INTRODUCTION TO TIPS PROJECT:

A CONTRIBUTION TO A JUST TRANSITION
FINANCE ROAD MAP

EU COFFEE CHAT

1 APRIL 2021
WHAT THE PROJECT ACTUALLY IS

- Not a traditional roadmap or traditional roadmap methodology or approach

- In Discovery phase stakeholders identified frustration with theoretical and high level talk about JT and JTF (stratospheric level – JT Alliance)

- SA Stakeholder Appetite for:
  - Creating traction for JT concept
  - Learning by doing
  - Proof of concept
  - Demonstration at scale

- Int’l DFI and other funders Appetite for:
  - Supporting SA to meet National Contribution and Paris Agreement
  - ‘Possible Blueprint’ for developing country JET
  - Market making

- Designed a project which aims to understand what is necessary to: **systemically mobilise just transition funding in support of Mpumalanga’s just transition to a low carbon, resilient economy**

- Use this to make a contribution to/ inform a roadmap
### Approaches and Parameters

#### Approaches

<table>
<thead>
<tr>
<th>Case Studies of Financing Arrangements to Date in SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Just Transition projects</td>
</tr>
<tr>
<td>- Impact Investment</td>
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<tr>
<td>- Innovative Green Funding</td>
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<td>- Adoption and Application of ESG and broader sustainable development principles</td>
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<td>- Self Regulation</td>
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**Identify Anchor Just Transition Projects/Programmes in Mpumalanga and Crowd in Funding for their Implementation**

Even though MP JET – JT Projects will cut across sectors and diversify economic activity

#### Parameters

- Green Economy Projects/programmes
- Social Infrastructure Projects/programmes
- Non brown Industrial Diversification projects/programmes
The questions we are solving for:

1) What will qualify as a JT project/programme in SA?

2) How will SA ensure access to global funding given limited SA fiscal space and structural domestic barriers to early stage funding?

3) How will SA balance the need for convergence with international benchmarks with the specificities of the domestic market in regard to:
   - Taxonomies
   - Standards and Labels
   - ESG disclosure and measurement

4) What new instruments, mechanisms, approaches, vehicles need to be innovated to systemically crowd in JT funding?

5) How will SA improve the project pipeline of bankable and investible projects (also issues of scale and market size)?
What is a Just Transition in SA

HARDER TO GET FUNDS FLOWING

EASIER TO GET FUNDS FLOWING

SPECTRUM OF JT PROJECTS

Transformation
Structural reform
Managerial reform
Status quo

Process: Procedural justice
Direct impacts: Distributive justice
Historical impacts: Restorative justice

Empowerment & elevation
Gain generation
Restoration
Participation & representation
Loss mitigation
Compensation
JTFR Observatory

Skills Development Facilitation

Networking and Partnering

Awareness and Outreach

Continuity of Dialogue and Knowledge Sharing

Data Collection And Tracking

Knowledge Product Generation

SA and International Policy and Framework Tracker
EU Engagement – Knowledge sharing

- Just Transition definition methodologies and approaches

- Just Transition financial sector experiences by type of financial institution (ESG + broader sustainable development issues)

- Just Transition policy for enabling environment for funding mobilisation, funding instruments, vehicles
THANK YOU

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Mpumalanga is the most vulnerable region to the transition to low carbon and climate-resilient economy.

- On average, over 80% of coal mining production is located in two districts in Mpumalanga – eMalahleni and Gert Sibande.
- Four municipalities in Mpumalanga have a highly undiversified economies that rely on coal.
  - Coal accounts for 44% of the economy in eMalahleni. It accounts for 35% in Steve Tshwete, 33% in Msukaligwa and 22% of total GVA in Govan Mbeki.
  - In terms of employment, coal accounts for 26% in eMalahleni, 17% in Steve Tshwete, 14% in Msukaligwa and 11% in Govan Mbeki.
  - Miners in these four local municipalities account for approximately 76% of total coal employment in South Africa.
- Vulnerability analysis indicates that the following groups are the most vulnerable:
  - Coal miners - Most vulnerable in the value chain
  - Coal Truckers – There are about 200 coal transporters who employ approximately 2000 to 4000 people.
  - Communities in the regions. Residents and small businesses will be indirectly impacted.
Next slides indicate potential **broad investment areas** in which **anchor projects** that can accelerate economic diversification in Mpumalanga are expected to be found.

Even though this research will only look at anchor projects they will be chosen because they are highly scalable, for example we would look in time to possibly having a land rehabilitation bond or a waste water fund.

It aims only to indicate possible opportunities, as far more work is required to test their viability and to identify the existing constraints on their development.
eMalahleni was identified as a site for Renewable Energy Development Zone (REDZ’s).

