

Net Zero for South Africa

Net Zero Economy Index 2020:
The Pivotal Decade



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As the COVID-19 pandemic is demonstrating, we cannot afford to ignore systemic risks. While the global pandemic resulted in unprecedented disruptions, the effects were notable because of their immediate and sudden onset. In contrast, the effects of an ever-warming planet may not be as immediately obvious, but will be seen through increased volatility and in floods, droughts, fires and other natural disasters.

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Climate change — to which no one is immune — continues to be a catastrophic risk. A shift towards greener economies cannot be delayed until the shocks of the pandemic subside. ‘Climate action failure’ is the most impactful and second most likely long-term risk identified.

— 2021 WEF Global Risk Report.

To avoid the worst impacts of climate change, global emissions must be halved by 2030, and reduced to net zero by 2050. Given that average global energy-related carbon emissions have risen by 1.5% per year from 2009 to 2019, the latest PwC Net Zero Economy Report found that a decarbonisation rate of 11.7% per annum is required in order to limit warming to 1.5°C.

Even the disruptive nature of global lockdowns is only predicted to have resulted in a temporary 7% decrease in global emissions in 2020, and these are already rebounding relatively quickly. This gives an indication of the scale of disruption to business as usual that will be required to reach the necessary reductions in the medium term.

But the COVID-19 pandemic has provided the world with a real chance to make a change and realise governments’ ambitions to transition to a low carbon global economy. In particular, this has provided South Africa with an opportunity to achieve its ambition of achieving a just transition to a low carbon economy as set out in the National Development Plan (NDP).

This opportunity was recognised by President Cyril Ramaphosa at the virtual High Level Meeting of the United Nations Sustainable Development Goals Moment in September 2020 when he said ‘the immense resources we have directed to fighting the coronavirus pandemic have severely set back our ability to realise the Sustainable Development Goals. At the same time, this is an unprecedented opportunity to build back better and fairer’.



The necessity for net zero in South Africa

South Africa will experience the impacts of climate change very acutely. According to the Wits Global Change Institute, the South Western Cape, which already came under threat of 'day zero' in 2018, is predicted to become substantially drier, with temperature increases of more than 4°C plausible by the end of the century.

A similar 'day zero' threat looms for Gauteng. Limpopo is also projected to become substantially drier, with temperatures plausibly increasing by more than 6°C by the end of the century if we do not act now. This could be accompanied by a drastic increase in the number of high fire danger days and droughts across Africa, which could have dramatic humanitarian impacts.

Since fossil fuels, internal combustion engines and platinum converters are major exports for South Africa, the shift to a new economic focus is imperative if we are not to be left behind global trends that are increasingly moving away from these products.

Similarly, other key exports such as deciduous fruits and wine are particularly vulnerable to the predicted temperature and rainfall changes. In addition, key export markets like the EU are already moving to the implementation of carbon border taxes, which could tax South African imports on their carbon footprints, further reducing demand for the products.

As the PwC Net Zero Report highlights, South Africa is one of the largest contributors to climate change in relative terms. While carbon intensity decreased by 2.4% globally in 2019, South Africa recorded an increase in carbon intensity of 1.3%, the second consecutive year of increase.

This solidifies our position as the most carbon intensive economy in the G20 with a carbon intensity of 599 tCO₂/\$m GDP, more than double the global average of 286 tCO₂/\$m GDP.

This necessitates that South Africa take steadfast action to move to a low carbon economy — not only for the country, but for the globe. However, this is easier said than done.

Unlike many countries, South Africa's economic case for implementing carbon neutrality, or even a 2°C mitigation path, is challenging. In addition, when the country was hit by the COVID-19 crisis, it was already in a recession with significant debt, widespread unemployment and low growth. While the short-term recovery focus is certainly on saving lives, the medium- to long-term necessity is saving both livelihoods and the economy.

Achieving a just transition will avoid exacerbating inequality while building social cohesion. In order to meet the 2°C temperature increase goal, South Africa will need to cut its emissions by ~60–75% by 2050. Approximately \$700bn in investment will be required to achieve the outlined 2°C scenario.

Based on the physical and climate risk, what would be considered an appropriate level of ambition to reduce greenhouse gas emissions by 2050? This question needs to take into account the fact that South Africa's economic vulnerability and tenuous political environment means stakeholder engagement is critical.



