

Recommendations for a Just Transition programme in South Africa *Key findings of two new Greenpeace reports*

Introduction

The human impacts of Cyclone Idai in neighbouring Mozambique, Zimbabwe and Malawi are a horrifying reminder of how the impacts of climate change may manifest on the African continent as extreme weather events increasingly become the norm. The Intergovernmental Panel on Climate Change (IPCC) has made it clear that we have 12 years in which to act to shift away from fossil fuels, otherwise we may be faced with runaway climate change. It is essential that we limit global warming of the Earth's atmosphere to 1.5°C to avoid the worst impacts of climate change. The Earth's atmosphere has already warmed by 1°C, which means that we do not have the luxuries of neither time nor space to avoid a climate crisis, which will know no borders and have incalculable costs.

South Africa is also living with an extreme air pollution crisis driven by Eskom's reliance on coal, and water scarcity that is only likely to worsen as climate change intensifies. Recent research released by Greenpeace reveals that Mpumalanga is the world's fourth worst NO₂ pollution hotspot, and is among the top three SO₂ pollution hotspots. This is because the province has 12 old and highly polluting coal-fired power stations, accounting for over 80% of South Africa's electricity production. These high levels of pollution have significant impacts on people's health, with multiple pieces of research confirming that Eskom is causing approximately 2000 premature deaths every year.

In the face of these severe impacts of coal and potentially catastrophic climate change, the urgency of delivering a Just Transition in South Africa has exponentially increased. This country is almost entirely reliant on coal for electricity production, and is one of the world's biggest coal exporters. However, as we increasingly live in a carbon constrained world, the viability of coal as a key industry is rapidly diminishing. Coal exports are already beginning to come under pressure as other countries reduce their imports as they take action to reduce their reliance on fossil fuels.

The question that has to be dealt with now is: what does an urgent Just Transition look like in South Africa? Greenpeace Africa addresses this question through two pieces of research:

1. 'Employment effects of a Global Energy Transition', which assesses the job creation potential for different global warming scenarios.
2. 'Case studies from transition processes in coal dependant communities', which assesses case studies in Germany, Poland, South Africa and Indonesia, in order to draw out key lessons and potential ways forward for Just Transition processes in these key coal-reliant countries.

There is no doubt that catalysing a Just Transition programme is challenging, particularly within the context of South Africa, where job creation is a critical component of attaining a more socially just society. However, there is a great deal of urgency attached to not only catalysing the Just Transition, but also implementing it in South Africa, and there are significant opportunities attached to a Just Transition as well. A shift to 100% renewable energy will significantly increase energy sector jobs globally, and there is no reason that this would not be the case in South Africa too.

The province of Mpumalanga is clearly of critical importance to any Just Transition approach because of its existing coal-reliance, and one of the studies has focused on Mpumalanga entirely, but it is important to note that Limpopo is also an important province due to existing and proposed coal-fired power stations and coal mines in the area.

Greenpeace believes that no further investments should go into coal-fired power stations, that Kusile should be cancelled, and that investments should be rapidly redirected to renewable energy instead. We are at the edge of a beautiful future in South Africa, since we are blessed with some of the best renewable resources in the world. However, there needs to be a real sense of urgency in developing and implementing a Just Transition approach in this country, to ensure that workers are at the centre of this transition.

Key messages:

- *The Energy Transition towards a 100% renewable energy supply will increase the number of jobs in the energy sector significantly.*
- *The Just Transition programme must be based on a high-profile dialogue between key stakeholders. This dialogue should then lead to a series of negotiations on a social compact.*
- *Eskom needs to become a supportive and enabling player within this Just Transition programme by changing its business model, by participating in negotiating a framework with trade unions, by developing social plans for the Just Transition and by investing in renewable energy.*
- *The highly polluted coal province of Mpumalanga needs to become a priority region for large scale investments in Renewable Energy.*

Report 1: 'Employment effects of a Global Energy Transition'

Introduction and Methodology

This study aims to analyse the impacts of a Just Transition to a 100% renewable energy system, in order to better understand the potential socio-economic aspects of the transition. This could provide a basis for further research at a local level, and highlight where action will be needed to ensure a Just Transition for fossil fuel workers and key regions. The two key dimensions of the study are:

1. Total employment in the energy sector: The total number of jobs is projected until 2050 based on 5.0°C, 2.0°C, and 1.5°C scenarios. This projection is the total number of direct jobs in electricity, heating, and fuel production sectors, across 12 fossil fuel and renewable technologies. The calculations are based on employment factors in construction, manufacturing, operations, maintenance and fuel supply. These calculations are based on the methodology previously developed by the Institute for Sustainable Futures, University of Technology Sydney (UTS-ISF) and is updated with recent data on employment.
2. Occupational breakdown of employment: The share of specific occupations is calculated based on the results from the total employment calculations for five technologies: solar PV, onshore wind, offshore wind, coal and gas. This is calculated for 2015 and compared to 2025 for the 2.0°C and 1.5°C scenarios, to understand which occupations are likely to see jobs lost or new jobs created. This is a new methodology developed by UTS-ISF for this study.

Projected employment (both total employment and occupational breakdown) is calculated for 10 world regions and global results are an aggregate of the regional results.

Global key findings

- The transition to a 100% renewable energy system will lead to changes in the type and location of jobs in the energy sector, but overall **the transition has a very positive impact on the number of jobs in the energy sector**:
- An ambitious energy transition scenario (1.5°C), which is in line with the Paris Agreement and action needed to avoid catastrophic climate change, is projected to generate about **60% more energy-sector jobs globally** compared to the reference scenario (5.0°C). This would mean around 48 million jobs created in the 1.5°C scenario compared with around 30 million jobs in the reference scenario.
- By 2025 the ambitious energy transition scenario (1.5°C) would already lead to **18 million more jobs more compared to today** and remain at this level until 2050.

