations and discussions throughout the project implementation.



# german cooperation DEUTSCHE ZUSAMMENARBEIT









## Thank you for your attention. We are happy to address your questions and comments.







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