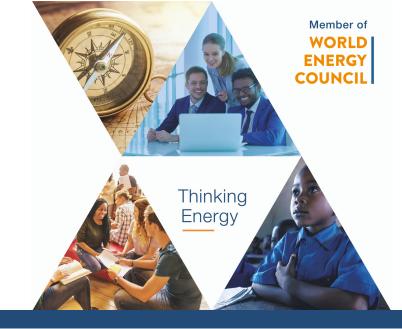


South African National Energy Association NPC
Thinking Energy

Opinion Piece



THE IMPACT OF COVID-19 ON THE ENERGY SECTOR IN SOUTH AFRICA

The impact of COVID-19 is still emerging. It is however clear that the energy sector has and will continue to be, significantly impacted. In South Africa there have been both positive and negative impacts on the energy sector.

Predicting when and how quickly demand will return is a key consideration for the country and possibilities of permanent destruction and shift in demand for heat, cooling, power and fuels will need make precise forecasting more challenging. It is also critical to see how energy can contribute to economic recovery and enable everyone and the environment to benefit from progress along a clean, reliable, affordable and socially and just energy transition pathway.

South Africa is heavily dependent on domestic coal to generate and meet electric power demand and on imported oil to produce liquid fuels for transportation and is therefore seeking affordable and practical means to lower greenhouse gases whilst meeting new and growing energy demand. The South African Energy Association (SANEA) is hosting a series on "Navigating the new energy reality" to share lessons learned and future outlook as part of its unique role in the world's first and foremost global energy community network – The World Energy Council.

The first of these webinars was on the impact of COVID-19 on the energy sector in South Africa. Kiren Maharaj MD Gibb Power and Chair of SANEA facilitated the webinar and introduced the topic saying "COVID-19 has challenged normal as we know it and this has led to new and innovative ways of doing things".



An expert panel consisted of Dr Angela Wilkinson, Secretary General and CEO of the World Energy Council (WE Council), Barry MacColl, Senior Regional Manager at the Electric Power Research Institute (EPRI) and Claire Lawrie, Senior Managing Director, Energy and Natural Resource at FTI Consulting, who debated the topic.

The panel debate revealed that globally, the energy sector has seen energy demand declining as lock-down occurred in many countries around the world. The WE Council global membership surveys highlight that 96% of energy business were already experiencing direct impacts and decreasing demand by end March, whilst trying to maintain services and manage reduced cash flows.



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www.sanea.org.za Page 1

Dr Wilkinson highlighted and a new energy leadership agenda is emerging in response to the ongoing crisis – characterised by the 4Rs – responsible business leadership, rethinking resilience to include people and global value chains, rescue and recovery packages, and, appetite for redesign of energy transition policies. Noting the dramatic decline in sales and revenue across several sectors these surveys also identify a seismic shift in investment by energy organisations of all shapes and sizes. For example, the re-allocation of financial capital to accelerating digitalisation strategies and R&D, whilst trying to preserve headcount.

Barry MacColl reported that EPRI has found that many operational challenges are being experienced by electricity companies as the demand for power shifted almost overnight. He commented "The significant changes in daily demand for power highlight the need to develop new and better approaches to forecasting". Companies are also having to quickly implement new tactics and operating modes for production, implement disinfectant technologies for the workplace for COVID-19 and any future pandemics, and execute new remote work and automation processes. IT requirements and remote work are therefore increasing and concomitantly, the risk of cyber security.

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The panel agreed that the longterm impact will be determined as a result of changes in human behaviour.

Focussing on South Africa, Claire Lawrie outlined how the country experienced three shocks at the same time, namely, COVID-19, a decline in the macroeconomy including sovereign rating downgrades and extreme low oil price. South Africa responded rapidly to COVID-19 with an immediate and strict lockdown. Claire Lawrie outlined how when oil prices dropped, coal and gas-to-liquid operations was heavily impacted as their prices are pegged to oil. Storage became a restricted resource as demand dropped.

As a consequence, she noted, all energy companies in South Africa have been financially impacted by the loss in revenue.

