

Remaking our Energy Future



TIPS Webinar 17 November 2020



PROJECT 90
BY 2030

Inspire.
Mobilise.
A low-carbon generation.



OUR VISION

To inspire and mobilise society towards a sustainably developed and equitable low-carbon future.

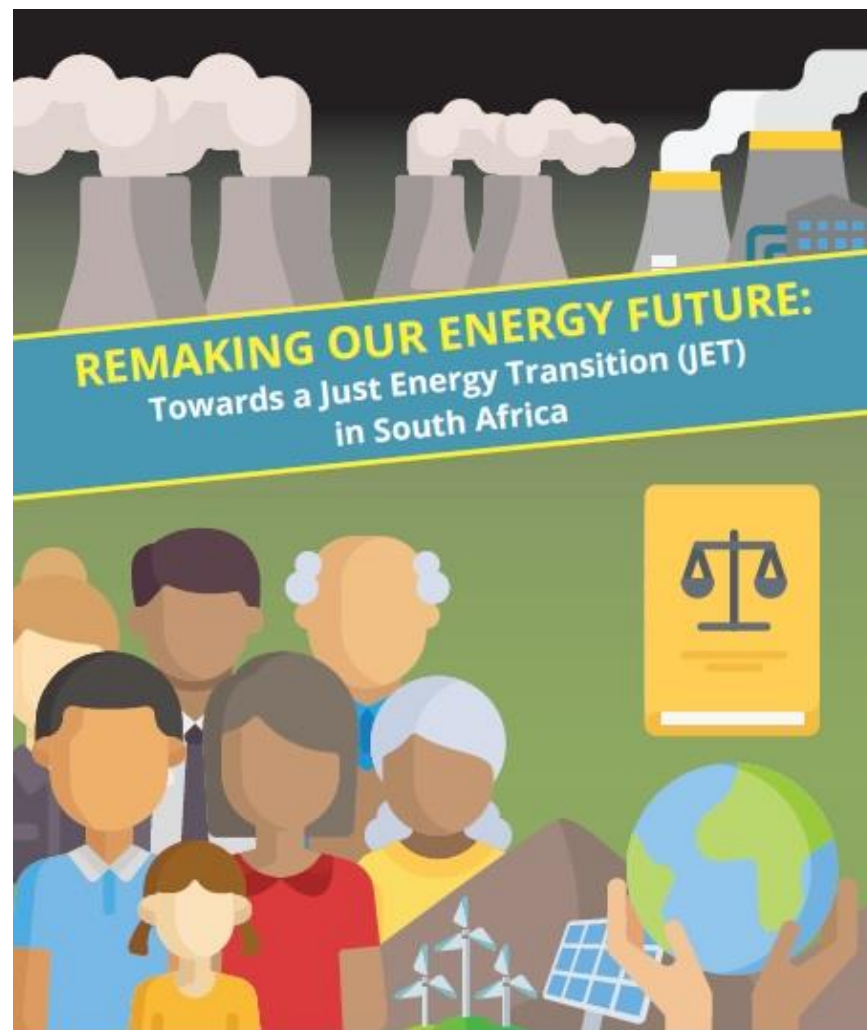
OUR MISSION

Bring about significant, positive change in the way we, as humans, engage with earth systems and each other.

Support the involvement of South Africans in a just energy transition.



