South Africa’s 1st Biennial Update Report - Overview

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Presentation overview

1. National Circumstances
2. GHG Inventory
3. Mitigation Actions
4. Domestic Monitoring Reporting and Verification
5. Climate Finance
6. Challenges and Lessons Learned
7. Update – Post BUR1
# National Circumstances: South Africa

<table>
<thead>
<tr>
<th>Feature</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form of state</td>
<td>A federal state, comprising a national government and nine provincial governments. South Africa is a multiparty, three tier democracy with National, Provincial and Local governance.</td>
</tr>
<tr>
<td>Legal system</td>
<td>Based on Roman-Dutch law and the 1996 Constitution, which came into force on 4 February 1997.</td>
</tr>
<tr>
<td>National legislature</td>
<td>Bicameral Parliament elected every five years, comprising a 400-seat National Assembly and a 90-seat National Council of Provinces.</td>
</tr>
<tr>
<td>Electoral system</td>
<td>List-system of proportional representation based on universal adult suffrage.</td>
</tr>
<tr>
<td>Head of state</td>
<td>The President is elected by the National Assembly. Under the Constitution, the President is permitted to serve a maximum of two five-year terms.</td>
</tr>
<tr>
<td>Language</td>
<td>Eleven official languages: Afrikaans; English; isiNdebele; isiXhosa; isiZulu; Sesotho sa Leboa; Sesotho; Setswana; siSwati; Tshivenda; and Xitsonga.</td>
</tr>
<tr>
<td>Population</td>
<td>52.3 million people (Statistics South Africa, 2013)</td>
</tr>
<tr>
<td>Currency</td>
<td>South African Rand (ZAR)</td>
</tr>
<tr>
<td>Time</td>
<td>Two hours ahead of GMT</td>
</tr>
<tr>
<td>Internet domain</td>
<td>.za</td>
</tr>
<tr>
<td>Capitals</td>
<td>Pretoria (administrative)</td>
</tr>
<tr>
<td></td>
<td>Cape Town (legislative)</td>
</tr>
<tr>
<td></td>
<td>Bloemfontein (judicial)</td>
</tr>
<tr>
<td>Flag</td>
<td><img src="image" alt="South African Flag" /></td>
</tr>
</tbody>
</table>
The Department of Environmental Affairs (DEA) plays the lead role in climate change reporting in South Africa.

Within the DEA, the Chief Directorate for Climate Change Monitoring and Evaluation is responsible for the coordination and compilation of GHG inventories.

Relevant departments, industries and agencies play a supportive role in terms of information provision across relevant sectors.
National GHG Inventory: Methods & Series

- **GWPs** – IPCC’s Third Assessment Report.

<table>
<thead>
<tr>
<th>GHG Inventory Published</th>
<th>Time Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial National Communication</td>
<td>1990 1994</td>
</tr>
<tr>
<td></td>
<td>1996 IPCC guidelines</td>
</tr>
<tr>
<td></td>
<td>2006 guidelines</td>
</tr>
<tr>
<td>First Biennial Update Report</td>
<td>2000 2001 2002</td>
</tr>
<tr>
<td></td>
<td>2003 2004 2005</td>
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<tr>
<td></td>
<td>2006 2007 2008</td>
</tr>
<tr>
<td></td>
<td>2009 2010</td>
</tr>
<tr>
<td></td>
<td>2006 guidelines</td>
</tr>
</tbody>
</table>
South Africa’s 2010 national emissions (including the LULUCF sector) was **518.2 million tonnes CO₂e**.

Emissions increased by 21.9% compared with 2000 levels.
Mitigation Actions

- All mitigation policies and actions reported in the BUR = 52

<table>
<thead>
<tr>
<th>Name of Policy/Instrument/Strategy/Plan</th>
<th>Primary Purpose</th>
<th>GHG</th>
<th>Type of Instrument</th>
<th>Administering government agency/Actors</th>
<th>Time Horizon</th>
<th>Estimated emission reductions (MtCO₂e)</th>
<th>Co-benefits</th>
</tr>
</thead>
</table>
| Municipal Energy Efficiency and Demand Side Management (EEDSM) | Grant funding is given to local municipalities to implement energy efficiency measures within the municipal infrastructure | CO₂   | Economic           | Department of Energy                   | Since 2004   | 0.5 (2004 up to end of 2012)           | • Reduce energy consumption  
• Reduce air pollution  
• Reduce electricity bills  
• Skills development  
• Job creation.                                          |

- Mitigation policies and actions for which mitigation potential has been estimated = 16
- Mitigation policies and actions with accurate emission reduction assessments = 6

- **BUR2:** - Plan to accurately assess 18 mitigation policies and actions  
  - Plan to quantitatively assess co-benefits as far as possible
OBJECTIVE: To track South Africa’s transition to a climate-resilient and lower-carbon economy and society

Monitoring = MRV
- Data & info provision
  - Data and information coordination network(s)
    - M&E guidelines
      - [Standardization & guidance]
- The Web-based M&E System Platform
  - (QA / QC)

Evaluation = impact Analyses
- Data & information analyses
  - Climate-resilience analyses
  - Climate finance analysis
  - Lower-carbon analyses

Outputs
- Annual publication of Climate Change monitoring process
- UNFCCC Reporting Obligations
- OTHERS
Financial Support Received - Multilateral

Analysis of Multi-Lateral support.

- International Finance Corporation
  - USD 231.2 million
- World Bank
  - USD 7.3 million
- Clean Technology Fund
  - USD 500.0 million
- Multilateral loans
  - USD 738.6 million
- Other
  - USD 98.7 million
- Global Environmental Facility
  - USD 90.6 million
- Renewable Energy and Energy Efficiency Partnership
  - USD 8.1 million
Analysis of Bilateral support.

