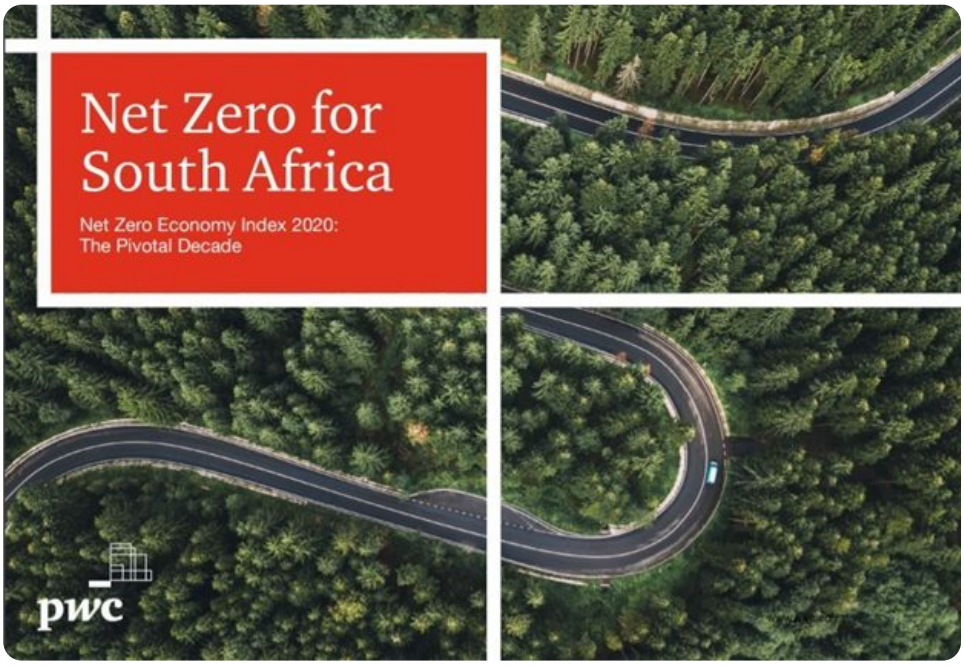
SA needs to cut emissions by 60-75% by 2050 - PwC Net Zero Economy Index

According to the latest PwC Net Zero Economy Index, a decarbonisation rate of 11.7% per annum is now required to keep warming within 1.5°C - five times greater than what was achieve going into 2020 (2.4%). The PwC Net Zero Economy Index shows that, based on current trends in energy consumption and CO2 emissions generation, the century's global carbon budget woul be used up by the end of this decade.



It sets the scene for a decade requiring unprecedented progress in solutions, investment, skills and technology transformation across business, government and society. As global economies plan their emergence from the pandemic, the index provides a warning sign of the risks of a return to "business as usual" in the race to recover and generate new growth.

For the last ten years, PwC UK's index has modelled economic growth and energy-related CO2 emissions data, and compared this to the rates required to achieve the aims of the Paris Agreement since its inceptic It tracks how economies are progressing in breaking the link between economic growth and increases in energy-related carbon emissions.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Slowed progress

Tracking a complete year of energy and economic data from 2019 (the most recent available), this year's index shows that progress in decoupling energy-related CO2 emissions growth from economic growth slowed. In 2019 global energy-related CO2 emissions increased by 0.5% with economic growth of 2.9%.

Carbon intensity fell by 2.4%, which is above the long-term average decarbonisation rate of 1.5% but falls way short of the progress required to keep global temperature rise below 1.5C.

Jayne Mammatt, sustainability and climate change partner at PwC South Africa, comments: “South Africa v experience the impacts of climate change very acutely - in unmitigated scenarios it is predicted that by 20: we could see warming of 0.5-1ºC across most parts of the country with parts of the western interior seeinç rises of 2ºC. Studies have found that temperature increases are associated with mortality rises of 0.9% pe 1°C above certain thresholds.

"South Africa's Low Emission Development Strategy 2050, published in February 2020, presents a vision South Africa following a low-carbon growth trajectory, making a fair contribution to the global effort to limit t average temperature increase all while ensuring a just transition and building of the country's resilience to climate change. This will be a crucial decade for establishing real, transformative implementation.”

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Emissions and energy consumption

Going into 2020, across the world, fossil fuels continued to dominate, with 57% of the increase in energy consumption met by natural gas and oil alone. Energy-related CO2 emissions were up 0.5% as global energy consumption increased by 1.3%.

2019 saw a decline in coal consumption for the first time since 2016 (0.6% decline). There were steady increases in the consumption of oil (0.8% growth) and natural gas (2.0% growth). On renewables, despite record growth rates in wind (12.1%) and solar (23.8%), overall, they accounted for just 11% of global ener consumption.

In terms of South Africa’s performance, the Net Zero Economy Index also reveals the following:

- South Africa continues to show little progress in decoupling emissions from GDP. Along with Indones South Africa reported an increase in carbon intensity for consecutive years.
- South Africa remains the worst performer in the G20 with a carbon intensity in 2019 of 599 (tCO_2/$m GDP), with China the second worst performer scoring 443, both are well above the global average of 286.
- The carbon intensity in South Africa increased by 1.4% in 2018-2019 while the real GDP growth (PPF saw a small increase of 0.2%. When compared to China’s real GDP growth of 6.1%, it is evident that South Africa sees little economic value for the large amounts of carbon emitted.
- In order to meet the goal to global limit temperature increase to 2°C, South Africa will need to cut its emissions by ~60–75% by 2050.

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Peter Gassmann, global environmental, social and governance leader, PwC, comments: “While governments have an important role to play, the focus on climate action is increasingly shifting to opportunities and action for businesses and finance. We can’t underestimate the considerable value creation opportunities around products and services aligned with a net zero future that the business, city a state commitments to net zero will drive.

"Neither should we underestimate the risks - physical, financial, operational and reputational - of delaying turning those commitments into action. Failing to respond with a road map for change and to create appropriate transparency towards stakeholders will erode long-term value, in particular for businesses and industries with high emissions.”

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Looking ahead, Mammatt concludes: “The Covid-19 pandemic should be the catalyst needed for change it has given us the opportunity to pause and re-examine the paths we were on as a global society. It coincides with a time when the cost for renewables are for the first time becoming cheaper than the costs traditionally cheap carbon-intense energy sources such as coal on which South Africa is so reliant.

"There is also growing global awareness of the need for a just transition to low carbon economies as evidenced in South Africa’s National Development Plan 2030. In South Africa, the social and economic costs of the pandemic have been huge, but we have a unique chance to develop recovery programmes th are socially just and ensure the transition to a low carbon economy at the same time.”

Download the *Net Zero Index report for SA* here.