

<b>Title of case study</b>	<b>Ensuring reliability and continuity of energy supply</b>
<b>Name of organization(s)</b>	<b>Eskom</b>
<b>Business sector</b>	Energy & Utilities
<b>Region(s) relevant to case study</b>	<input type="checkbox"/> All regions <input checked="" type="checkbox"/> Africa and the Arab States <input type="checkbox"/> Asia and the Pacific <input type="checkbox"/> Caribbean and Central America <input type="checkbox"/> Europe <input type="checkbox"/> Least Developed Countries <input type="checkbox"/> North America <input type="checkbox"/> Polar regions <input type="checkbox"/> Small Island Developing States <input type="checkbox"/> South America
<b>Country(s) relevant to case study</b>	South Africa
<b>Adaptation sector(s) relevant to case study</b>	<input type="checkbox"/> Business <input type="checkbox"/> Education and training <input type="checkbox"/> Food security, agriculture, forestry and fisheries <input type="checkbox"/> Human health <input type="checkbox"/> Oceans and coastal areas <input checked="" type="checkbox"/> Science, assessment, monitoring and early warning <input type="checkbox"/> Terrestrial ecosystems <input type="checkbox"/> Tourism <input checked="" type="checkbox"/> Transport, infrastructure and human settlements <input checked="" type="checkbox"/> Water resources <input type="checkbox"/> Other (please specify):
<b>Adaptation activity</b>	<p>Eskom is a South African electricity utility, established in 1923. The utility is the largest producer of electricity in Africa, is among the top seven utilities in the world in terms of generation capacity and among the top nine in terms of sales. Eskom operates a number of notable power stations, including Kendal Power Station and Koeberg nuclear power station in Cape Province, the only nuclear power plant in Africa. The company is divided into Generation, Transmission and Distribution divisions and together Eskom generates approximately 95% of electricity used in South Africa.</p> <p>Adaptation-related risks in South Africa include increased</p>

	<p>numbers and severity of droughts and floods, human settlement and thus infrastructure movements and risks to staff and customers. Eskom’s short-term adaptation measures include the use of dry-cooling technology in new power stations, which reduces water consumption by 90%, although there is an efficiency loss. Medium to long-term considerations include improving the resilience of infrastructure and staff, by incorporating adaptation issues into long-term planning and risk mitigation strategies. This requires modelling of impacts and the development of robust strategies that will reduce the overall cost of adaptation and minimise operational disruptions.</p> <p>Eskom integrated adaptation into its six-point plan on climate change to ensure reliability and continuity of its energy supply. The company completed a scoping exercise to develop an adaptation strategy focused on addressing risks related to availability of water for power generation; extreme weather events impacting on the ability to supply; and infrastructure damage and relocation of people. In addition, Eskom works with other institutions to look at opportunities to draw more information from climate models to better inform this strategy.</p> <p>Under the UN Global Compact “The CEO Water Mandate”, Eskom has pledged to include water sustainability considerations in its business decision-making, invest in new water-efficient technologies, conduct a comprehensive water-use assessment to understand the extent to which the company uses water in the direct production of goods and services, and implement a Water Accounting Directive to ensure water accounting and management across all of Eskom’s coal-fired power stations. Furthermore, Eskom is encouraging suppliers to improve their water conservation, quality monitoring, and waste-water treatment and recycling practices.</p>
<p><b>Cost-benefit</b></p>	<p>Eskom accepts that the negative impacts of climate change will become a reality to which it must adapt in order to sustain its business. As Eskom’s operations rely heavily on vulnerable resources such as water and on infrastructure for the generation and distribution of power, it is essential to Eskom’s business strategy that it understands the current and projected impacts of climate change, and incorporates this knowledge into ongoing decision-making.</p>

<b>Case study source(s)</b>	<a href="#"><u>Adapting for a Green Economy: Companies, Communities and Climate Change (UN Global Compact)</u></a> <a href="#"><u>Eskom's "The CEO Water Mandate" (UN Global Compact)</u></a>
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