September 2019



<https://90by2030.org.za/wp-content/uploads/2020/03/Remaking-our-Energy-Future.pdf>

Outline

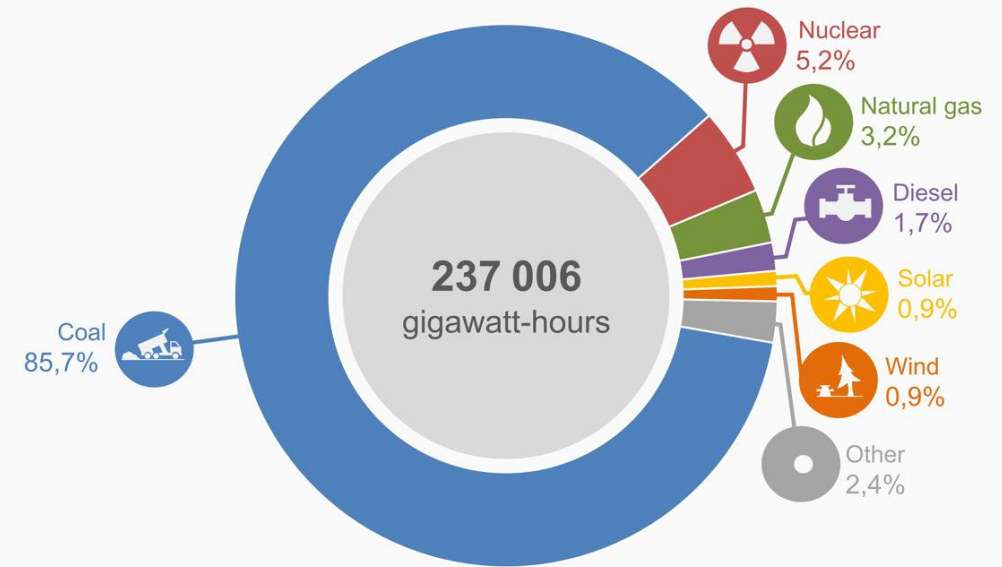
1. Why focus on coal?
2. International coal phase out examples
3. Lessons
4. Recommendations

Why coal?

1. Mining damage
2. Power station pollution
3. Majority SA GHG emissions
4. ~85% electricity from coal
5. Eskom crisis
6. RE opposition

Coal remains South Africa's dominant source of energy

Total electricity generated by source, 2016



Excludes municipalities and enterprises that distribute liquefied petroleum gas (LPG) Source: Electricity, gas and water supply industry, 2016 (Table 11)

