

## Some tough conversations needed to address the transition in the liquid fuel value chain

Key stakeholders in the liquid fuel value chain, which researchers have found employs well over 300 000 people including at petrol stations, gathered yesterday to unpack the challenges, risks and potential opportunities associated with the just transition to a low-carbon economy. The biggest risk identified during the discussion was failing to plan and explore alternative economic opportunities. The closure of local oil refineries points to the fact that the transition has already started and, whilst an opportunity has been lost to plan around such closures, there is still time to plan and have “some tough conversations” as the transition unfolds in the rest of the value chain.

Whilst there are many uncertainties and unknowns, significant opportunities should be explored in the areas of green hydrogen, electric vehicles (EVs) and sustainable aviation fuels (SAF) as is happening in the case of companies such as Sasol and elsewhere. For these opportunities to bear results, some speakers argued for government to ensure an enabling policy environment as well as partnerships to access finance. By contrast, one speaker proposed that government should get out of the way and level the playing fields to allow energy carriers to compete with each other.

These emerged as some key themes during a robust discussion on the impact of the just transition on the liquid fuel value chain which was organised by Trade & Industrial Policy Strategies (TIPS) and the WWF South Africa. The webinar was held against the backdrop of the on-going discussions around decarbonising the economy and the need for a just transition. Decarbonising this value chain will impact on the continued usage of liquid fuel, the viability of petrol stations, and on the broader value chain which extends to plastics and petrochemicals, amongst others.

Input from independent researcher and director of the South African National Energy Association Dave Wright highlighted how the transition has already begun with the closure of the main local refineries in the country. The broader industry which includes both refining and logistics employs over 60 000 people, many of these jobs are at risk with the eventual phase out of liquid fuel as the country moves, for example, to electric vehicles. However, there is still time to plan for the logistics sector as there was no immediate transition pressure - fossil fuel reduction is not anticipated before 2035. Wright stressed that there is time now to plan for the transition and new opportunities, such as green hydrogen, and biorefineries.

Turning to another sector which will be hugely affected by the increased electrification of transport and the decline in the use of liquid fuel is the petrol stations and related activities, which is estimated to employ in the region of 130 000 people. TIPS senior economist Nokwanda Maseko explored the current position of petrol stations – who owns the infrastructure and the nature of petrol attendants in terms of education, average salary and gender. Maseko argued that, in moving forward, stakeholders had to explore a) how to support consumers to foster the uptake of EVs; b) ensure a future for petrol attendants in terms of reskilling and social security; and c) what should happen to the existing network of infrastructure.

Farai Chireshe, bio-energy analyst for WWF-SA explored the opportunities and challenges for South Africa in using biomass for sustainable aviation fuels (SAF). Whilst substantial infrastructure was needed to move biomass from dispersed sources to centralised consumption points, the potential exists. Seven biomass options are locally available. These could create an estimated 90 000 green jobs whilst the construction of biorefineries could also lead to a large number of jobs over an extended period. In addition, the move to biomass production could lead



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to saving a significant number of jobs that will in time be lost by coal truck drivers whilst it could also boost the agricultural sector if feedstock was used. Chireshe concluded that, ultimately, a domestic SAF sector could be a key cornerstone of a low-carbon economy in South Africa.

During the panel discussion, a number of speakers elaborated and commented on the input made by Chireshe, Maseko and Wright. Climate change head at Sasol, Presidential Climate Commissioner and Business Unity SA representative, Shamini Harrington highlighted the urgency to “act and act now”, in view of what has already happened with the local refineries. Whilst stressing the magnitude of the challenges which lay ahead, Harrington outlined a range of projects which Sasol was exploring in relation to the production of green hydrogen (starting next year); SAF and biomass and a Greenfield project in the Northern Cape. She concluded that a number of projects were underway but this required partnership and “we need to work together.” Critical to exploring new opportunities was not only partnerships but finance and the right policy environment.

Congress of South Africa Trade Union (COSATU) official Boitumelo Molete provided some insight into the federation’s blueprint for a just transition. Elements included the need to explore social protection, reskilling, sector specific plans and the transformation of the transport sector with the upgrading of the rail network. Molete indicated that the federation was supportive of dialogue and worker engagement around the just transition whilst stressed the need for innovation to inform workable opportunities to address potential job losses.

Rod Crompton of the African Energy Leadership Centre, at the Wits Business School expressed some concern over the lack of sufficient and accurate data around, for example, the number of service stations which exist in South Africa (and associated employment). Crompton also highlighted that the research into the liquid fuel sector had not touched on what such a transition would mean for other by-products such as plastics and petrochemicals. In terms of the potential opportunities presented around biomass, he questioned an approach where the energy return was less than the energy investment.

While Crompton questioned the high cost of SAF and if it would be passed onto consumers, TIPS senior economist Gaylor Montmasson-Clair pointed out that cost of green hydrogen and SAF had to be price sensitive for the domestic market whilst this was not necessarily the case for the international market as long as the price was in line with competitors. Crompton argued further that South Africa had to change its policy around EVs and noted the need to manufacture parts and assemble electric vehicles in South Africa for both the domestic and export market. He added that the South African automotive companies supplied both markets and this was a key industrial sector for the country. He cautioned that the failure by government to act would lead to the closure of the local automobile manufacturing sector. Ultimately, whilst the move to EVs in South Africa was slow, the companies in this industry are global and supply a market which is changing faster than expected. A failure to act would not only lead to potential job losses in manufacturing but in automotive repairs and related sectors.

In conclusion, discussion also focused on the use of incentives such as those currently provided to the fossil fuel sector; whether South Africa could provide support to encourage EV sales; the rehabilitation of service stations and how economically competitive SAFs are likely to be. It emerged during discussions that both Airbus and Boeing have already done demonstration flights relying on SAFs.

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