

# South Africa: Transitioning to a low-carbon economy



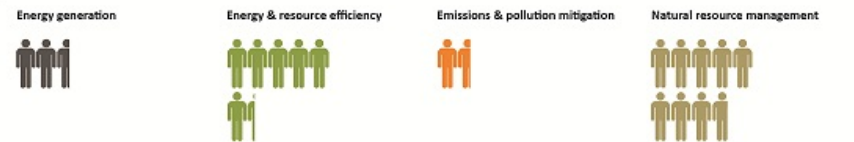
Presentation to the Forum on the Impact of the Implementation of Response Measures  
Doha, 28 November 2012

# Introduction

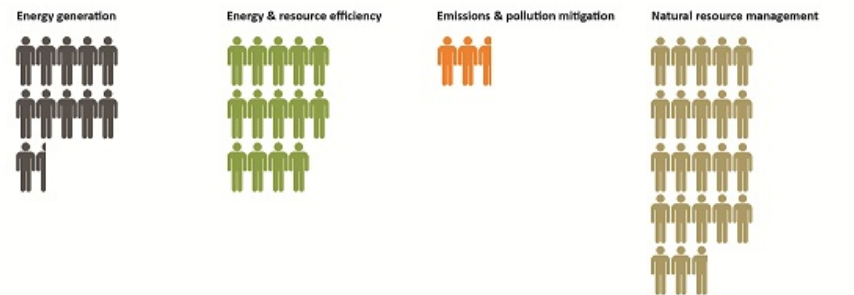
- Substantial steps taken by South Africa (SA) in formulating and implementing strategies aimed at:
  - Adapting to the effects of climate change;
  - Reducing its carbon emissions to a sustainable level.
- Economy's carbon-intensity underpinned by various factors (e.g. abundance of coal, mineral resource wealth, industrial policy legacy).
- Divergent views on how to move toward a low-carbon economy, but sustainable development (SD) imperatively widely recognized.
- Transition must be achieved without hindering socio-economic objectives.
- Green economy considered one of the critical tools for SD.
- Presents opportunities for expansion of productive capacity and service delivery, contributing to job creation goals.

# “Green Jobs” report\*: Estimates of direct formal employment potential

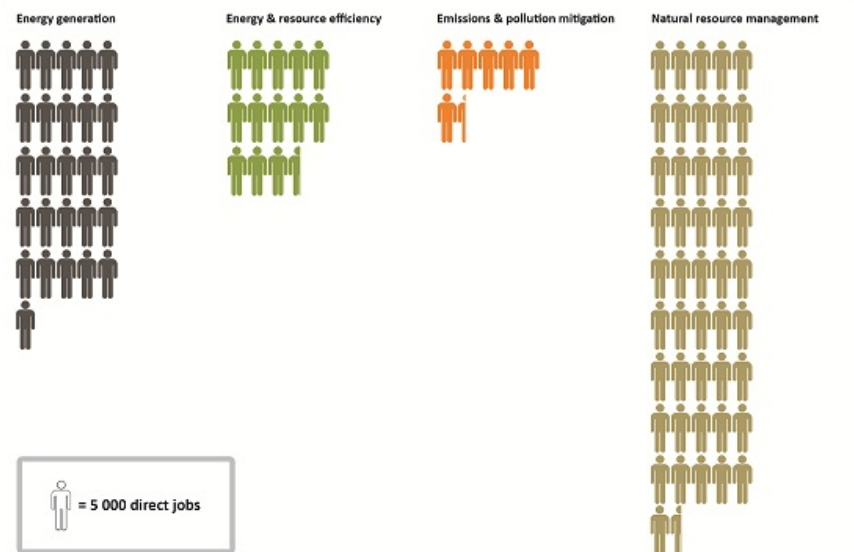
## SHORT TERM




## MEDIUM TERM



## LONG TERM



 = 5 000 direct jobs

\* IDC/DBSA/TIPS

	Short term	Medium term	Long term
<b>Total</b>	<b>98 000</b>	<b>255 000</b>	<b>462 000</b>
Energy generation	13 565	57 142	130 023
<i>% of total</i>	<i>13.8%</i>	<i>22.4%</i>	<i>28.1%</i>
Energy & resource efficiency	31 569	70 193	67 979
<i>% of total</i>	<i>32.2%</i>	<i>27.5%</i>	<i>14.7%</i>
Emissions & pollution control	8 434	13 189	31 641
<i>% of total</i>	<i>8.6%</i>	<i>5.2%</i>	<i>6.8%</i>
Natural resource management	44 512	114 842	232 926
<i>% of total</i>	<i>45.4%</i>	<i>45.0%</i>	<i>50.4%</i>

