

Energy Research in SA & Priority Areas for EU cooperation

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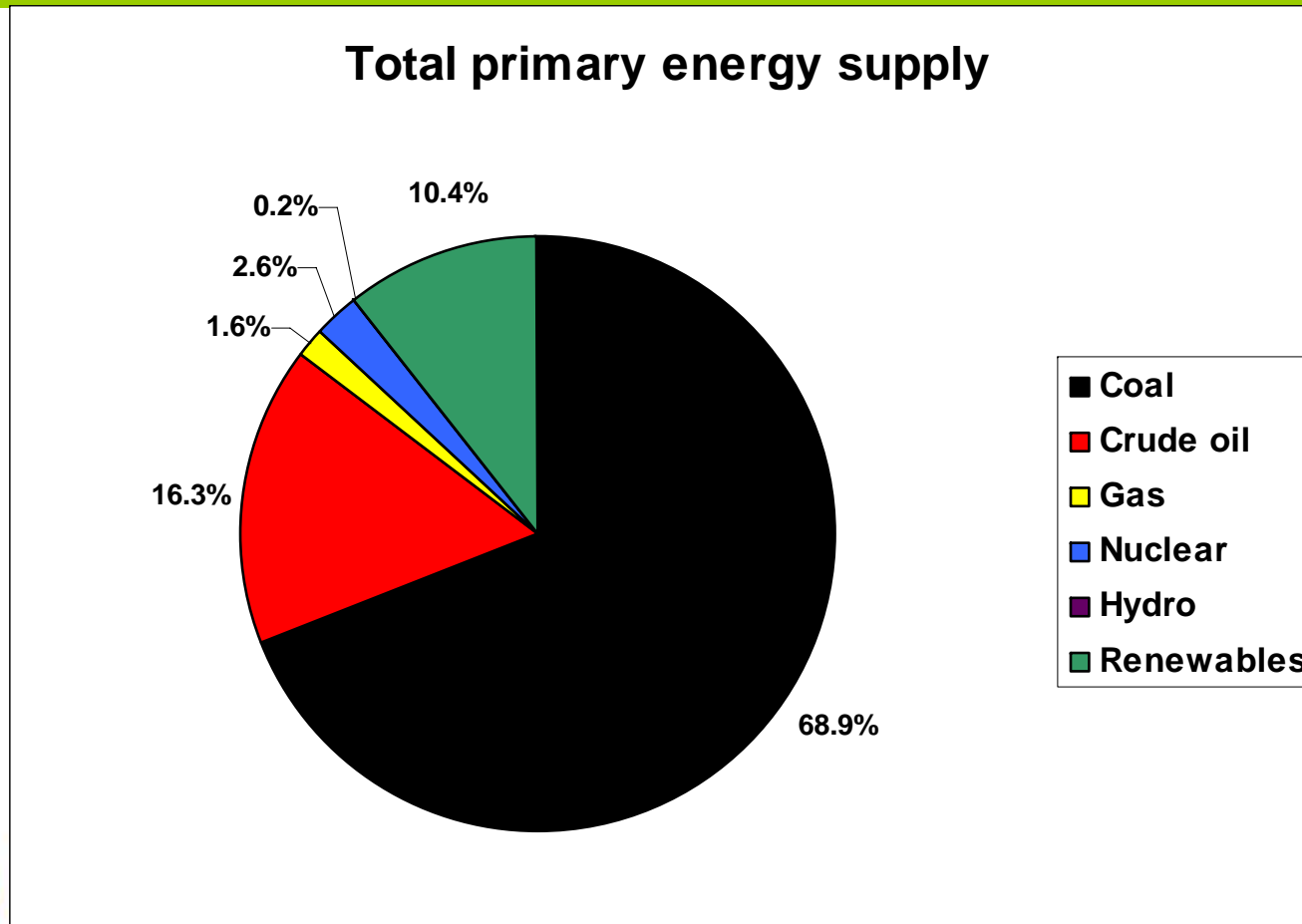


Presentation Outline

- The SA Primary Energy Mix
- Energy Policies in SA
- Drivers behind SA Energy R&D Strategy
- Current Energy R&D Themes
- Priority Research Areas for EU Collaboration



The South Africa Energy Mix



Oil from coal synfuels plants provide a significant proportion of South Africa's liquid fuels

Energy Policies in South Africa

- 2003 White Paper on Renewable Energy, has a target of 10,000 GWh contribution from RE to final energy consumption by 2013
- Energy Efficiency Strategy, 12% reduction in energy use by 2013
- The Biofuels industrial strategy has been approved by cabinet and excludes maize as feedstock.
- Energy is one of the grand challenges in the DST ten year innovation plan

Drivers behind SA Energy R&D Strategy

- Security of supply
- Environmental issues: >75% of SA green house gas emissions result from energy generation and use
- Energy equity: 1/3 of SA population still does not have access to reliable sources of energy
- Retain our cheap electricity status, to attract localisation of manufacturing activities



Current SA Energy R&D Themes

- Renewable Energy
- Alternative Energy (incl. nuclear and the development of the hydrogen economy)
- Energy Efficiency & DSM
- Understanding the impact of energy use on the environment
- The role of energy in stimulating socio-economic development
- Cleaner Fossil Fuel Development, (incl. clean coal technologies)
- Energy Infrastructure Optimisation
- Energy Planning and Modelling; and
- Energy Policy Research



Priority Research Areas for EU Collaboration

- Clean Coal Technologies – including Carbon Capture and Storage
- Integrity and Reliability of Electricity Network
- Superconductors
- Solid State Transformers
- Ocean Energy Conversion Systems
- Enhancing Solar PV applications
- Concentrating (PV and Thermal) Solar Power
- Resource Mapping for Wind, Ocean, energy sources
- 2nd Generation Biofuels
- Advanced Biofuels
- Energy Storage Technologies

SA's participation in last Energy FP7 Calls

- CO2 Capture and Storage – 2 proposals with SA participants
- Transnational Cooperation among NCPs – SA participating.
- Sweet sorghum for biofuels production – a number of proposals with SA partners



Thank you!

More information
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