What are South Africa's green jobs?

With South Africa at a critical moment in its pursuit of a greener economy, the findings of a research report titled *Mapping of Green Jobs, Skills Development and the Just Energy Transition,* underscore the transformative potential of green jobs. The report highlights the need for targeted upskilling, international cooperation and policies to ensure a Just Transition that protects workers' rights and livelihoods.

The research report by the Sam Tambani Institute (SATRI), the research arm of the National Union of Mineworkers (NUM), mapping potential green jobs in renewable energy value chains and critical transition minerals (CTMs) like lithium, cobalt and nickel offers a detailed examination of the opportunities and challenges found in this shift.

According to the report, the concept of green jobs remains contested. Many workers in South Africa's mining and energy sectors associate green jobs only with renewable energy, overlooking opportunities in related fields like CTM exploration, processing, and refining. Yet the report identifies significant job creation potential in renewable energy, particularly in manufacturing, construction, installation, operation, maintenance and research and development. However, these roles depend on local value addition and the learning of specialized skills. For instance, engineering, technical, and scientific expertise are critical for developing green infrastructure and services, while operational management and monitoring skills will ensure efficient adoption of green technologies.

The report highlights that the main concern for trade unions is whether green jobs can offset job losses in the coal sector which employs over 90 000 workers. Further, it outlines South Africa's energy transition questions on how many jobs will be created, whether they will be in regions like Mpumalanga, where coal-dependent communities face unemployment risks? Can coal miners be reskilled for green roles, and will their hard-won rights, such as unionization, be preserved in the renewable sector? The report suggests that without clear answers, unions are unclear on how the transition from coal to renewable energy will benefit workers.

The report stresses that skills development is key to unlocking green job opportunities. It states that essential skills are in engineering and technical expertise for manufacturing green infrastructure, scientific knowledge for innovation, operational management to facilitate access to green products, and monitoring to optimize the use of renewable energy sources.

To attain the skills, targeted training programmes are needed to equip workers, particularly those transitioning from coal-based industries. For CTMs, job creation hinges on local processing and refining, which requires international technical and financial support to build capacity.

The transition also poses challenges for informal workers, who dominate parts of the green economy in the country, argues the report. With South Africa grappling with a 32.9 per cent unemployment rate which is higher at 60.7 per cent for youth aged 15–24 and 35.7 per cent for women, formalizing green jobs is critical.

"We continue to work with research organizations and partners to build knowledge on trade union policy positions on the green economy and the transition to renewable energy, and this report is a contribution towards a just and inclusive transition for workers." The NUM is affiliated to IndustriALL Global Union, and the research was supported by the IndustriALL regional office for Sub Saharan Africa and 3F – the United Federation of Danish Workers.