Country perspective on Low Carbon Power Development

Republic of South Africa

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Renewable Energy

- Aspiration for RE in Integrated Resource Plan (IRP)
- Premised on, inter alia, emissions performance (long-term mitigation scenarios)
- RE Feed In Tariff (REFIT) program with incentives for wind, solar, biomass, small scale hydro, landfill gas
  - Different tariff levels for each technology
  - Expression of Interest indicates 20X oversubscription
  - Anxious to avoid Spanish experience
  - First 1025MW to be launched in March 2011

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Gas and Clean Coal

- Aspiration in IRP for gas of about 9%
- Have no local resources so looking to LNG and imported
  - Possible indigenous shale deposit
- Have completed a CCS atlas indicating suitable locations
- Chair our Carbon Sequestration Leadership Forum with other countries, to develop clean coal
  - huge deposits of coal
  - Extensive deep mining experience
- Building 8 000MW of new coal until 2018, then hope to make transition to cleaner

Nuclear

- Aspiration for nuclear in IRP is 9600 MW

- Only options available to mitigate carbon emissions and to increase RE portfolio – nuclear, gas and imported hydro
- Currently have 2000MW PWR and yet to decide on way forward

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Energy efficiency

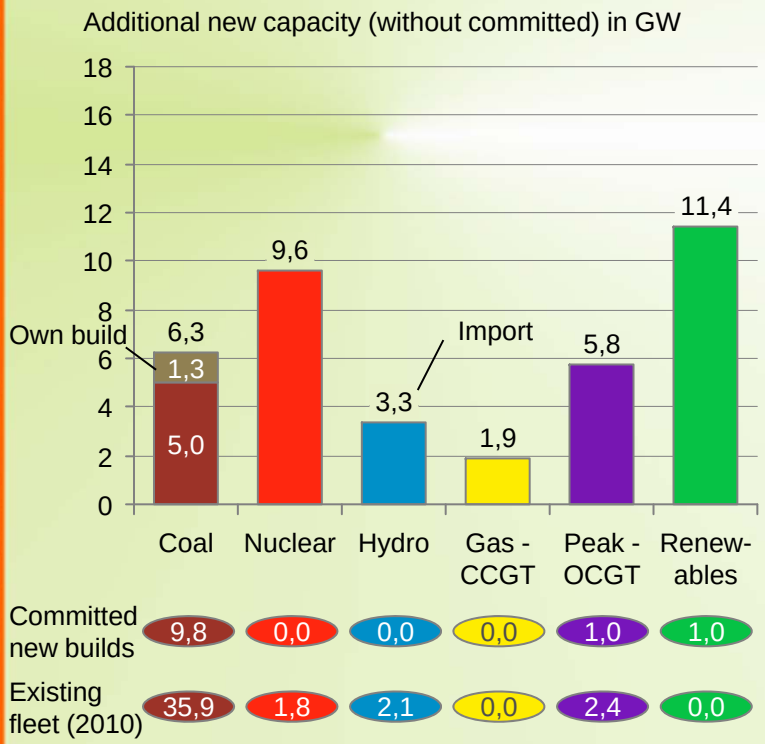
- EE Policy with sectoral targets
  - Energy Efficiency Accord with different sectors (some 9TWh)
  - Translated into mandatory EE requirements (Energy Conservation Scheme)
  - Coupled to incentives (fiscal and tariff based)
- EE Resource Standard
  - An integral part of IRP
- Fiscal funded programmes as well
  - Lighting
  - Solar water heating
  - Buildings
- Revenue decoupling from utilities remains a challenge

Incentives and policy

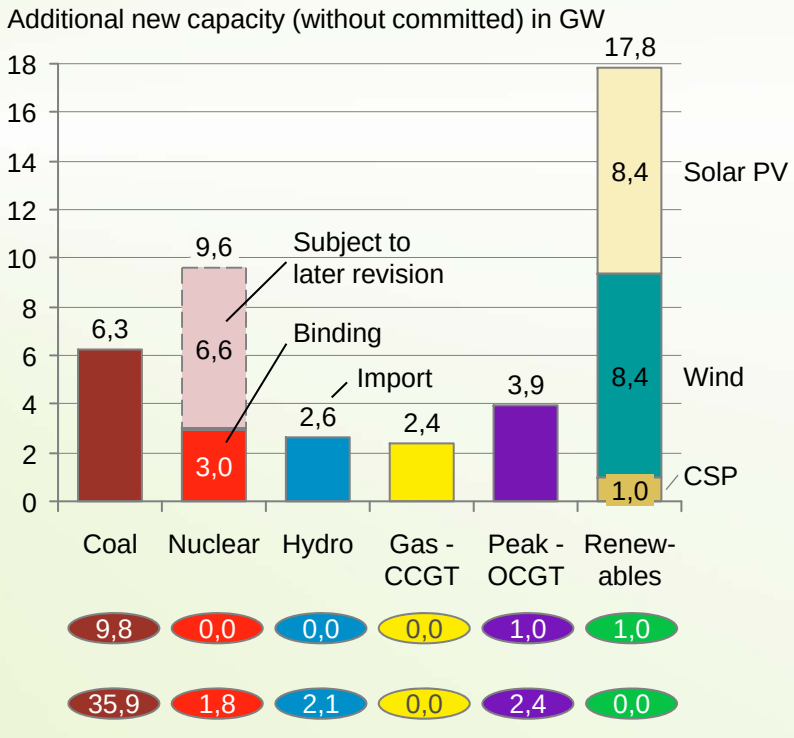
- Standard offer (facilitate solar water heating) – R/kWh
- Public buildings performance contracting
- Tax incentive scheme (industrial and commercial interventions)
- REFSO (RE financing and subsidy office)
- Integrated Resource Plan with objectives as indicated:
  - More reduction of emissions
  - More Renewables (Solar, Wind, Biomass)
  - More Efficiencies (Demand and Economic)
  - Affordability
  - Energy Security

20-year Power Plan

Before public participation:



After public participation:



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Conclusion

- We are trying to balance economic, social and environmental concerns
- We cannot focus on affordable electricity at the expense of climate
- We cannot sacrifice employment in our choices

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