

## **A Just Energy Transition is an ambitious project**

**By Ghaleb Cachalia, DA Shadow Minister of Public Enterprises**

The biggest injustice around electricity in South Africa is that we don't have enough of it and that it is too expensive. Elevation out of poverty is predicated on the availability of electricity.

Our just transition should be a transition from an electricity-poor to an electricity-abundant society. And that means affordable electricity should be available in every home and in every workplace for businesses to create jobs - now.

This is why we need a stable baseload while generation from other multiple sources of supply kick in on a source agnostic/lowest cost basis while we explore the most suitable, least invasive, energy-dense solution. We must leverage what we have in hand and focus in parallel on what we can alternatively and impactfully implement over a sensible timeframe.

Yes, the Just Energy Transition – JET's vision focuses on achieving "Net Zero" carbon emissions by 2050, with an increase in sustainable jobs involving increasing our share of renewable energy, storage, grid strengthening, and the repurposing our coal fleet.

But it is not today's panacea. It is tomorrow's cautious project.

Remember that last year during COP 26 in Glasgow, India was opposed to hard targets on phasing out coal – still among the key sources of energy for developing nations. It pushed to introduce equity and safeguards on fossil fuel subsidies for the poor following which the text in the final pact was reworded.

The current question on everyone's lips is why has loadshedding not been fixed after 15 years?

In the face of ongoing and debilitating loadshedding and the need to transition sensibly we need to understand that reliable alternative power needs to be dispatchable, and we need to plan accordingly for both smaller scale and utility scale augmentation.

If you were to replace the 1600 mw lost at Kusile and Medupi with renewables we would need 5000mw because from 100mw of nameplate renewables you only get 30% capacity factor.

So we need a reliable interim solution while we explore alternatives and push for the deregulation of the energy, accommodating IPP's.

Battery storage is key to new generative augmentation and multiple 1000mw's of renewable energy need 1000's of MW Hours of battery storage. Elon Musk's historic storage facility in Australia – the largest globally – is tiny by comparison, with a capacity of 129MW hours and significant augmentation will need government guarantees to kick in in 2050? So, it's going to be a while before this morphs into utility scale solutions and loadshedding must be fixed now.

And, given that South Africa will need R1.48 trillion over the next five years to transition an economy that's heavily dependent on coal-generated energy, does SA have the time and the fiscal space?

Africa's JET is said to be the first of its kind globally in both scale and ambition and sees itself as a leading player in the new carbon global economy.

This is all very well, but let's learn to walk before we can run and that involves keeping the lights on, lest we fall in the darkness.