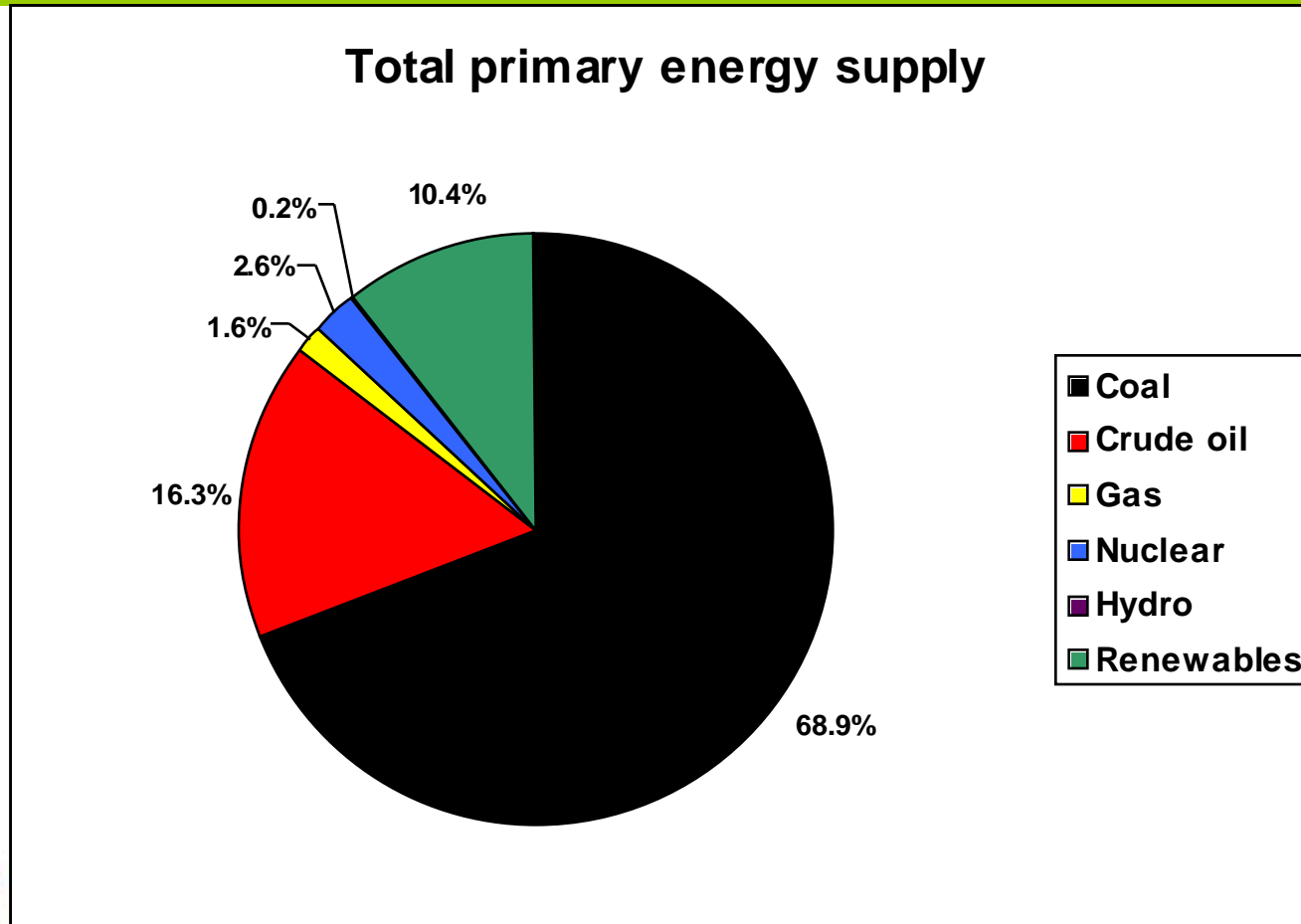


# The European Union's Seventh Framework Programme (FP7) Energy Information Session

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# The South Africa Energy Mix



Coal syngas provide significant proportion of South Africa's liquid fuels



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# 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



# 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 strategy is being finalised.
- The national energy R&D strategy is also being finalised.



# Draft SA Energy R&D Themes

- Nuclear Energy
- Alternative Energy (incl. nuclear and the development of the hydrogen economy)
- Renewable Energy
- 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



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# Hydrogen & FC Technologies

- HFC, REs & EE seen as future energy areas to limit climate change
- The National Hydrogen and Fuel Cell R&D strategy and implementation plan, was adopted by Cabinet in 2007.
  - 3 Hubs have been set up at UWC, CSIR and UCT/Mintek funded by DST.
- One compelling argument: Platinum production in SA is one of the highest in the world



# Other Energy Research Activities

The other R&D themes are publicly funded via SANERI

- Renewable Energy
- 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



# FP7 Energy R&D Focus Areas

There are 10 activities under the Energy FP7 theme:

- Hydrogen and Fuel Cells
- Renewable Electricity Generation
- Renewable Fuel Production
- Renewables for heating and cooling
- Energy Savings & Energy Efficiency
- CO<sub>2</sub> Capture and Storage Technologies
- Clean Coal Technologies
- Smart Energy Networks
- Knowledge for energy policy making

***Details of these activities in***

***[http://cordis.europa.eu/fp7/energy/about\\_en.html](http://cordis.europa.eu/fp7/energy/about_en.html)***

# Other Energy related focus areas

- Food, Agriculture and Fisheries and Biotechnology
  - Biomass and Biofuels
- Transport
  - Energy efficiency through efficient transport systems
- Environment
- Nanosciences, Nanotechnology, Materials and New production technologies
  - New materials for increased energy efficiency in buildings, industrial processes and lighting.
- Information and Communications Technology
  - Energy efficiency systems for intelligent transport systems, smart lighting



# Future Energy FP7 Calls

- In November/December 2007, two calls will be published for 2008 funding.

- **FP7-ENERGY-2008-1-RTD**

Which will focus on:

- areas not well covered by the outcome of the first call (the first call covered all the thematic areas);
- additional topics identified as being strategically important by technology platform SRAs;
- opportunities for Future and Emerging Technologies (FET) e.g. innovative concepts for fuel cells including new fuel cell designs.

- **FP7-ENERGY-2008-2-TREN**

Which will focus on:

- Eco-buildings i.e. large scale integration of RE supply and EE in buildings
- Concerto i.e. innovative integration of RE supply and EE in large communities
- Gas Networks

- The next major call for research activities having a longer term perspective will be open in 2009 (Call FP7-ENERGY-2009-1-RTD).



# Preparatory steps for SA Energy researchers

- Identify potential specific areas that will be for funding in 2008 or 2009 within the focus areas in the future calls.
- Find potential research partners for projects and initiate the formation or joining of a consortium.
- Use seed funding for developing relationships
- Be ready for call way before the call is advertised.



# Leverage Saneri activities

- Funding
  - Similar research themes means projects can be co-funded as both Saneri and the EU support the co-funding principle
- Saneri network for finding potential EU partners
  - E.g. ETDE database access and Saneri database

# Thank you!

*More information*  
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