



**SABS**

**Energy Efficiency**

**06 September 2012**



- ❑ Introduction: The SABS
- ❑ Policy context
- ❑ Standards & Testing for a Diversified Energy Mix
- ❑ Standards and Testing in Demand-Side Management

- SABS underpinning commitment is to support manufacturing and innovation based on standards
- 80% of business is conformity assessment services
- 20% is development of standards
- Maintain support of Good of Nation facilities, such as:
  - Emission testing in East London
  - NETFA – high voltage and short circuit testing
  - Acoustics laboratory
  - Bio-diesel laboratory

## Standards

- **Focus for 2011- 2014:**
- Prioritizing standards informed by economic impact studies, relevance for local manufacturing development industrial policy priorities
- Selection of products and services driven by priority sectors (IPAP), regulatory priorities by government departments e.g. Green technologies, energy saving, analogue to digital migration

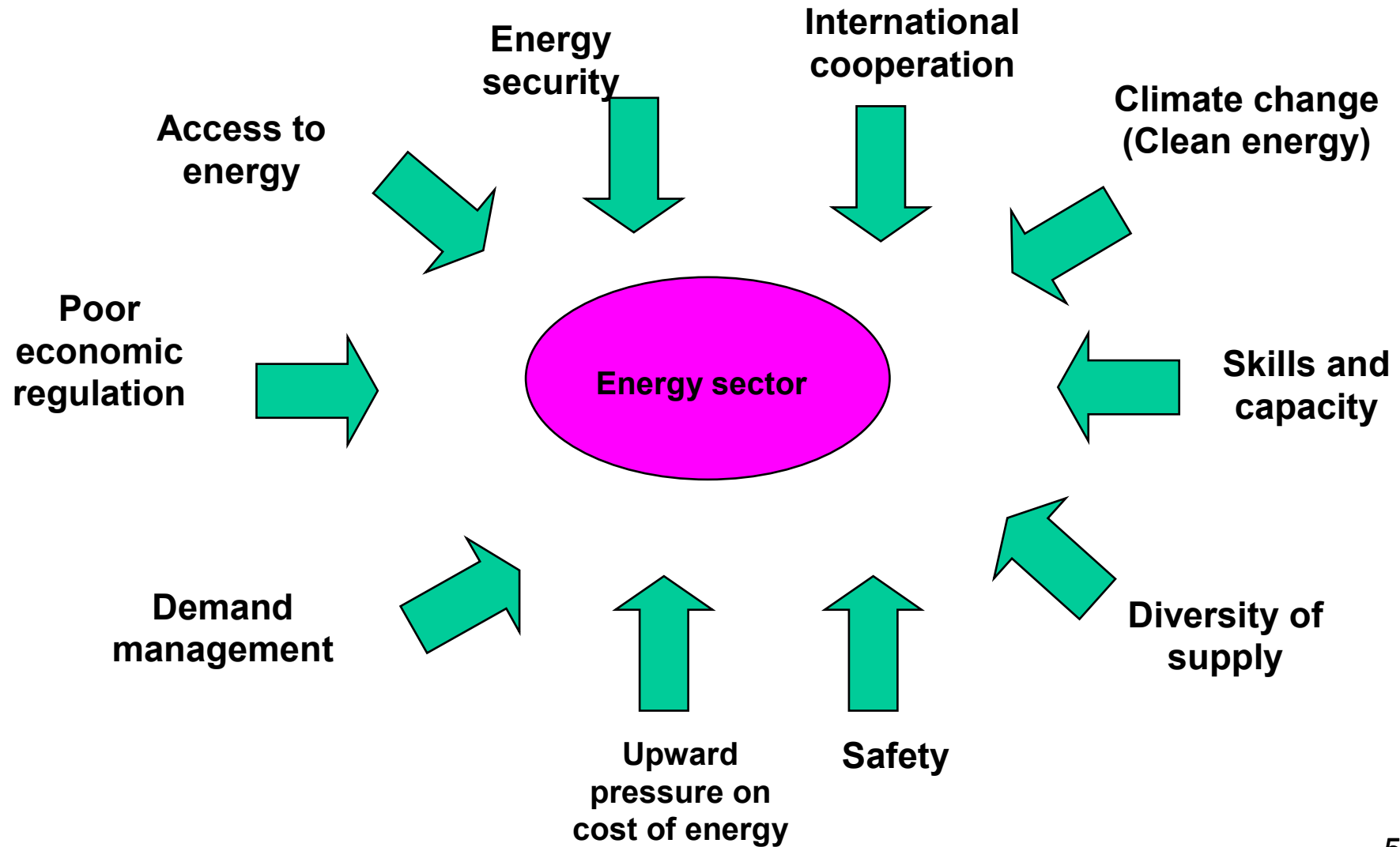
## Testing

- 90 test laboratories in field of electro-technical, food & health, transportation, mining & minerals, materials (piping, plastics, textiles)