ST = 2011-12  
MT = 2013-17  
LT = 2018-25

# Contributors to SA's low-carbon strategy

- Commitment to undertake mitigation actions.
- Supportive policies (e.g. New Growth Path, Industrial Policy Action Plan).
- Appropriate mix of carbon pricing mechanisms.
- Renewable energy (RE) programme, development of biofuels sector.
- Energy efficiency incentives and energy demand management.
- Accords between government, business sector and labour movement.
- Provision of development finance.

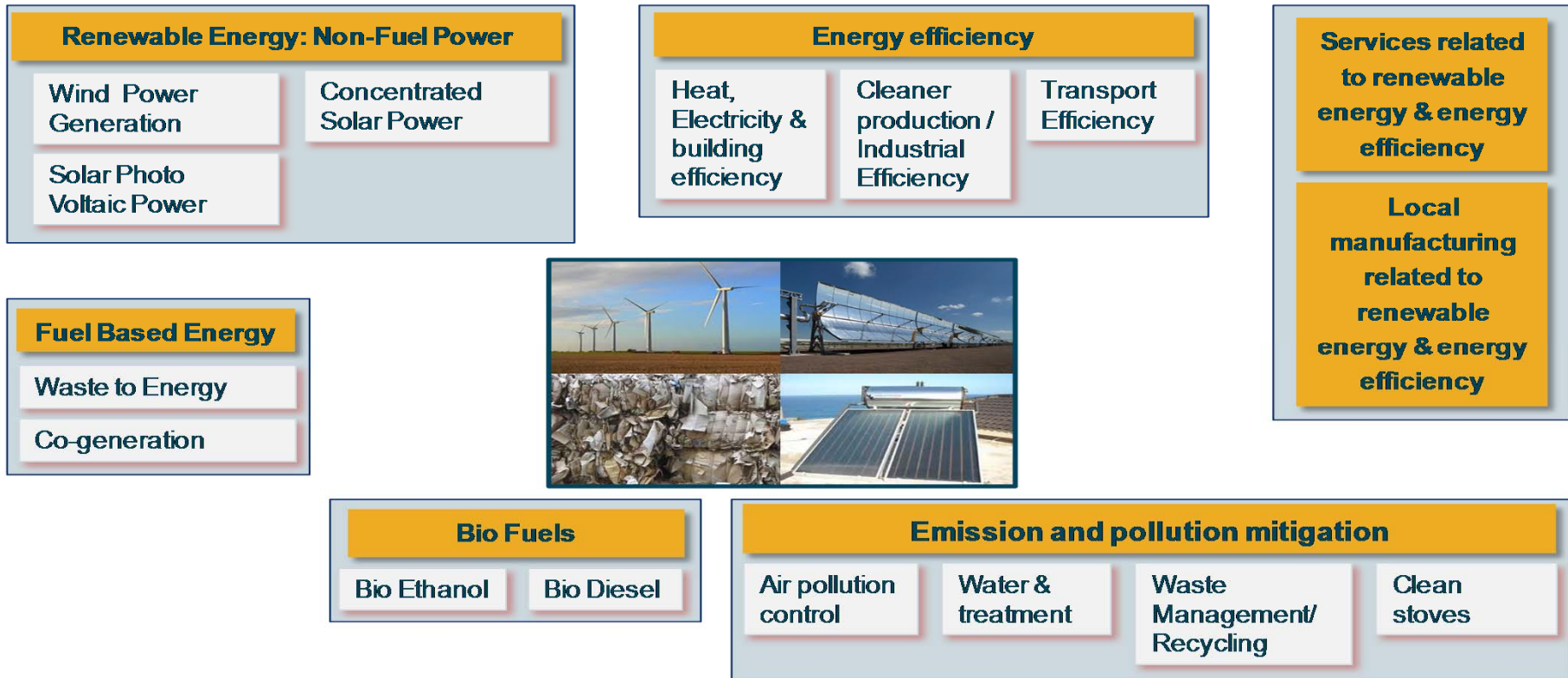
# Contributors to SA's low-carbon strategy (continued)

- Green building and construction regulations and practices.
- Local government programmes (e.g. waste management, street lighting).
- Improved efficiencies in public transportation systems.
- Allocation of resources to research and development.
- Exploiting manufacturing opportunities arising from preferential local procurement.
- Skills development and training.
- Active marketing efforts.
- Effective monitoring, reporting and verification.