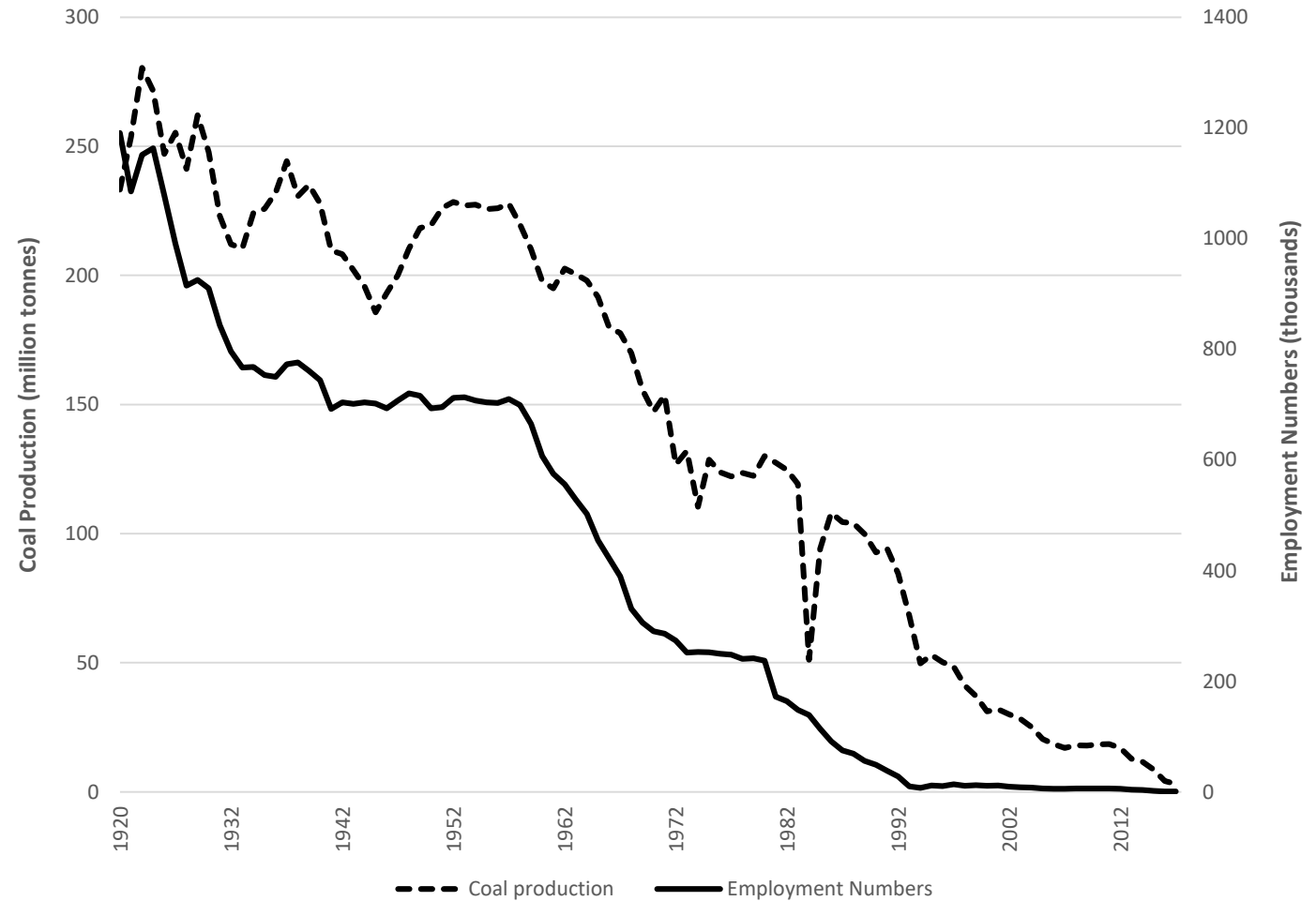
South Africa

2019: World Economic Forum (WEF) ranked South Africa 114th out of 115 countries in terms of its readiness for “an effective energy transition”.

2017: FES put South Africa at the bottom of a list of 12 countries from the Global South in terms of their readiness for a JET

We have long way to go
and
we need to get the basics right

United Kingdom – country level



Drivers

- Decline in profitability, cheaper alternatives (gas)

