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# Just Energy Transition: Community Ownership and the Future of Renewable Energy Systems

### 1. Introduction

South Africa's energy sector is a major contributor to the country's Green House Gas (GHG) emissions, given its dependence on fossil fuels for electricity generation. In addition, the country's economy is energy intensive, mostly because of the energy requirements of the mining, extractive and mineral-processing industries. This puts South Africa near the top of the list of countries with the world's highest rates of carbon dioxide Adding to the environmental emissions. challenges that this sector poses in its current operation, is the fact that energy, amongst other natural resources, is still perceived as a commodity rather than a social good, and is market driven.

In April 2016, South Africa signed an agreement to commit to the Paris climate agreement at the United Nations Framework for Convention on Climate Change (UNFCCC) conference of parties 21st session in New York. Through this agreement the country has committed itself to reducing dependence on a centralised energy system, and is moving towards a more decentralised system of energy generation and supply. This is being done with the aim of building a low-carbon economy and a just society, where affordable and clean energy would be accessible to all. It is also in alignment with the country's **National** Development Plan (NDP) and the international Sustainable Development Goals (SDGs) for 2030, especially reducing dependence on increasing the use of renewable energy to combat climate change, and alleviating poverty. In all of this, communities are supposed to be at the centre of the transition towards a 'just society', with equitable access to natural resources such as energy.1

#### 2. Roundtable Discussion

In collaboration with Project 90by2030, CPLO recently hosted a roundtable discussion on a just energy transition (JET), with a focus this time on issues of *community ownership*, following the series of three roundtables held on other aspects of a just energy transition held last year. The speakers were Dr Neil Overy, a freelance researcher; Mr Thabo Sibeko from Earthlife Africa; and Ms Karien Erasmus of Promethium Carbon. The following sub-themes formed part of the discussion:

- The role of ownership in a just energy transition, presented by Dr Overy
- Enabling social upliftment: the land-community-energy nexus, presented by Ms Erasmus
- Pilot renewable energy projects in communities 2014 – 2016, presented by Mr Sibeko

## 2.1 Just Energy Transition

Dr Overy described JET as a transition process that is transformative, democratic, focused on local-ownership, and which places social justice at the core of change. JET has social implications which involve politics, hence it is almost impossible to suggest that the transition could happen smoothly without thorough political engagement and persuasion. Research shows that the model has cultivated great benefits for communities in European countries such as Denmark, where it is said that 70% - 80% of the 6 000 turbines generating wind energy, installed on Samso

Island, are owned by either local co-operatives or individual farmers. Furthermore, case studies for some African and Asian countries such as the DRC, Nepal, Nigeria, Myanmar and Tanzania, show that where community-owned solar systems were installed in areas where there was no electricity at all, the communities have been able to start small businesses and to contribute to their own economic development.<sup>2</sup>

As South Africa's energy sector moves into the just energy paradigm, it is very important to reflect on some of the factors which contributed to the success of JET in other countries, such as: policy certainty, feed-in tariffs, financial support for scoping and development, priority grid access, local government involvement, technical support programmes, and social justice commitments. This will allow us to reflect on issues such as overall governance, infrastructure, and economic models in our country, and to check if they are suitable and conducive for a just energy transition, or whether there might be a need for restructuring.

## 2.2. The land-community-energy nexus

Climate change and socio-economic challenges, amongst many other elements, opportunities for a transition to decentralised renewable energy, where communities are responsible for their own clean and affordable energy generation and distribution. In her presentation Ms Erasmus included an example of a pilot project, where mines in collaboration with communities work together in generating bioenergy. Giant king grass and sugar beet are planted on land that previously hosted mining activities, and these crops are used to generate bioenergy that is distributed to nearby facilities. Not only are fossil fuels replaced in this practice, but there are great opportunities for rejuvenating the soil, cleaning water and involving local communities. Ms Erasmus's organisation, Promethium Carbon, has published the "RE Toolkit 2017: A practical guide to project development", which provides guidelines on building just and sustainable land reform projects.<sup>3</sup> Participants at the roundtable also noted that there is a need to create synergies whenever possible between mine closures and the social issues of communities around these mines.4

