

Why is CCS relevant in South Africa?

South Africa is reliant on fossil fuels – approximately 90% of primary energy is derived from fossil fuels. Coal provides 92% of electricity production and, through synthetic fuel production, 30% of the petroleum used in South Africa. This use of fossil fuels is important to our economic development, being the most dependable, cost-effective energy source currently available in this country. Fossil fuel production and use also provides significant employment in South Africa. The downside of fossil fuels however, is that their conventional use releases significant amounts of CO₂.

As with all countries, South Africa will require a portfolio of technologies to reduce its CO₂ emissions and meet its climate change goals. With a heavily coal-based economy, CCS is likely to be a particularly important part of this portfolio as one of the few technologies that can address the large-scale CO₂ emissions associated with coal-based electricity, liquid fuel production, smelter operations and cement production without negatively impacting the number of jobs and other social and economic benefits that these industries provide.