The **National Energy Act**, 2008 (Act No. 34 of 2008), Section 7 (2) provides for **SANEDI** to direct, monitor and conduct energy research and development, as well as undertake measures to promote energy efficiency throughout the economy.
Some Key South Africa Facts

2011

41 194 MW  Maximum self-generated capacity
237 430 GWh  Total production
4.7 m  Customers

Build Programme

16 304 MW  Additional capacity by 2017
80 000 MW  Total capacity by 2026

Source: Eskom’s Integrated Report 2011
South Africa’s Current Capacity Mix

- Coal, 84.9%
- Gas, 5.8%
- Nuclear, 4.4%
- Pump Storage, 3.4%
- Wind, 0.0%
- Hydro, 1.5%

ENERGY INNOVATION FOR LIFE
Consumption per Sector

**Consumption**
- Residential: 17%
- Industry: 49%
- Commerce: 10%
- Transport: 2%
- Agriculture: 4%
- Mining: 18%

**Demand**
- Residential: 35%
- Industry: 35%
- Commerce: 10%
- Transport: 2%
- Agriculture: 4%
- Mining: 14%

ENERGY INNOVATION FOR LIFE
Most planned maintenance is done in summer, when demand is lower, so that maximum capacity is available to meet demand at winter peak. *(Note: Southern Hemisphere)*

A colder-than-expected winter puts added pressure on the system: for every 1 degree **Centigrade decrease** in winter temperature, electricity demand increases by **600 - 700 MW** during the evening peak; a warmer than expected **summer increases air-conditioning load** and demand can increase by up to **400 MW**.
Housing, on the other hand ..... 

The SA Government has built over 3 million subsidised housing units since 1994.

Current estimates of the backlog stand at about 2.1 to 2.5 million units.

As at September 2011, it was estimated that approximately 12 million people were still without adequate housing!

According to the 2009 General Household Survey, 12.8 percent of South African households lived in a RDP or State-subsidised dwelling.

South Africa has committed to increasing the rate of delivery with a view to wiping out the backlog by 2030!
Over **R16 billion** is earmarked by Government for housing each year.

The percentage of households with access to piped water increased from 84.5 percent in 2001 to 88.6 percent in 2007.

*The use of* **electricity as the main energy source for lighting** *increased from 57.6 percent in 1996 to 80 percent in 2007!*

Source: Community Survey (2007), in South Africa; “today is better than yesterday” (as reported by Finmark)
The National Planning Commission (NPC) is an advisory body forming part of the Presidency, tasked with conducting an independent and critical assessment of the current status of South Africa and formulating a development plan for achieving the long-term vision for South Africa, (the National Development Plan (NDP)).

The NDP is intended to provide for:

• the mobilisation of society around a commonly agreed set of long-term goals;
• greater coherence in government’s work between departments given a common understanding of long-term objectives; and
• the development of a broad consensus to encourage business and society to think about the long term.

The NDP seeks to addresses 13 key challenges and in this regard proposes inter alia, transitioning to a low carbon economy.

Includes specific reference to:
• Installation of 5 million solar water heaters by 2030;
• Introduction of a zero emissions building standard by 2030!
DEPARTMENT OF TRADE AND INDUSTRY
DEPARTEMENT VAN HANDEL EN NYWERHEID

No. R. 711

9 September 2011

NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS
ACT, 1977 (ACT 103 OF 1977)

INTRODUCTION OF AMENDMENTS TO THE NATIONAL BUILDING
REGULATIONS TO INTRODUCE REQUIREMENTS FOR ENERGY USAGE IN
BUILDINGS

I, Dr Rob Davies, Minister of Trade and Industry, hereby under section 17 (1) of the
National Building Regulations and Building Standards Act (Act 103 of 1977) and on
the recommendation of the Board of the National Regulator of Compulsory
Specifications, amend the National Building Regulations, as set out in the Schedule,
with effect from the date two (2) months from publication of this notice.

Dr R Davies MP
Minister of Trade and Industry
The Challenge!

Balancing and aligning these national priorities!

The National Energy Efficiency Strategy of March 2005 (reviewed in October 2008 & 2011/12), proposes that by 2015, a final energy demand reduction of 12% should have been realised by South Africa. *(Residential target – 10%)*

– Cool Roofs could possibly contribute to this!
Conclusion

A conservative estimate of the supply shortage is 5000MW, excluding current ‘new-build’ projects!

Current estimates of the backlog of low-cost housing, stands at between 2.1 to 2.5 million units!

Unless both these crises is acknowledged and resolved very urgently, all the talk of growth and jobs is superfluous because without power and adequate housing, the economy can’t grow and this is already preventing desperately needed job-creating economic expansion in the regions of 3.0 to 3.5% gross domestic product (GDP), per annum!
THANK YOU