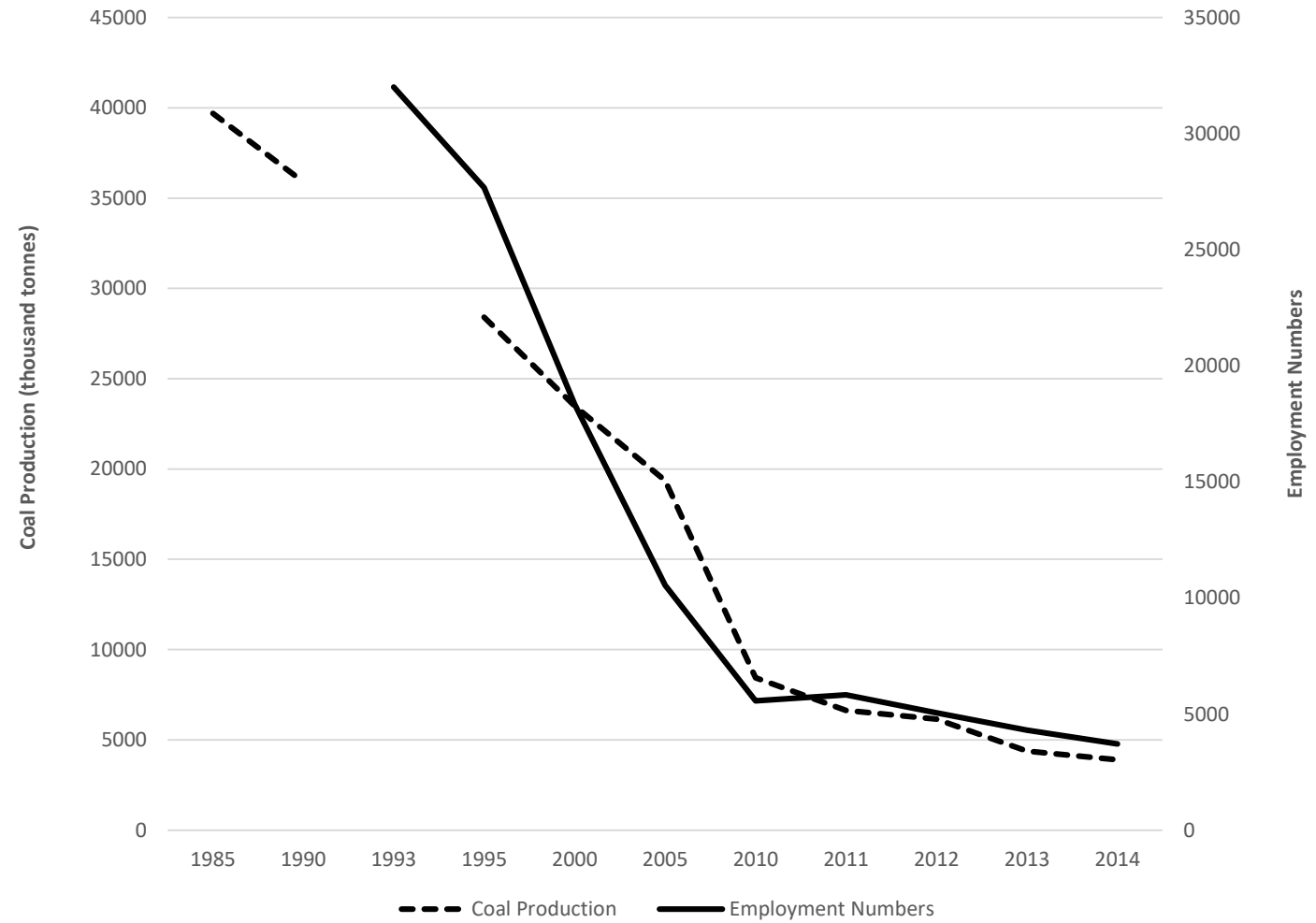
Features

- Not really organised, no explicit political decision
- Not a strategy – collection of reactive measures
- Miners strike '84/85





Spain – country level



Drivers

- Closure of non-competitive mines
- High costs and subsidies for coal

Features

- Government plans to phase out coal.
- 1998-2018 – reduce production and employment
- 2018 - The €250 million Plan del Carbón replaces subsidies to the coal industry with a sustainable development plan. Supported by unions



Spanish coal unions win landmark Just Transition deal

Spain to close most coalmines in €250m transition deal

Agreement with unions includes early retirement for miners, re-skilling and environmental restoration




Netherlands – regional conversion



Limberg

- 1965-1990
- Changed from coal mining region to one with high value add sectors

e.g health services, chemical processing, logistics, financial admin



Drivers

- Discovery of Europe's largest gas field 1960
- Government decision in 1965 to end coal mining, but almost all the mines were in Limburg

Features

- No significant labour protests – appeared that writing was on the wall and parties worked together
 - In fact, labour stood to benefit from an earlier exit while the state mining company still had money

Acceptance

Germany – regional conversion



Ruhr

- 1957 – 2018
- Densely populated area - >5 million
- Converted from coal to mostly knowledge based economy

A number of mines have become heritage sites and museums, e.g. Zollverein



By Avda - Own work, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=24838162>

Drivers

- Imported coal and oil became more competitive than local coal
- Air pollution

Features

- Strong resistance from coal and steel sector
- Between 1965 and 2014,
 - 22 universities/colleges were built
- 2018 – establishment of **coal commission** to plan phase out of remaining power stations. Union involvement.

