

Making South Africa's migration to Fourth Industrial Revolution just for workers: A lesson from the just energy transition framework to a low-carbon economy

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Article Summary

Two parallel developments are taking place in South Africa that are of key significance to workers. On the one hand are calls for a move from traditional fossil-fuel energy generation to a greener, cleaner low carbon emissions energy generation. On the other is the country's looming embrace of the Fourth Industrial Revolution (4IR). Both developments require organised labour to be very active and engage with other stakeholders in ensuring that both these developments do not compromise workers interests. To this end, labour has been engaging with multiple stakeholders in advocating for and implementing a Just Energy Transition to a low-carbon economy to ensure that the interests of workers and communities are taken care of and are not sacrificed in the transition. As far as the 4IR is concerned, labour has not yet come up with a clear and consensus-based position on how to deal with the revolution. It is against this backdrop that this article makes a case that the labour related tenets of a Just Transition in the energy sector apply to a migration to the 4IR. The proposal of what should constitute a just transition to the 4IR should mirror that of the transition to a low-carbon economy that is based on the four pillars of the International Labour Organisation's (ILO) Decent Work Agenda. The four pillars are, social dialogue, social protection, rights at work and employment protection and creation. This the key lesson that labour can draw from the energy transition space and use it to make the migration to the 4IR in the country just.

Introduction

The emergence of the 4IR and its potential anticipated negative impacts pose a major challenge for trade unions. Of the biggest of these challenges is the anticipated job losses should the 4IR not be embraced with caution. The 4IR is characterised by advanced and increased technological use and it is a known fact that technology always requires less human capital. With this in mind, the trade union movement needs to be proactive by taking a practical and informed stand towards job protection in the wake of the 4IR. The introduction and implementation of the 4IR lies largely in the hands of private actors who do not seek permission from government or organised labour to do so. Noteworthy however is that the 4IR is not only characterised by challenges but opportunities as well. Hence labour has to engage with all stakeholders to protect workers interests while taking advantage of the opportunities that come with the revolution.

Unfortunately, labour has not come up yet with a position on the 4IR despite the fact that the revolution is fast taking root in the local economy. The article aims to contribute towards developing an informed labour-leaning position and approach to the 4IR. It makes the proposition that trade unions need not re-invent the wheel when it comes to the 4IR, rather it should utilise the tenets of a Just Transition as applied in the energy transition space - from high emission energy generation to a low carbon emission energy.

The rest of the paper is as follows, Section two looks at the concept of a Just Transition. It highlights key assumptions and relationships that informed labour to request for a just energy transition. Section three makes a case for why the Just transition concept in the energy space and its tenets that are drawn from ILO's Decent Work Agenda is relevant to the 4IR. Section four concludes with recommendations.

Just Transition Concept: Genesis

The concept of a just transition originates from the North American trade unions in the 1990s, and was located in the energy space. It was an intervention that was aimed at making sure that workers who would lose their jobs due to environmental protection policies and accompanying migration to cleaner energies would be supported (Smith, 2017).

Underlying the demand for just energy transition are a number of assumptions regarding what happens to workers and working environment when there is a migration from fossil energy to low-carbon energy generation in a country. Some of these key assumptions are:

Capital intensity of low carbon energy generation: Low carbon and clean energy generation is more capital intensive compared to the existing fossil fuel energy generation. The latter is more labour intensive whilst the former uses less labour and more machinery. This implies that labour will be the first casualty of clean energy production.

Job displacement in the energy sector: Jobs created in the clean energy sector are likely to be less than those in the existing fossil energy generation. In fact, even if the clean energy sector will create some jobs, the new jobs will not necessarily be occupied by the same people in the fossil energy generation sector given the geographical location of new energy plants.

Higher skills demand in the clean energy generation: The clean energy sector will demand higher skills levels than those existing under 'dirty' energy generation. Moreover, the skills set needed by clean energy sector are also not readily available in the country and may require to be imported from abroad.

Low linkages with other sectors of the local economy: The green energy generation has less development linkages with other sectors of the local economies compared to the fossil energy generation. This implies that indirect economic and employment opportunities of the country's energy sector will be less under the green energy generation regime.

Private ownership will dominate the local energy sector: Whilst the fossil energy generation is in the hands of the state through State Owned Enterprises (SOEs), green energy generation is most likely to be private and foreign owned and controlled.

With the recognition of the above fundamentals of energy transition, organised labour had to come up with proposals that would make the energy transition just for workers.

Labour proposals on the characteristics of a just energy transition

Organised labour put forward four pre-requisites or characteristics that would make the energy transition just from a workers' perspective. It relied on the Decent Work Agenda of International Labour Organisation (ILO, 2015) in coming up with these pre-requisites. According to organised labour, for the energy transition to be just, it had to be characterised by:

Social Dialogue: Social dialogue is a process which involves various social partners who negotiate towards certain policy agreements in the best interests of those whom they represent.