The global analysis does not subdivide the findings by country numbers, but rather into regional numbers. This means that the analysis has general figures for the African continent, but does not have specific figures for South Africa.

Regional key findings for Africa

- As of 2015 there are approximately 7 million jobs in African energy sectors. Most of them are already in the renewables sector (where 6.1 million jobs are related to 'biomass use' alone). About 250 000 jobs are in the coal sector.
- An ambitious energy transition scenario (1.5°C) for the continent would lead to 8.6 million jobs by 2025, which is about 700 000 more compared to the reference scenario (5°C). **In 2050 it would be 2.1 million jobs more than the reference case and 4.7 million more compared to today.**
- Renewable energy accounts for 94% of energy sector jobs by 2030 in the 1.5°C scenario, with biomass having the greatest share (53%), followed by solar PV, wind, and solar heating.
- There is an **increase in jobs across all occupations** between 2015 and 2025 in the 1.5°C scenario. The occupations with the highest number of projected jobs are plant and machine operators and assemblers, followed by technicians. The occupations that will have the largest increase in jobs are plant and machine operators and assemblers, with more than 300% increase and electricians and labourers with more than 200%.

Report 2: 'Case studies from transition processes in coal dependant communities' - Recommendations for South Africa

Introduction and Methodology

This report explores what a just and fair transition from coal looks like in four countries, namely Germany, Poland, South Africa and Indonesia. It aims to understand enablers and barriers to economic restructuring in the energy sector and identify and compare measures that ensure a just socio-economic transition for the workers and local communities involved. The power sector is consciously included in the analysis due to the interdependency with coal and the overall implications for the energy transition. In each country, one region was used to exemplify their pathway to a low carbon society. The cases are following:

- Germany: Lausitz – lignite mining and power generation
- Poland: Silesia – black coal mining and power generation
- South Africa: Mpumalanga – black coal mining and power generation
- Indonesia: East Kalimantan – coal mining and power generation

The study draws on qualitative research through desktop research of current literature, studies and government and other reports, including a brief media analysis of the most recent developments, supplemented with expert interviews.

Key recommendations for South Africa:

- The experience of South Africa highlights that **investment in a Just Transition is a pre-condition to an energy transition** at the pace that is required to avoid catastrophic climate change. The failure to pre-plan and invest in just transition measures has been a key factor in the unravelling of labour support for energy transitions. This is highlighted by reactions to the the first potential closures of coal plants. Since coal still represents a major energy source and constitutes the primary livelihood of many communities, a transition can only be equitably realised if a fair process accommodates local concerns and human rights. This imperative is magnified if the transition is accelerated, as it is the case if the global temperature rise is to be kept within acceptable limits.
- **The primary aim of the 'social dialogue for just transition' process should be the negotiation of a social compact:** a high-level political framework is required between key stakeholders which includes commitment to manage the coal plant decommissioning schedule as per the IRP and the establishment of a just transition fund and authority through legislation to manage impacts on workers and communities.
- **Coal expansion plans by Eskom need to be discontinued and funds re-allocated to a Just Transition fund:** additional coal plants will increase electricity prices, increase economic risk, and defer urgent just transition investment and planning required to avoid catastrophic social impacts when coal closures accelerate. It also locks in emissions that reduce South Africa's future ability to meet climate commitments.
- **Eskom needs to set up a new business model that is aligned with a clean energy transition and with benefits from the energy transition:** The national utility's reliance on coal is a primary barrier to a just transition and is the main cause of tensions between social partners. Eskom's importance in the country cannot be understated; it is therefore important that Eskom plays a central role in the just transition.
- **Eskom is required to participate in negotiations on a just transition framework agreement with trade unions:** a coordinated approach to worker redeployment, re-training, retirements and redundancies is needed to avoid involuntary redundancies and provide

support for workers to transition to new jobs.

- **Large-scale distributed energy and economic diversification programs should be implemented in Mpumalanga:** these are needed to create alternative economic activities and jobs as coal plants are decommissioned. It is crucial that the roll-out of renewable energy is implemented with a great level of clarity and certainty for renewable energy developers by the government, otherwise it will be difficult to drive the job creation that is needed.

Conclusion

The conversation around a transition away from coal and towards renewable energy has been rife with opposition for the sake of protecting jobs in the coal sector, particularly in the South African context. However, advocating for a Just Transition inherently demands that there is adequate social protection for those most vulnerable, and that there must be a Just Transition is simply not contested in this country. What remains to be done, is for the government to take clear steps towards developing a national dialogue and plan for the Just Transition. Based on the release of these reports, it is clear that job protection will take the form of a massive surplus of jobs in the energy sector, all born from the transition away from fossil fuels and towards clean, renewable energy. It is within our power to ensure that coal regions like Mpumalanga benefit from the shift to renewable energy, by prioritising large scale investments in renewable energy in the province.

However, a Just Transition is not an overnight event, and requires careful planning and management. Thankfully, in South Africa, we are able to take some learnings about what has and has not worked in other countries who have been/are in a similar position. Some key recommendations include ensuring that financial investment is directed to the Just Transition, and that money should be redirected from coal expansion to a Just Transition Fund; Eskom will need to take center stage in the transition by amending their business model and being closely involved with all stakeholders in the process - including unions; Mpumalanga, South Africa's coal region, will need to be supported by energy and economic diversification programs to ensure that no workers are left behind once coal plants are decommissioned.

The urgency of a Just Transition cannot be overstated, especially when considering South Africa's international commitments to the Paris Agreement. If we are to avoid catastrophic climate change, we need to take urgent, decisive action and limit global temperature increases as much as possible.