### **Focus for 2011- 2014:**

- New technologies to support the Green Economy and Energy efficient technologies
- Need capacity for testing for renewable energy, bio-fuels, waste to energy beneficiation, components used in electric vehicles

**PRESSURES FACED BY THE SECTOR**



## **NATIONAL ELECTRICITY STRATEGIC OBJECTIVES**

- To create and maintain a secure balance between electricity supply and demand,
- To diversify primary energy mix in the new build program (e.g. bringing in IPPs in renewable sources),
- To create incentives for energy efficiency and demand side management programs,
- To create a sustainable electricity distribution industry (has a bearing on NETFA).

## Diversified energy mix

- Renewables: 10 GWh from Renewable Energy
- Renewables: Solar: Independent Power Producers (in the pipeline PV 27, CSP 3); 1 000 000 household solar water heaters by 2014; New building regulation requirements; DTI Local Content requirements for suppliers in public procurement.
- Renewables: Wind: Target 9100 MW by 2030 with 400MW installed capacity over next three years; Independent Power Producers (in the pipeline 15); DTI Local Content requirement for suppliers.
- Small Hydro: 2 IPPs in the pipeline

## **...Standards and testing**

### **SOLAR TECHNOLOGY**

#### **Designated local content industry**

#### **Standards**

SANS 1307, Domestic solar water heaters

SANS 6210, Domestic solar water heaters - Mechanical qualification tests

SANS 6211-1, Domestic solar water heaters Part 1: Thermal performance using an outdoor test method

#### **Testing**

Local content requirement to be evaluated and verified by the SABS as the Verification Authority on Local Content



## ...Standards and testing

### Demand-Side Management: Energy Efficiency

#### Standards

SANS/ISO 50001 - Energy management systems - Requirements with guidance for use.

Implementation of a management system to monitor, measure and analyse energy usage

SANS 50010 - Measurement and verification of energy savings. (Will support tax incentives)

#### Conformance Assessment and Certification

Will conduct certification audits to ensure compliance to ISO/SANS 50001

## ...Standards and testing

### **Demand-Side Management: Energy Efficiency**

*Significant potential exists for energy efficiency improvements in South Africa. In developing policies to achieve greater efficiency of energy use, government is mindful of the need to overcome shortcomings in energy markets. Government will create EE consciousness and will encourage EE in commerce and industry, will establish EE norms and standards for commercial buildings and industrial equipment and voluntary guidelines for the thermal performance of houses. A domestic appliance-labelling programme will be introduced and publicity campaigns will be undertaken to ensure that appliance purchasers are aware of the purpose of the labels. Targets for industrial and commercial EE improvements will be set and monitored".*  
White Paper on Energy Efficiency, 1998

**EE 2015 target of 12% reduction in energy demand**

## ...Standards and testing

### **Demand-Side Management: Energy Efficiency**

#### **Standards**

SANS 941 Energy efficiency for electrical and electronic apparatus.

Covers energy efficiency requirements, measurement methods and energy efficiency labelling of electrical and electronic apparatus

In the near future some products will be regulated to ensure that the appliances comply with the minimum energy saving requirements

#### **Testing and Labeling**

Household appliances: Dishwashers, Washing machines, Tumble driers, Air conditioners, Electric ovens,

## ...Standards and testing

### **Demand-Side Management: Energy Efficiency**

#### **Standards**

SANS 204 – Energy efficiency in buildings

Reducing energy use from electricity, oil and gas

SANS 10400XA – The application of the national building regulation

Part X – Environmental sustainability

Part A- Energy use in buildings

To help architects and buildings construction companies to ensure that buildings comply with energy efficiency requirements as describe in the standard



**Thank You**