- **Bilateral loans**
  - USD 1,098.6 million

- **Other**
  - USD 98.6 million

- **Japan**
  - USD 7.7 million

- **Netherlands**
  - USD 3.2 million

- **Norway**
  - USD 0.7 million

- **Switzerland**
  - USD 4.7 million

- **United Kingdom**
  - USD 2.9 million

- **United States of America**
  - USD 5.4 million

- **Australia**
  - USD 1.6 million

- **France**
  - USD 3.4 million

- **Germany**
  - USD 55.0 million

- **Denmark**
  - USD 14.0 million

**Financial Support Received - Bilateral**
Financing BUR compilation – Challenges

1. Misalignment between the GEF process and the BUR compilation process resulted in SA receiving GEF approval late.

2. SA had to request contingency funding fill this gap so as to submit to the UNFCCC timeously.

3. This also resulted in delays and deviation from the original planned schedule with the service-provider.
Lessons learnt

i. It is imperative to set up sound and **effective national M&E (MRV) systems for continuous data-collection**

ii. **GHG Improvement Programme** allows us to work with international partners and also with key local industries.

iii. **Institutional arrangements:** We have found out that institutional arrangements are central to build ownership of the BUR across key information providers. Steering committee for the composition of the BUR should be comprised of **all relevant stakeholders to ensure ownership**.

iv. Tracking progress towards a climate resilient economy and society through the M&E system requires **methodologies for the determination of effectiveness of Adaptation actions**.
Challenges

i. **Information not always available** for quantification of emission reductions of mitigation actions, climate finance, technology transfer and capacity-building.

ii. **Capacity constraints**: human and financial resources to support on-going compilation of the BUR.

iii. **Methodologies for calculating emission reductions** of mitigation actions are not internationally standardized. The national M&E (MRV) system is currently developing appropriate methodologies.

iv. **Sustainable funding** approaches for the compilation of international reports.
Update – Post BUR 1

• Implementation of the national Climate Change Response M&E system
  1. MRV guidelines for mitigation (A 6-volume series)
  2. Desired Adaptation outcomes and indicators defined
  3. GHG inventory reporting regulations
  4. Design of the new web-based M&E system platform in progress

• Compilation and publication of the 1st Annual Climate Change Report in April 2016

• GHG improvement programme in progress (developing country-specific emission factors, methodologies, etc.)

• Emission reduction instruments currently being developed: carbon budgets, mitigation planning, carbon tax, incentives
Mitigation actions quantified in BUR 2

<table>
<thead>
<tr>
<th>Theme</th>
<th>Response Measure</th>
<th>Cumulative Emission Reductions (MtCO₂e) up to 2010</th>
<th>Cumulative Emission Reductions (MtCO₂e) up to 2012</th>
<th>Cumulative Emission Reductions (MtCO₂e) up to 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Efficiency</td>
<td>Energy Efficiency Target Monitoring System (EETMS) – overall EE achievements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Integrated Demand Side Management (IDM)</td>
<td>19.6</td>
<td>37.2</td>
<td>60.3</td>
</tr>
<tr>
<td></td>
<td>Municipal Energy Efficiency Programme</td>
<td>0.02</td>
<td>0.2</td>
<td>0.5</td>
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<tr>
<td></td>
<td>Industrial Energy Efficiency Improvement Project (IPAP)</td>
<td>0.1</td>
<td>0.4</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>SASOL Energy efficiency projects</td>
<td>1.4</td>
<td>3.3</td>
<td>5.9</td>
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<tr>
<td>Electricity generation</td>
<td>Renewable Energy Independent Power Producers Programme (REIPPP)</td>
<td></td>
<td></td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td>Eskom Open Cycle Gas Turbines (OCGT)</td>
<td>0.3</td>
<td>0.4</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>SASOL gas turbines</td>
<td>0.9</td>
<td>3.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Industrial Feed &amp; Fuel</td>
<td>SASOL coal-to-gas switch</td>
<td>51.5</td>
<td>66.2</td>
<td>80.9</td>
</tr>
<tr>
<td>Switch</td>
<td>CNG industry fuel switch</td>
<td>0</td>
<td>0</td>
<td>0.008</td>
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<tr>
<td>Clean Development Mechanism (CDM)</td>
<td>All CDM, excluding Energy Efficiency projects.</td>
<td>9.4</td>
<td>16.5</td>
<td>26.2</td>
</tr>
<tr>
<td>Greenfund</td>
<td>Greenfund</td>
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<td></td>
<td>0.02</td>
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<tr>
<td>Green Transport</td>
<td>DEA Green vehicles</td>
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<td>0.0000003</td>
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<td>Transnet Road-to-Rail Programme</td>
<td>0.42</td>
<td>1.78</td>
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<td>Biofuels</td>
<td>0.0003</td>
<td>0.0007</td>
<td>0.0012</td>
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<tr>
<td></td>
<td>CNG vehicle fuel switch</td>
<td>0</td>
<td>0</td>
<td>0.003</td>
</tr>
<tr>
<td>Extended Public Works</td>
<td>Working for Ecosystems, Land and Energy</td>
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<td></td>
<td>0.04</td>
</tr>
<tr>
<td>Programmes</td>
<td>Data unavailable</td>
<td>Data unavailable</td>
<td>Data unavailable</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>323.6</td>
<td>463.6</td>
<td>611.5</td>
</tr>
</tbody>
</table>

Key: **Yellow highlight** = mitigation actions that were already quantified in 1st BUR