Executive summary

South Africa continues to be one of the most accessible and well-regulated entry points to the African continent. In addition to being Africa’s second-largest economy, it is the most globally integrated in terms of capital and trade flows, and is well placed to benefit from growth in Africa and the broader global economic recovery.

The South African government is optimistic that improved electricity availability should help the country’s economic growth recover gradually over the medium-term. Power utility Eskom has bolstered its supply with the introduction of new generating capacity and believes that better management of its maintenance schedule, combined with new capacity, should further improve the outlook for supply and demand.

Medium-term interventions to alleviate electricity supply constraints include private sector investment in renewable energy, a major expansion of independent power producer (IPP) baseload capacity and a gas-to-power IPP programme. The introduction of supply from private producers has helped to prevent or delay load-shedding, while also replacing expensive diesel and coal fuel costs that would have been incurred at Eskom power stations.

Already the continent’s largest producer of renewable energy, South Africa is moving to further reduce its reliance on hydrocarbons by expanding private sector investments in solar and wind projects and introducing biofuels. Renewable power sources account for 5% of South Africa’s installed capacity, from a baseline of zero in 2010. This has led South Africa to become the largest wind energy producer on the continent and to rank among the top-10 countries globally for installed, utility-scale solar photovoltaic capacity. South Africa's renewable power programme is well-placed to drive the economy forward.

The implementation of the Integrated Resource Plan (IRP) has been a critical component of the country’s push to improve supply, opening up space for private sector-led renewable energy. The plan calls for coal-fired electricity to account for less than 15% of all new generation capacity added through to 2030, and for it to provide under 50% of the total grid capacity. Renewables are set to take up 42% of all new generation capacity, which would see the construction of 9.6GW of nuclear energy and 11.4GW of renewables, including solar and wind, by 2030.

The IRP marks a clear departure from the country’s traditional reliance on coal-fired power. Natural gas will also play a larger role, through both imports by pipeline and proposed liquefied natural gas terminals, as well as from domestically produced sources including shale gas and coal-bed methane reserves. Locally sourcing significant amounts of fossil fuels other than coal seems unlikely in the short term.

Over the longer-term, South Africa is aiming to invest in nuclear energy capacity. The government’s interest in nuclear energy is strong and agreements have already been signed with several vendor countries that have expressed interest in a new nuclear programme, including the US, China, France, Russia and South Korea. However, the initiative is still in the early stages and there isn't certainty on how the programme will proceed.