





National Climate Change Response Dialogue 2014

Green Industries, Department of Trade and Industry



Green growth, trade and competitiveness in South Africa

- Key question:
 - What are the trade and economic competitiveness opportunities and impacts of moving towards a greener economy? What needs to be done to maximise the opportunities, and reduce the impacts?





Drivers of Green Economy

- The complex interaction between the rising cost of existing energy in the world (mainly derived from fossil fuels), the current and future demand for energy, the need to find a reliable supply of energy and the decreasing costs of alternative green energy can be seen as the main drivers of Green Economy, globally and in South Africa.
- Due to increased focus on climate change, and consumers becoming increasingly aware of the impact of their product choices.
- Also about ensuring the survival of our species over the long term





Why the slow transition to a Green Economy

- Behaviour change of consumer, industry and government - we are used to the current system – business as usual
- Technology adoption life cycle often in early adoption stage where market does not function optimally
- Industries (energy, fuel) are often heavily regulated and this requires the correct policy signals from government but it also requires policy coordination across departments on a scale we have not experienced before

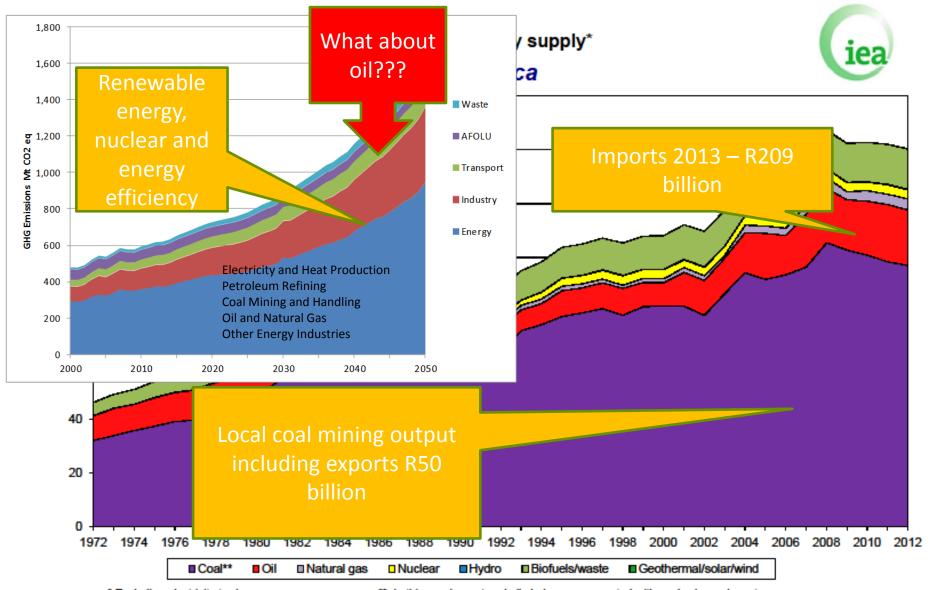




Opportunities

- Renewable energy and energy solutions with a lower carbon footprint co-gen, gas, nuclear
- Energy efficiency, especially in industry
- Move away from resource based industrialisation to higher value add industries where the CO2/output is more favourable
- Massive opportunity in transport price per GJ is 10X higher than electricity sector





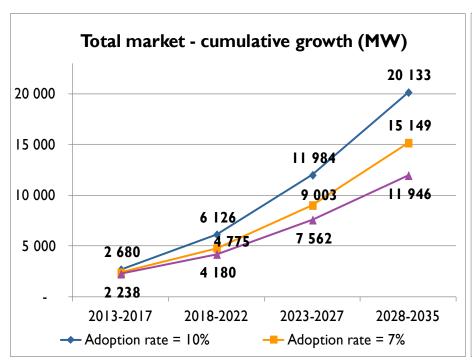
^{*} Excluding electricity trade.

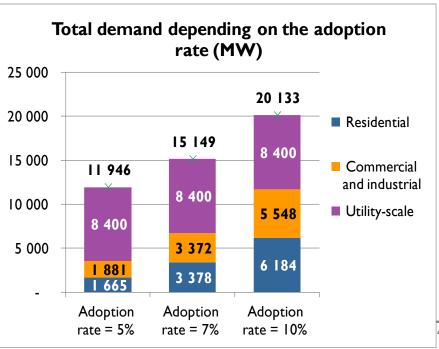
For more detailed data, please consult our on-line data service at http://data.iea.org.

^{**} In this graph, peat and oil shale are aggregated with coal, when relevant.

PV market growth paths

- With the greater adoption rate (10%), the size of the demand-driven market (residential and commercial) exceeds policy-led market
- High uptake rate among residential and commercial/industrial market is integral to the industry development







Trade opportunities

- Economic instruments for climate change mitigation raise competitive concerns
- SA is at present a technology adopter we have to opportunity to leapfrog – (same as ICT where we missed the boat)





Practical experience last few years

- Number of success stories and a few spectacular failures
- Funding requirements
 - RE long term debt funding you have to please the bank risk averseness – Product must have a proven track record
- Focus on the market
 - Many entrepreneurs focus on the technical solution





Strategic procurement Government contracts

- The planning of a roll-out needs to be aligned with a viable process of building relevant industrial capacity and capability.
- A minimum level of local content needs to be a condition of making a bid.
- An adequate monitoring mechanism with stringent penalties for non compliance
- Consultation with industry and research as and when required.





Thank you

Gerhard Fourie

Chief Director: Green Industries

Gfourie@thedti.gov.za

012 394 1151

083 229 6926





Economic instruments for climate change mitigation raise competitive concerns

- Price based
 - Polluter pays per unit of emission
 - Benefit is stakeholder has certainty as to the cost of emissions
 - Does not automatically translate to reduced emission levels
- Quantity based
 - Specific total quantity of pollution is defined or capped and stakeholders get fined or are allowed to trade
 - More likely to reduce emissions
 - Potentially more difficult to predict the impact on production cost
- Policy complementarity and holistic view
 - Tax, climate change, industrial, investment, technology, transport, energy etc.





Critical success factors

- Normal business challenges but:
- Cost/price substitute in target market
- Demand for the product/service
- Regulatory environment
- Access to finance

