

**MINISTRY**

**MINERAL RESOURCES AND ENERGY**

**REPUBLIC OF SOUTH AFRICA**

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 **Memorandum from the Parliamentary Office**

**National Assembly: 69**

Please find attached a response to Parliamentary Questionfor ***written reply*** asked **by Mr K J Mileham (DA) to ask the Minister of Mineral Resources and Energy:**

**Adv. T.S Mokoena**

**Director General: Department of Mineral Resources and Energy**

**………………/………………/2022**

Approved / Not Approved

**Mr. S.G Mantashe**

**Minister of Mineral Resources and Energy**

**………………/………………/2022**

1. **Mr K J Mileham (DA) to ask the Minister of Mineral Resources and Energy:**
2. Whether any studies have been conducted into clean coal by (a) the SA National Energy Development Institute, (b) the Council for GeoSciences and/or (c) any other entity reporting to him; if not, why not; if so, (i) when were the studies conducted and (ii) what is the status of the specified studies;
3. Whether he will make the studies available to Parliament for the purposes of oversight, information and scrutiny; if not, why not; if so, what are the relevant details;
4. On what scientific basis does he rely in his repeated statements regarding clean coal; and
5. What are the reasons that the recognised research experts of his department have not been consulted on this matter? NW73E

**Reply**

**1)** Yes, the following studies have been conducted in relation to coal:

|  |  |  |
| --- | --- | --- |
| **Research Programme/Project** | **(i) Expected date of conclusion of phase** | **(ii) Status** |
| **(a) SANEDI** |
| Cleaner Fossil Fuel | 31 March 2022 | In progress |
| **(b) Council for Geoscience** |
| Carbon Capture, Utilisation and Storage | 2024 | To be conducted in 2024 |
| **(c) MINTEK** |
| Coal gasification | 2020-present | In progress |
| Operability of the DC waste coal gasification concept | 2015 | Outputs incorporated in strategic programme |
| Techno-economic evaluation of the DC arc plasma coal gasifier | 2011 | Outputs incorporated in strategic programme |
| Feasibility of Producing Hydrogen in DC arc Furnace | 2009 | Outputs incorporated in strategic programme |
| Coal solubilisation | 2004 | The project was not successful as the conversion of the coal to methane could not be controlled and the coal was instead converted to biomass and carbon dioxide.  |
| Biogas from coal | 2019 | Issue with the quality of the gas produced and the economic viability of the process  |
| Microbial desulphurisation of coal | 1995 | Process technically successful, economic viability an issue |
| Reuse of treated mine-impacted water as a potential resource for accelerated carbon sequestration | 2020-present | In progress – concept being validated |
| CO2 Capture and Utilisation | 2019/2020 | At concept stage |

**2)** Yes but most of these studies are available online. either on the websites of SOEs or from the document database on request. Any which is not in the public domain they can be released for sharing at the Minister’s discretion.

**3)** The clean coal technology as a scientific intervention is not new – the Norwegians started a pilot in 1986, followed by a number of other jurisdictions that have tested the technology, including the USA, UK, Italy, Netherlands and Australia amongst others. The basis of science has therefore been established and is a subject of refinement to the South African context by the CGS, as an implementing agent for the partnership of the South African Government with the World Bank. As a responsible state, it is our social and environmental responsibility to allow critical decisions to be premised essentially on scientific and technical basis. However, the afore mentioned studies are all of a sound scientific basis and one needs to consider energy security and its impact on the South African economy. South African coal reserves are adequate to meet the targets outlined in the IRP 2019 and the Paris Agreement talks to the country’s commitment to lowering emissions from an economy that will still be using coal towards a net zero by 2050.

**4)** TheDepartment is consulting experts in the sector and within its resources.