Criteria for location included:

- Availability of existing economic infrastructure such as electricity grids and roads
- Previously mined areas which required economic diversification
- Proximity to Gauteng (SA economic hub)

Renewable energy is crucial diversification strategy;

- A typical 86 MW solar PV power plant value chain created 950 jobs and 3,670 jobs over the lifetime of the project.
- Notably, construction phased accounted for 63% of the jobs which has a typical employment period of 1.5 to 3 years (Co-benefits study, 2019).
Potential Investment Opportunity: Mine and Land rehabilitation

Highly complex and expensive

- Agriculture
  - Restoring soil conditions to a level at which crops can be grown for human consumption.
  - Mpumalanga has a large dynamic agricultural sector
    - It is the 4th biggest income-generating province in terms of commercial agriculture
    - It produces 44% of South Africa soya beans, 21% of citrus and 67% of the country’s banana crop. It also the fourth biggest seller of cattle and has a sizable poultry industry.
  - Opportunities for entrepreneurs would come from the following:
    - Food Import replacement (Sugar, Poultry, Beef, Maize Value Chains)
    - Export promotion (Citrus, Macadamia and Marula Value Chains)
    - Ash to Aquaculture

Less complex and inexpensive

- Biomass
  - Rehabilitating land to arable levels but not food crops for human consumption
  - Feedstock can be grown for multiple non-consumption uses. Eg soya can be grown as biomass to produce energy for the local community.
  - Biomass has been identified as a priority in the Mpumalanga Green Economy Development Plan
    - As a strategic focus, MP seeks to grow a number of biomass plants to match resource availability

- Leisure and Hospitality
  - Mines can be repurposed to leisure and hospitality museums, shopping centres, restaurants as well recreational facilities
  - This is an inexpensive and less complex method of rehabilitation. It requires that mining landscape be restored and pose no health and safety risk to society.
  - This can be a viable diversification strategy;
    - Mpumalanga is one of SA top’s tourist destination – the biggest attraction is Kruger National Park.
    - In 2017, the province received 14% of international arrivals and 24% of domestic trips.
Potential Investment Opportunity: Fly Ash

- The use of fly ash is gaining traction internationally and it is a commercially viable opportunity.

- Ash is left over after coal is combusted in power stations. This ash is stored close to the power stations in ash heaps and is regarded as waste.

- Eskom and Sasol are the biggest producers of ash and the relatively high cost associated with storing ash has prompted the two companies to search for alternative use of ash.

- Use of fly ash:
  - Most of the fly ash is absorbed by the cement industry.
  - Fly ash can be also be used in the construction of roads as well as brick-making. It is imperative to develop new markets in these areas that can consume volumes of ash.
  - Ash can be used in mine rehabilitation as well. It can be added to topsoil during the rehabilitation process to improve the fertiliser value of the soil, however, toxic elements must be removed prior to use.
Coal based energy production consumers water has a negative impact on water resources as a result of pollution during the mining process as well in the production of coal (WWF, 2011).

Acid mine drainage is the most hazardous threats facing water resources.

Given the concentration of coal mines, and power stations in the area, Mpumalanga is the most affect region. Witbank and Middleburg dams started showing an increase in sulphate and TDs since 1986.

Olifants river is known as SA’s most degraded rivers because of the impact of coal mines (WWF, 2011).

There are a number of proposed projects for water rehabilitation in MP including:

- Bruigspruit Acid Mining Drainage and Water Management – Pilot studies and being conducted, and;
- In situ Ground Water Remediation Pilot Study.

Source: Jojo (2021)
Possible investment opportunity: Eco-Industrial Parks, Incubators and Smart Hubs

**Eco – Industrial Parks**

- Eco Industrial Parks are a community of manufacturing and related services located on the same property. These businesses seek enhanced environmental, economic and social performance.

- Eco industrial parks are very important to developing and transition economies as they contribute to inclusive and sustainable industrial development.

- Ekandustria (in Bronkhorspruit) has been chosen as part of the Global Eco-Industrial Parks Programme.

**Incubators and smart hubs**

- Just Transition is likely to produce entrepreneurial activities in Mpumalanga and elsewhere in the country.

- These entrepreneurial activities will supplement blueprint diversification projects and meet national imperatives of employment, transformation and gender inclusion.

- Incubators and smart hubs play an important nurturing role, connecting entrepreneurs with sources of finance and means to innovate.

- They also help in the growth of small businesses.

- So far, Mpumalanga has two incubators – agricultural building, stainless steel processing. Additionally, Mpumalanga's green economy development plan indicates that agri-hubs are government priority.
### Concluding remarks

Most the projects presented are:

a. **Labour intensive**

b. **A national and/or provincial government priority**

c. **Somewhat not so expensive**

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<th></th>
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<th>Government priority</th>
<th>Expensive</th>
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<tr>
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<td>Yes</td>
<td>Yes</td>
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Thank you!!

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