Given all these developments, the level of uncertainty in the energy sector has exponentially increased. This includes a lack of clarity about the spread of the virus such as when and how quickly a vaccine can be developed and disseminated, levels of infection, government response measures and if countries and companies will collaborate, take a more diversified approach or implement protectionist measures. There is also uncertainty when it comes to the responses and resilience of the energy sector itself such as global value chain recovery times, demand patterns and prices.

The WE Council has pulled together the expertise of its entire global member network to provide a set of four impartial crisis scenarios that decision makers can use to design and stress test exit strategies and better understand implications for successful energy transition. based FTI has undertaken a desktop analysis to develop a more focussed set of South African scenarios which explore implications of different economic recovery curves.

COVID-19 has not impacted energy technology innovation per se, although uptake rates and prices may change. Both sets of scenarios encourage consideration of more than one future outlook and help explore and prepare for what comes next: has world has experienced a big enough shock that going "back to normal" is unlikely.

The panel agreed that the long-term impact will be determined as a result of changes in human behaviour, that has fundamentally shifted as a result of COVID-19. Indeed, the three critical uncertainties used by The WE Council to develop its COVID-19 scenarios are trust, ambition and control – three people and society dimensions that reflect its vision of humanising energy transition.



www.sanea.org.za Page 2



New policy and regulations will be required in addition to new business models.

The panel discussed that key areas of impact include changes in market development and business models, market design rules, consumer behaviour (air travel, remote working on-line retail), the reversal of globalisation and protectionism, changes in the demand for specific energy products such as jet fuel vs diesel, changes in demand patterns and some product substitutions. For South Africa, Claire Lawrie pointed out the security of supply issues in the liquid fuels space if refineries close, and South Africa needs to increase imports in finished products. There can also be significant impacts in the financial health of energy players and there may be more defaults closures, merges etc. Claire Lawrie said "The greatest impact will be on small wholesalers and retailers and may cause international companies to question their presence in South Africa".

So what do energy players need to do? The panellists agreed that energy sector participants need to learn from the experiences of the last few months, become more resilient and adjust to operating at lower breakeven points and different operating regimes. It will be essential that developments and key indicators are closely monitored and a variety of different strategies developed, to be robust no matter which scenario emerges. It is however essential that an integrated and multi-energy approach is taken if the opportunities that COVID-19 brings are to be exploited, required new and progressive leadership mindsets and approaches. Levels of innovations must therefore rise and respond to longand short-term changes, such as the levels of uptakes of technologies including electric vehicles and renewables and changing customer needs and requirements.



Given that the market has shifted, companies should diversify their products and services as it has been found that diversified companies have outperformed single product companies after COVID-19, due to their higher resilience. New policy and regulations will be required in addition to new business models. This will mean that South Africa needs to revisit its draft Integrated Energy Plan and the Integrated Resource Plan to factor in these new changes and uncertainties.

Angela Wilkinson stated "Africa has the opportunity to develop a blue-print for a hybrid energy market which invests in both green power and clean energy to accelerate climate neutrality and social inclusiveness – new net zero emissions pathways enable wider access more opportunities and thus attractive to investment". She added this will also requires new approaches to cooperation across a new energy ecosystem that involves associated sectors and with customers and end-users increasingly in the driving seat. "The energy transition to lower carbon has been strengthened by the COVID-19 impact but South Africa may not have the financial resources and investment to make it happen fast enough" was an observation by Claire Lawrie.

The global cost of capital is likely to increase, albeit unevenly and this means that if the just energy transition is to happen, in a manner which creates jobs and prosperity in South Africa and fuels economic recovery post COVID-19, a new normal is also required. Investor confidence must therefore be supported and driven by a clear policy commitment, together with business innovation.

ABOUT SANEA

The South African National Energy Association (SANEA), founded in 1924, is the South African Member Committee of the World Energy Council. SANEA represents a hub for objective thought leadership on energy and related matters. In so doing, SANEA stimulates original thinking to catalyse transformation of the South African Energy Sector.

To benefit our stakeholders, we will draw on our World Energy Council affiliation and our local, regional, continental, and global networks to provide credible interventions that:

- Engage influential role players
- Stimulate objective thinking and critical assessment
- Encourage knowledge-sharing and debate
- Strengthen the professional energy network
- Enhance awareness of energy issues in South Africa Promote talent development

www.sanea.org.za Page 3