Canada – Alberta and Ontario



- Coal phase out plans that have support programmes and funding for workers that are in line with ILO guidelines

Drivers

- Change in ruling party
- Pollution

Features

- Just Transition Task Force
- Workforce and community transition funds.
- Still heavily reliant on oil and gas....

Australia – regional and facility example



Latrobe Valley

- Was home to the largest and most polluting power station in country – Hazelwood.
 - Sudden closure
- Creation of **Latrobe Valley Authority (LVA)**
 - Could be a model for JT activities

Response

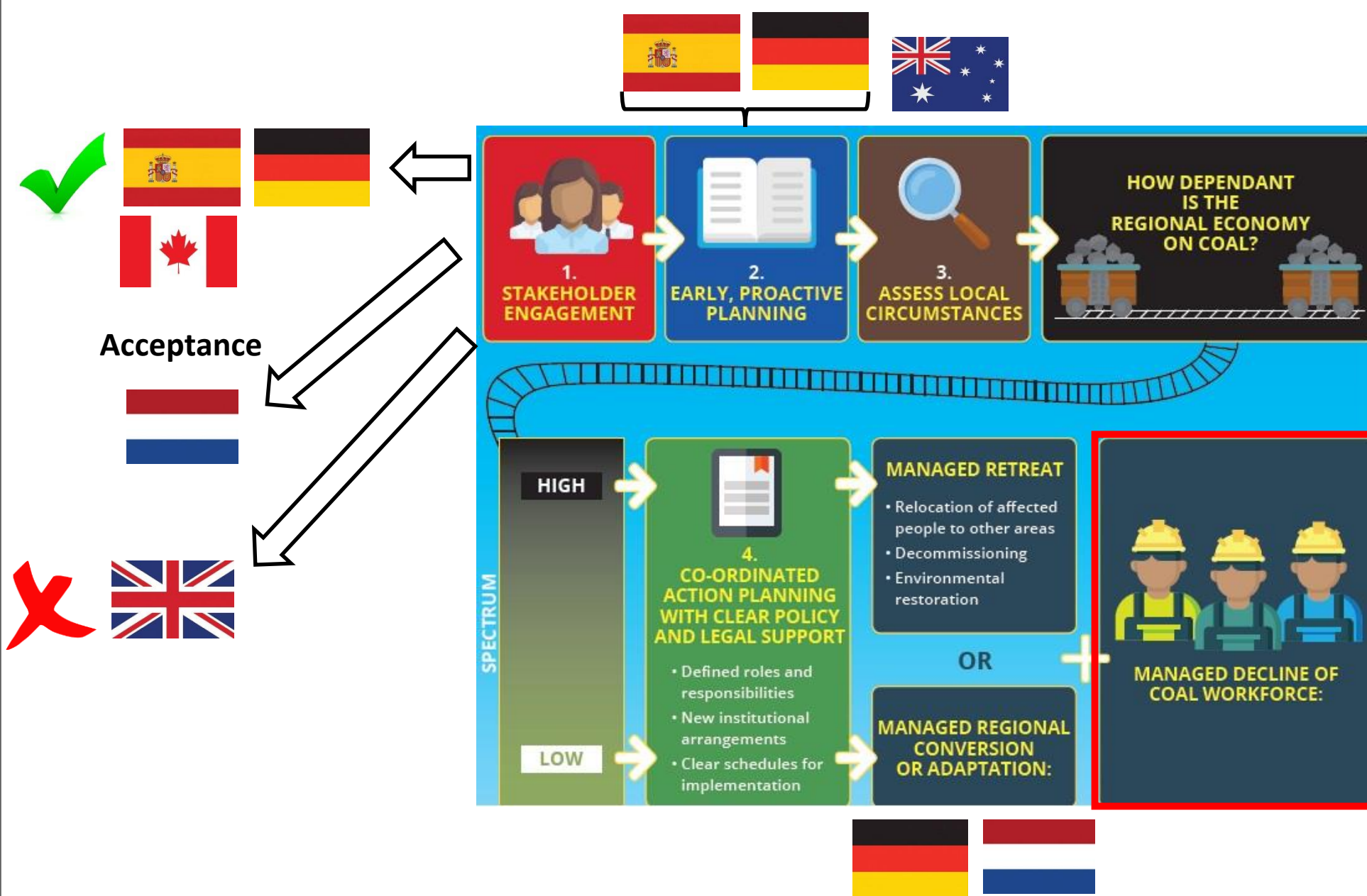
- Federal Government: \$43 million
 - Infrastructure, job creation, diversifying regional economy, some re-training funds.
- Victorian Government: \$266 million total
 - Largest in Victorian history
 - LVA, business investment and job creation in wider area.