## 2.3. Piloting renewable energy projects

Mr Sibeko's presentation placed much emphasis

on the important role that communities play in the transition to renewable energy. Earthlife Africa partnered with the Women in Energy and Climate Change Forum to work on a renewable energy project in areas around Gauteng. The objective of the project was to ensure access to sustainable energy, and to improve waste and water management in poor communities. Through this project they managed to install solar panels and biogas digesters for power generation in schools around the region; and to develop food gardens in a number of these schools. The vegetables produced were used to supplement the feeding scheme, while organic waste from the gardens was fed into the biogas digester, to produce energy for cooking. This cycle contributed to a generally sustainable generation and use of energy. Importantly, communities around these schools were involved as part of the project task teams, and through community consultations and training.

## 2.4. An enabling environment

Currently, the energy sector is faced with challenges as far as connectivity and supply are concerned, especially in rural areas, many of which are without electricity. People wait for longer periods to be connected to the grid, and when it finally happens it is difficult for them to afford electricity, as most of these communities live below the poverty line. This presents wider challenges for people living in these areas, because it becomes a cross-sectoral issue impacting on their health, education and financial well-being. Not only does a just energy transition offer alternative energy technologies to improve environmental circumstances, but it also serves as a platform for addressing these equity issues. It is thus very important for all levels of government to build relationships with business, communities and academics in order to create an enabling environment for just energy transition.

Further exploration of the following aspects could be fundamental in creating such an environment:

Research and policy development: Academics and policy makers have a role to play in harnessing efforts, knowledge experiences of transition to renewable energy across sectors, and to develop policy frameworks that would help enhance the level of commitment and investment by energy companies, entrepreneurs and communities.

- Capacity development: There is a great need to equip labour with the necessary skills to ensure employment for people in the renewable energy sector.
- Infrastructure upgrade/ Institutional capacity: Energy utilities such as Eskom need to be equipped to handle transformative change. At the same time, the sector has to consider looking into the possibility of developing an institutional capacity that will facilitate the innovation of renewable technologies, and the implementation and monitoring of renewable energy systems, as a matter of social justice.
- Education and Awareness: There is a need to incorporate renewable energy education into the school curriculum in the long-term, and in the meanwhile the level of awareness in communities about renewable energy's benefits and ownership issues must be prioritised.
- Financial support: Pilot projects in communities could serve to persuade government and other stakeholders to invest in transformative renewable energy.

### 3. Conclusion

There is a great need for engagement between government, business, civil society and academia, to discuss what needs to be in place for a just energy transition, and how to plan and implement it. The roundtable discussion raised a number of questions and for further research around some of the following issues:

- 1. Is the just energy transition idea revolutionary does South Africa have successful examples of any community ownership?
- 2. How do we invoke the required political will?
- 3. When it comes to ex-mine based projects on land reform and energy transition, how can ownership issues be resolved?
- 4. What is the definition of 'community' in the context of just energy transition?
- 5. How do we address the problem that people want ownership when it comes to benefits, but not when it comes to responsibility?
- 6. Can a capitalist economy accommodate full community ownership?
- 7. While it is important to reflect on experiences elsewhere, we need to develop approaches that respond to the local context and its particular challenges.

# Lovedonia Mkansi Project Co-ordinator

Lovedonia Mkansi joined CPLO in April as Project Co-ordinator for the Environment and Energy Project. Originally from Limpopo, Lovedonia graduated from Polokwane University, and worked for the Department of Environmental Affairs before joining CPLO.

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<sup>&</sup>lt;sup>1</sup> https://www.enca.com/south-africa/sa-signs-paris-climate-change-agreement

<sup>&</sup>lt;sup>2</sup>https://www.theguardian.com/environment/2012/nov/05/windfarms-community-ownership See also <a href="https://www.tearfund.org/climate\_energy">www.tearfund.org/climate\_energy</a>

<sup>&</sup>lt;sup>3</sup> See <a href="http://promethium.co.za">http://promethium.co.za</a>

<sup>&</sup>lt;sup>4</sup> See, for example, https://spotlight.africa/2018/05/07/old-mine-sites-a-power-filled-opportunity/