



- Eskom is the single largest user of water, using 2% of water nationally.
- Eskom coal fired power stations are situated in water scarce catchment areas necessitating inter-basin transfers. These transfers ensure a secure supply of water to Eskom.
- Eskom supplies in excess of 90% of electricity, without water this would not be possible.
- Coal mines supplying Eskom require and impact on water resources
- Koeberg nuclear power station uses sea water for cooling.



- Eskom operations can negatively impact on water quality through ground and surface water pollution, this not only has an impact on a precious resource but could lead to legal liabilities.
- Infrastructure, power stations and power lines and mines supplying coal impact on ecosystems including wetlands

- Despite Eskom being classified as a Strategic Water User with high assurance of water supply, the ability to meet this assurance is at risk due to:
 - Water usage trends increasing beyond available catchment yields and current capacity limits of the water infrastructure and climate change impacts; and
 - Practices which reduces the available resource and supply such as illegal abstraction and use, unaccounted for water losses, dilution of pollution, inefficient water management practices and inadequate infrastructure maintenance
 - Internal water management practices

- Eskom’s vision is “Sustainable Power for a Better Future” and its mission is to “provide sustainable energy solutions, to grow the economy and improve the quality of life of people”. It is therefore incumbent on us to ensure water security and quality internal and external to our facilities.
- Supply side measures to deal with risk such as drought include putting in place with DWS alternative water supply infrastructure (VRESAP, KWSAP and MCWAP) and transfers from strategic storage dams such as Sterkfontein and Heyshope into the Vaal River System
- Water demand management measures – WCWDM: water management, water use performance, Water Accounting Framework, and Zero liquid effluent discharge
- Diversifying our energy mix to low water use generation technologies such as nuclear and dry cooling at coal power stations, pursuing the use of alternative water sources such as treated mine water from adjacent coal mines where practical.

- Collaborating with other water users and stakeholders to manage shared water risks for example Strategic Water Partners Network.
- Research, Technology and Innovation to deal with current business requirements and future challenges such as water quality deteriorations, climate change impacts, biodiversity offsets and environmental liability management
- All of these treatment plans and controls form part of Eskom's integrated risk management system and processes and risk are monitored, tracked and reported to various Management and Board Risk Committees.
- Business Continuity plans which could be activated in the unlikely event of water restrictions to Eskom's power generation.
- Eskom's goal is to reduce its freshwater footprint (both absolute and relative water use consumption), be less reliant on freshwater sources, be more resilient to climate change impacts on its business.