LVA

- **Bottom up and top down:**
- **Created by locals but supported by government**



Coal transition sequential framework





BUILD ECONOMIC RESILIENCE

Investment and diversification is required to make region attractive to workers and new industries

UNDERTAKE ENVIRONMENTAL RESTORATION

Revitalising mining and industrial areas can create job opportunities

EMPOWERMENT OF WORKERS

Workers must be in a position to take on different jobs or opportunities

- No new training for coal sector
- Hiring freeze in coal sector
- Bridge to Pension
- Early Retirement
- On the job training
- Worker transfer
- Retraining

Often failed



5.

IMPLEMENTATION

- Bottom up with top down support. e.g. local implementation agents with government funding.
- The amount of action required in each section is *location specific*, but in each area all 4 factors (dotted boxes) must be assessed
- Balance and interaction between these 4 factors helps define success of transition.

Recommendations

1. What should be in a plan?

2. Who should do it?

3. How to pay for it?

The bottom of the slide features two horizontal bars. The top bar is light blue and the bottom bar is olive green, both spanning the full width of the slide.

What should be in a plan?



ACCESSIBLE AND AFFORDABLE ELECTRICITY

Millions of South Africans lack access to electricity. All South Africans need access to affordable, low carbon electricity to provide for basic needs.



CORPORATE AND BUSINESS REFORM

We need to move away from business as usual. Corporations need to prioritise social and environmental issues and must implement tools to reduce emissions, pollution and waste but also secure decent jobs.



SHIFT IN OWNERSHIP OF ENERGY

Using renewable energy opens up opportunities for more socially or community-owned and less corporate or privately-owned energy generation.