# Catalytic development finance

- Development funding deemed catalytic for a successful roll-out, particularly the leading state-owned DFIs - IDC and DBSA.
- IDC allocated USD2.8 billion to green economy projects up to 2016, focusing on:



# Select progress highlights: Renewable energy (RE)

- Exciting time for RE development in SA and throughout Africa.
- 56 000MW in new electricity generation capacity required by 2030, over 20 000 MW of which from RE sources (IRP 2010-30).
- Introduction of Independent Power Producers of RE being effected through Renewable Energy Independent Power Producers Procurement Programme:
  - 5-phased bid process, for a total allocation of 3 725MW spread across renewable energy technologies;
  - Key qualification criteria include economic development factors such as job creation, local content, community development, skills development;
  - Preferred bidders in first 2 rounds announced: combined capacity of 2 460MW (mostly wind power and solar PV; but also some CSP and small hydro);
  - Expected jobs in first 2 rounds = 21 214.
- Manufacturing of solar PV panels, wind turbine components.

# Select progress highlights:

## Energy efficiency

- Energy Efficiency Strategy sets national target of 12% by 2015.
- Through “Energy Accord” between industry, mining and government, industry players committed to voluntary 15% final energy demand reduction target.
- Appliance-labelling programme launched for domestic appliances such as refrigerators and further sectors will be targeted, such as transportation.
- Green Energy Efficiency Fund (SA’s IDC and Germany’s KfW) launched recently:
  - Loan funding at concessionary rates;
  - Debt tenures up to 15 years;
  - Repayment structured to match savings profile of technology installed - no out-of-pocket expense for the company.



# Select progress highlights: Energy efficiency (cont.)

## Building regulations:

- New building regulations published in 2010, supporting government's IPAP and energy strategy.
- Guidelines to reduce energy requirements of buildings, residential as well as non-residential buildings.
- Minimum requirements: glazing, insulation, shading, orientation and building services, hot water, lighting etc.
- Energy Efficiency Building Regulations stipulate that new buildings will have to be installed with:
  - solar water heaters, heat pumps or similar technologies;
  - ceilings, walls, windows will have to meet minimum requirements to prevent heat loss/gain;
  - energy-efficient heating, air conditioning and mechanical ventilation systems.

# Select progress highlights: Energy efficiency (cont.)

## Solar water heaters

- 158 175 solar water heaters (SWHs) installed under Eskom rebate programme in 2011/12 (1 220 installation & manufacturing jobs).
- Future designated sector.

## Public transportation

- Public Transport Strategy includes modal upgrading and establishment of Integrated Rapid Public Transport Networks (IRPTN), incl. Bus Rapid Transit (BRT) in metropolitan areas:
  - Gautrain Rapid Rail Link;
  - BRT system operational in Johannesburg;
  - IRPTN operational in Cape Town, expansion under way;
  - Construction of BRT system in Tshwane (Pretoria) began in mid-2012;
  - Others to follow ...

# Key success factors

## Generic issues

- Commitment, awareness and readiness by the private, public and household sectors.
- Institutional capabilities.
- Funding availability, incentives, mechanisms.
- Regional coordination.
- Integration and coordination.

## Conducive regulatory environment

- Policy framework, pace of regulatory revision, amendment and development.
- Stakeholder communication and co-ordination.
- Simplification and streamlining.

## Taking the lead, growing demand

- Public sector playing an exemplary role.
- Gradual, effective transformation of production and consumption patterns.

## Localisation

- Local procurement and export market penetration to develop critical mass.
- Availability of competitively priced inputs and services.
- National industrialisation strategies.
- R&D capabilities and technology transfer.

## Developing skills

- Address shortages of skills in certain areas.
- Re-skilling and development of specific skills capabilities.

## Securing resources

- Availability, accessibility, quality, sustainability and pricing of required resources.

**Success factors**

**Thank you**