Taking action

SA has signed up to the Paris Agreement and has also set Nationally Determined Contributions (NDCs). However, the Climate Action Tracker shows that South Africa's NDCs are highly insufficient and, if the rest of the world followed the commitments made by South Africa, then global warming would reach 3–4°C, well above the revised target of limiting global warming to 1.5°C. According to a LeadIt Report¹, South Africa has decarbonisation plans in place, but they are not ambitious enough and continue to promote coal-powered electricity generation. The study found that the carbon tax was not high enough to incentivise investment in decarbonisation.

Additionally, South Africa appears to face more sociopolitical challenges relating to politics, power and vested interest as well as the need to be sensitive to the societal impact of decarbonisation, and therefore a need to focus on a just transition. With one of the world's highest unemployment rates, job protection is at the top of government's agenda. However, there will be no jobs on a dead planet.

A coordinated intervention will require action from both the public and private sectors. One mechanism being applied to limit our national emissions is legislative action such as the carbon tax. The ultimate aim of a carbon tax is to disincentivise future carbon-intensive investments and encourage energy efficiency by utilising alternative and cleaner technologies.

Having come into effect in 2019, the carbon tax rate is currently R127/tCO₂e (increasing by CPI + 2% annually), but when the tax-free allowances are taken into consideration, the effective tax rate is much lower and ranges between R6.35 and R50.80/tCO₂e (increasing by CPI + 2% annually) for Phase 1 (1 June 2019 to 31 December 2022). The allowances that are provided for in the carbon tax act are as follows: the allowance for fossil fuel combustion (basic tax free allowance); the allowance for industrial process emissions, the allowance in respect of fugitive emissions, trade exposure allowance, performance allowance, carbon budget allowance and carbon offset allowance.

Furthermore, the tax is levied in terms of Scope 1 greenhouse gas (GHG) emissions resulting from fuel combustion, industrial processes and fugitive emissions. It therefore does not take into consideration the emissions from electricity purchased (Scope 2) or induced emission, especially within the supply chain (Scope 3) for Phase 1.

There is therefore uncertainty about the effectiveness of this measure alone to reduce carbon emissions. Moreover, there is a need for transparency in terms of the use of taxes collected in this way as per the expectation that they should be ring-fenced for initiatives that further support South Africa's move to net zero.

¹ LeadIt is the Leadership Group for Industry Transition made up of countries and companies committed to action to achieve the Paris Agreement

According to the Science-Based Target (SBT) initiative:



Financial institutions are the key to unlocking the system-wide change needed to reach net-zero emissions and limit global warming to 1.5°C above pre-industrial temperatures. The SBT initiative's new framework allows financial institutions — including banks, investors, insurance companies, pension funds and others — to set science-based targets to align their lending and investment activities with the Paris Agreement.

Therefore, business leadership in South Africa needs to utilise the two strategic cycles within businesses that remain before the deadline of the Paris Agreement to transform every sector of the global economy to halve global emissions. This will first require an ambition and commitment to shape a future that includes business outcomes, better jobs and greater environmental protection. The ambition must be built into strategy and incentives, as well as being effectively communicated to investors and customers.

Science-based targets should be set to align activities to a net-zero future that is centred on people and business impacts and cover the entire value chain. These targets should be independently verified and executives should be held accountable to delivery against them.

Once the climate ambition has been set it must be followed by climate action, where the business is transformed to deliver a new competitive advantage that grows in line with decarbonisation. Core business strategy must be reviewed to identify areas of material change, such as the risks and opportunities outlined by the Taskforce for Climate Related Financial Disclosure (TCFD).

Aspects to consider could include reskilling and training workers to use new technologies and collaborating on the development of green technologies. These changes will require an adaptive and innovative mindset as well as collaboration across the value chain and reaching for a wider influence.

Full and transparent disclosure is essential to maintain credibility and promote wider change. Global industries and corporations operating in South Africa should apply the same standards as they do in developed countries.

Business also has a critical role in advocating for clarity on the rules for a zero-carbon economy from the government. Equally, they stand to benefit from policy frameworks that create incentives for decisive climate action. To be effective, businesses should advocate for policies that move beyond the status quo and are consistent across all routes to policy. This will once again require collaboration

with peers to use their joint market muscle, while at the same time managing misleading messages and listening to challenging voices.