EMPOWERMENT OF WORKERS AND COMMUNITIES

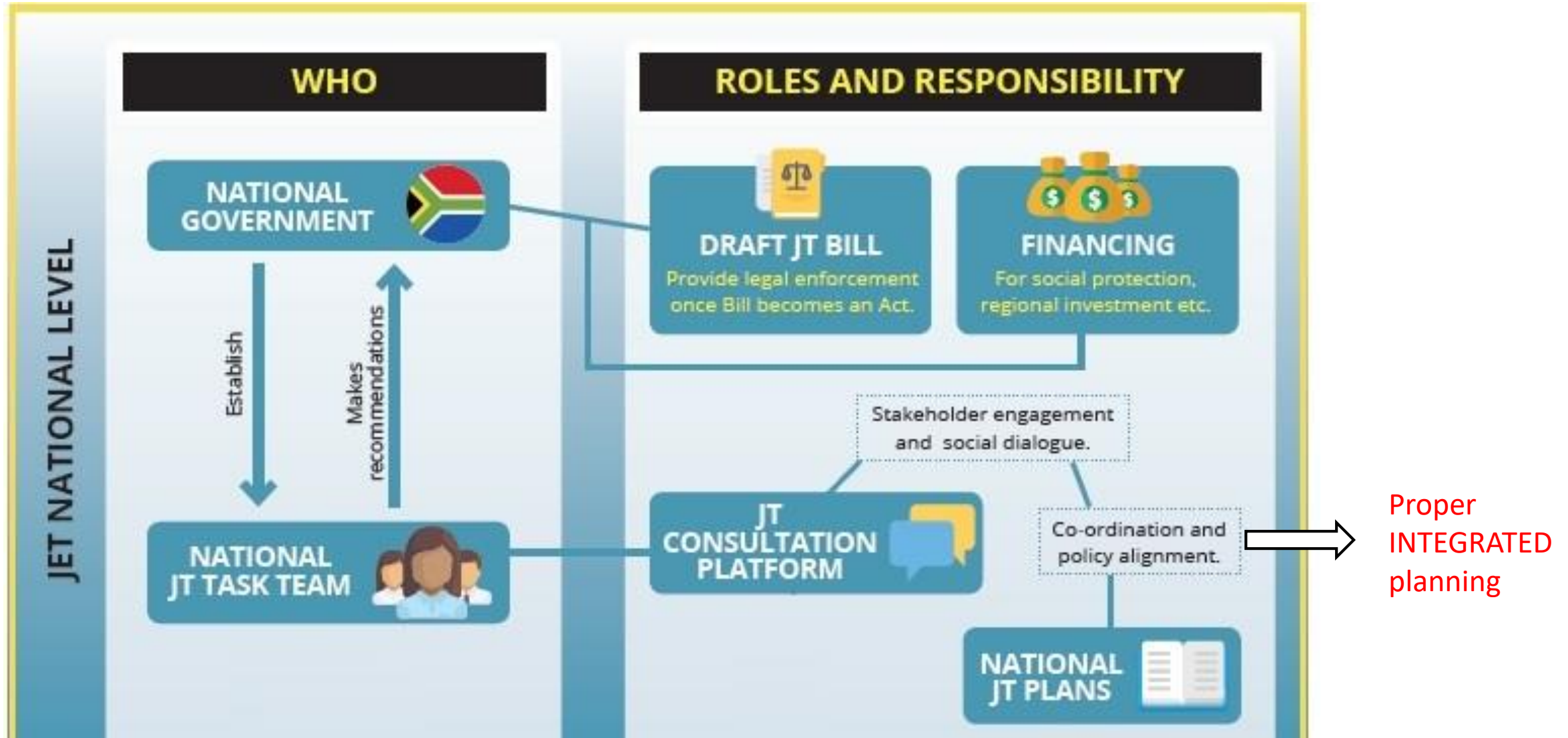
Workers and communities should not shoulder the burden of shifting to a low carbon economy. We need decent jobs and economic opportunities for all to 'leave no one behind'.



