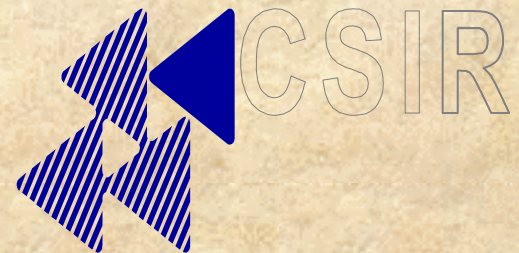


RENEWABLE ENERGY: THE ROLE OF CSIR

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Importance of energy

1. Energy is a catalyst to a range of developmental activities such as education, health, income generation, water provision, etc.

As a result, poor access to affordable energy contributes to deprivation

Importance of energy (cont)

- The White Paper on Energy Policy provides the South African government with a mandate to supply affordable and safe fuels

Importance of energy (cont)

- In terms of the energy policy, government is obliged to ensure universal access to electricity

Importance of energy (cont)

4. The Minister of Minerals and Energy has been tasked with a responsibility to ensure that in 10 year's time, there should be no community without access to energy, whether grid or non-grid electricity

Importance of energy (cont)

- Minister of DME has expressed the need for CSIR to play a role in the energy sector, especially because of its objectivity (no vested interests)

Importance of energy (cont)

- CSIR has consequently investigated what it can contribute and is setting up an “energy thrust” in which it intends to invest some resources. Our focus will be facilitating technological innovation. This has been approved by the CSIR Board

CSIR: FOCUS AREAS

- A: Non-conventional/alternative sources of energy (e.g. renewable)
- B: Cost-effective use of conventional sources of energy (e.g. coal and oil)
- C: Utilisation of energy for development (from the community, via SMMEs to industrial level)
- D: Strategic decision support and pro-active planning technologies. For example through modelling and simulation of energy systems.

EXAMPLES OF CURRENT CSIR ACTIVITIES WITHIN THE PROPOSED THEMES

Non-conventional/alternative sources of energy

- Photovoltaic systems design
- Biomass (small gas turbines)
- Low smoke fuels technologies
- Solar water heating/solar cookers
- Wind and wave energy research