BlackRock, one of the biggest global investment houses, has asked CEOs of the companies it invests in to disclose not only according to the Sustainability Accounting Standards Board (SASB) and TCFD, but to also provide a plan for how their business model will be compatible with a net-zero economy and how this plan is incorporated into their long-term strategy.



Our contribution

There will be no vaccine for climate change, so it is important that every country, government, company and individual take urgent action. On a global strategic level, PwC has committed to become net zero by 2030. This is an ambitious target that will require the reshaping of our operations, working across our value chain and engaging in public policy discussions.

As part of our journey as a professional services firm, we are also committed to supporting our clients in their sustainability journey. We are specialists in fields such as environmental, social and governance (ESG) strategy, implementation and reporting; risk; finance and business strategy; people and change; tax; and assurance.

We are therefore able to support other organisations with insights including energy transitions, TCFD alignment, net-zero strategy and implementation, circular economy opportunities, carbon tax, carbon emissions assurance and much more.

The thinking that created the problem will not solve it. It is only through collaboration and focused problem solving that the decarbonisation required can be reached. If the COVID-19 pandemic has taught us anything, it is that global problems require global collaboration and individual actions. Let's hope we can effectively take this learning into the climate change discussion to make a real difference.

If you would like to discuss how PwC can partner with you in this regard please contact:



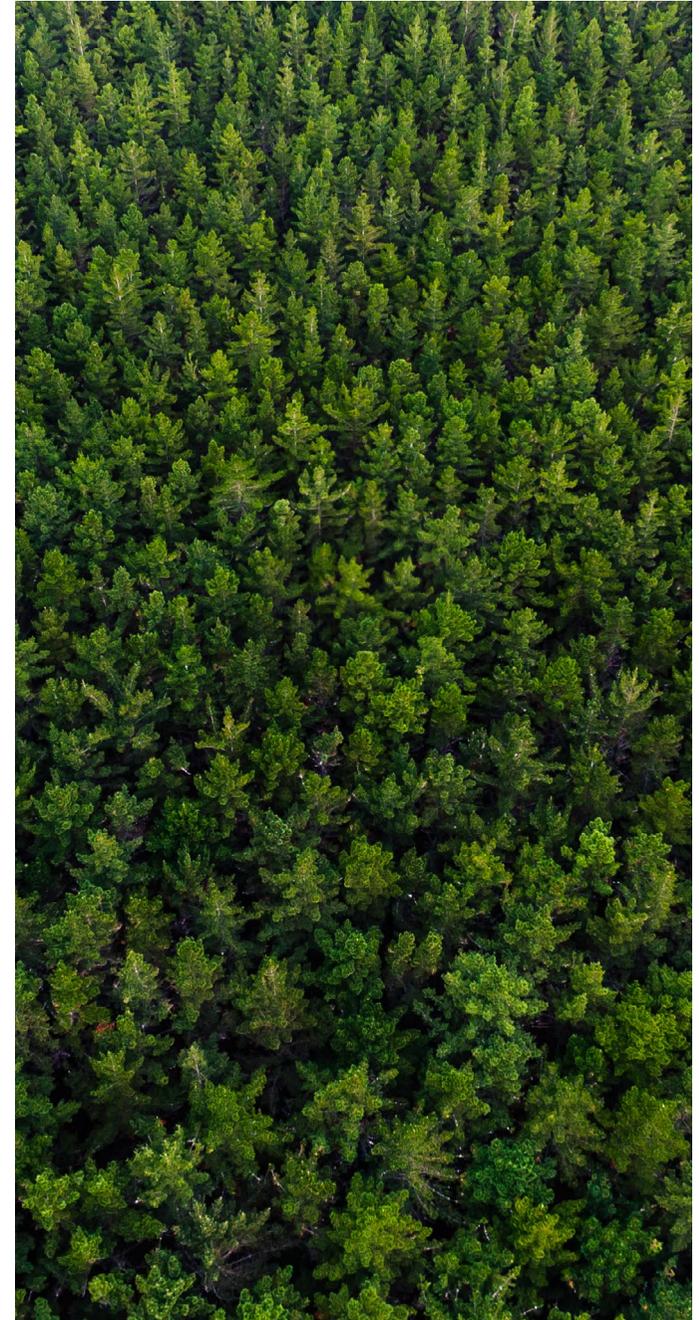
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