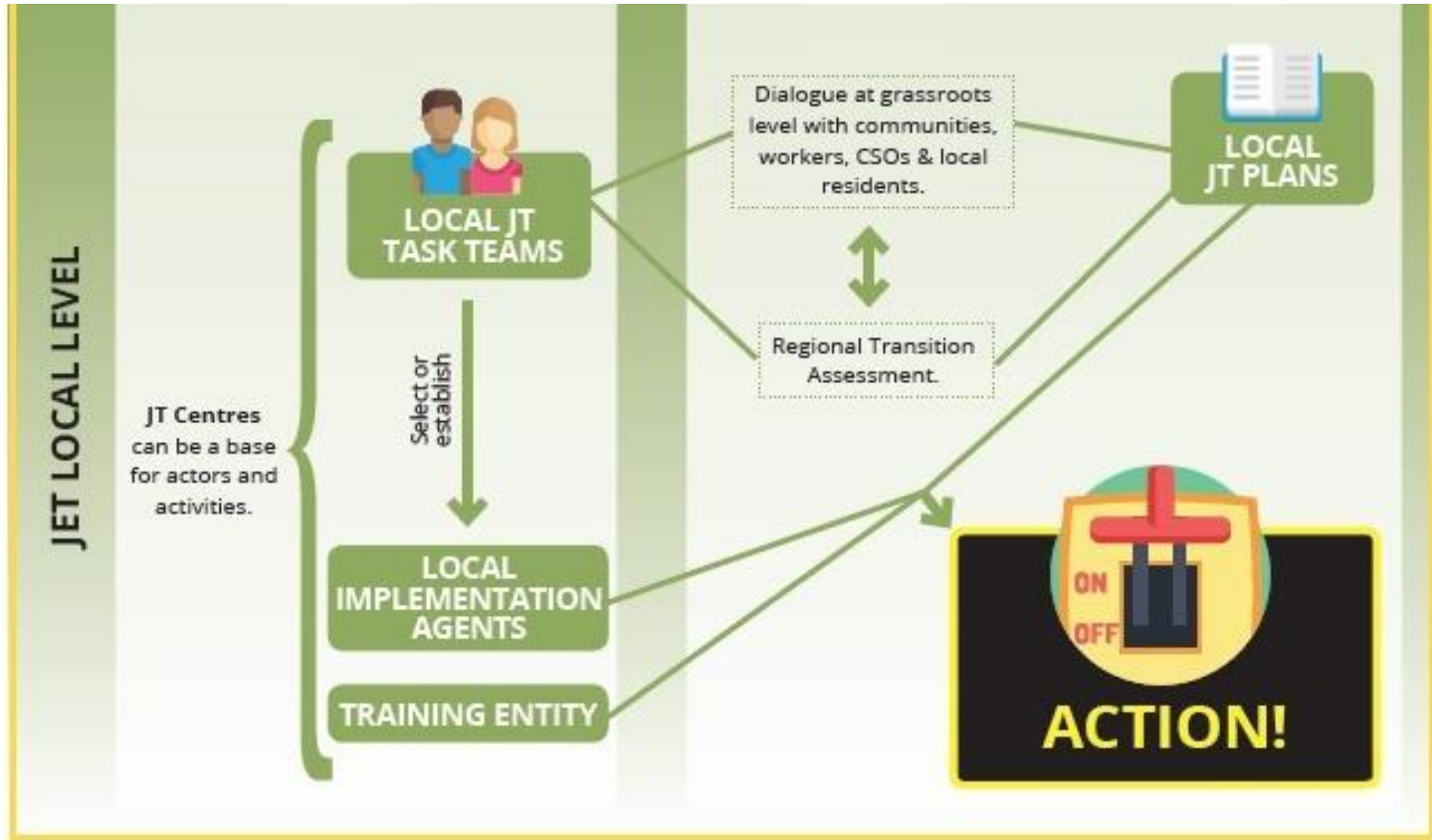
ENVIRONMENTAL RESTORATION AND PROTECTION

Modern agriculture, mining and industrial development have degraded the quality of our soil, air and water resources. We have to restore these areas and prevent further damage.

Who should do it? Consultation, oversight and planning



Who should do it? Implementation



How to pay for it?

~ R100B/yr (2010-2014)

E.g. Just Transition
Transaction
Meridian Economics
R200 Bn ?

And more: divestment, PIC etc

Clamp down on tax avoidance

Innovative models that access international climate finance

Introduce a line into the national budget



Increase existing carbon tax rate and ringfence a proportion of the funds

R56 Bn in 2016/7 for coal alone

Conversion of existing fossil fuel subsidies

Introduce a 'transition fund' that companies put towards their workers.

Remove exceptions of up to 95%

Contact

Richard Halsey

richard@90by2030.org.za

**FRIEDRICH
EBERT 
STIFTUNG**



PROJECT 90
BY 2030

Inspire.
Mobilise.
A low-carbon generation.