Social Protection: Social protection is about people and families having security in the face of vulnerabilities and contingencies; it is about having access to health care, and it is about working in safety.

Rights at work: Rights at work include the right to freedom of association, and the effective recognition of the right to collective bargaining.

Employment protection and creation: Employment protection and creation is one of the most important concerns of organised labour.

Organised labour strongly believed that with the incorporation of the above four characteristics in the energy transition, the transition would become just.

The 4IR and Why a Just Transition is Relevant to the 4IR

The 4IR is loosely understood as a concept that is highly synonymous with technology. According to various scholars (Schwab, 2017; Ayentimi & Burgess, 2018; Kaggwa, 2019) the 4IR is characterised largely by a range of technologies that combine digital, physical, and biological systems to operate as one. These can be categorised as artificial intelligence, robotics, the internet of things, 3D printing, and additive manufacturing to name a few.

The 4IR undoubtedly presents businesses, and economies in general, with many opportunities. It is considered as an important driver of social and economic growth as it is anticipated to increase production potential at a more rapid pace, using advanced technologies. The 4IR is anticipated to reshape the future of work; and for trade unions this is a major concern as advancements in technology are known to reduce labour in the workplace.

The 4IR is expected to bring with it changes in the manner in which goods and services are produced and are marketed. Production under the 4IR will be more capital intensive; to make matters worse, even the selling of goods and services produced is likely to go online. With online sales, the retail sector, which is a major employer, will lose many jobs; this will exacerbate the already high unemployment levels in developing countries like South Africa.

In all, despite the positives that will accompany it, the 4IR poses a real threat to organised labour due to its potential to lead to significant job losses and the displacement of workers based on skills, geographical location, or new workplace configuration.

The relevance of just energy transition to the 4IR comes from the fact that the effects of the transition to the 4IR on workers and workers communities mirrors those of the energy transition.

Why a Just Transition is relevant to the 4IR

The assumptions and labour concerns that motivated for calls for a just transition in the energy debates are very similar to those labour faces under the 4IR. The threat to employment and well-being of workers that was faced under the energy transition from fossil to low-carbon energy mirrors the threats that confront organised labour with the emergence of the 4IR. As such organised labour should borrow from the energy transition, the labour perspective conceptual framework and recommendations in dealing with the 4IR.

The key similarities between energy transition – from fossil energy to low-carbon energy and the transition from previous industrial revolutions to the 4IR transition are that both processes:

- Involve migration from a labour intensive production regime to a capital intensive regime; Require fairly higher skilled workers than previously;

- Are characterised by the private actors taking a bigger role in the production process and the relegation of the role of the state.

The similarities point to the fact that the resultant effects on workers and organised labour of the energy transition and the 4IR will be same, although they may differ in scale. The undesirable effects of the transition have already been identified and articulated under the energy transition – job losses, workers replacement, and other adverse effects that come from job losses. Moreover, a framework to mitigate these adverse effects in the energy space – namely a just energy transition - has already been developed.

For the 4IR, labour should propose that recommendations of a just transition should apply to the 4IR as they apply for the energy transition. This will not be controversial since the concept of the just energy transition has, by and large, been accepted by key stakeholders in the energy space, and these happen to be the same stakeholders in the 4IR space, i.e. government, business, and labour.

Concluding Remarks

Although the 4IR is likely to increase productivity and probably propel countries to faster rates of development, its effect on employment in the short term, is likely to be negative. A number of existing jobs will be lost, and there are no guarantees that the envisaged benefit of rapid economic growth will be fairly distributed between owners of capital and workers.

With the recognition that the 4IR cannot be stopped in its entirety, organised labour has to come up with an informed and consensus-based position on how to deal with the 4IR in the country, so that the interests of workers are not sacrificed in the process. Organised labour has

to make sure that the well-being of the working class does not become a casualty of the technological changes that accompany the 4IR.

This article makes the case that the concerns that workers had with the change in energy (from the fossil based energy to low-carbon energy) are still the same when it comes to the 4IR challenge. As such organised labour should simply demand that the process of adopting the 4IR should be made just

– it should demand for a just transition to the 4IR. Making the transition to 4IR just means that it should embody the principles of the Decent Work Agenda.

Organised labour should make it clear that a just transition is as relevant to the 4IR as it is to the energy transition. This is because the anticipated impacts of both transitions on workers are similar. Like in the case of the transition to low carbon energy, if the transition to the 4IR not carefully planned and managed, it will ultimately have a negative effect on employment in general and the wellbeing of workers and workers' communities.

Drawing from the energy just transition, it should demand that a just transition to the 4IR should be underpinned by social dialogue, social protection, protection of rights in the workplace, and job protection and creation.

References

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