

The hydrogen economy is about more than just energy transition

By [Viren Sookhun](#)

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The recent [Devac Hydrogen-H Conference](#) highlighted the opportunity for Africa to lead in the development of green hydrogen for energy transition. However, in the greater context and in the South African market in particular, green hydrogen is about more than just replacing fossil fuels. Building a hydrogen economy in South Africa presents a significant opportunity for skills development, local content, and social upliftment.



The just transition is about more than energy

A just energy transition requires more than moving away from fossil fuels; it also requires a concurrent social transition that uplifts the people of South Africa and Africa as a whole. There is opportunity to use the funding, loans and grants available to invest in the future and ensure that, in the future, the standard of living of even the poorest in our society is far higher than it is today.



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One of the best ways to do this, is to expand the definition of local content beyond just using local people for employment and procurement. By opening the parameters and allowing for a portion of the total contract value of green hydrogen projects to be used for people development, we will be able to create a broader economic and social impact. Investing in people beyond those who are directly involved in projects, training them and skilling them to enable upliftment will facilitate their growth and have a ripple effect to wider communities.

Moving up the value chain

One area that funds can and should be used for is to set up component manufacturing facilities for the various parts of renewable energy production, from wind turbine blades to solar panels and batteries. If these are set up in Special

Economic Zones (SEZs) the surrounding communities can also have a stake, while the country moves up the value chain, and locally manufactured components can decrease cost, add value, and reduce carbon footprint.

It is also important to engage with the communities to determine and prioritise their needs for development. Often, community development initiatives are not conducted in consultation with the communities, and the result is something that is not necessarily of great use – for example, the construction of a sports stadium when a hospital or a school would be more beneficial. In addition, community leaders need to be upskilled to understand the investment, to use financial grants wisely and grow the money for continuous development.

South Africa has a substantial proportion of unemployed youth who are ideal candidates for skilling in skills around the fourth industrial revolution (4IR) as well as science, technology, engineering, and mathematics (STEM) subjects. This knowledge is essential for hydrogen and renewable energy technologies as well as a host of essential future endeavours. We also need to focus on skills development around 4IR from the ground up, even as early as Early Childhood Development (ECD) centre education.

A move toward self-sufficiency

Africa cannot be a developing economy forever; we need to use the fund inflows that are part of the just energy transition to invest wisely so that we can become self-sufficient in the future. Expanding the definition of 'local content' will allow for investment into community development, skills development and transfer of skills, education, training and establishing component manufacturing factories locally, creating jobs and value down the line.

It is also essential for corporate social investment (CSI) to move beyond a tick box exercise – it must be meaningful, fully thought through and sustainable, and centred on giving back to communities. CSI is not just about building and equipping schools in rural communities. CSI opportunities can also be found in value chains such as transport and logistics, ports, green hydrogen refuelling networks, and construction and civils.

By creating local component manufacturing and investing in innovative skills development, and by focusing on creating value through effective CSI and community initiatives, we can move the continent forward and become more globally competitive.

ABOUT THE AUTHOR

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