

# South Africa's 1<sup>st</sup> Biennial Update Report - Overview

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Climate Change and Air Quality



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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



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# National Circumstances: South Africa

Feature	Detail
Form of state	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.
Legal system	Based on Roman-Dutch law and the 1996 Constitution, which came into force on 4 February 1997.
National legislature	Bicameral Parliament elected every five years, comprising a 400-seat National Assembly and a 90-seat National Council of Provinces.
Electoral system	List-system of proportional representation based on universal adult suffrage.
Head of state	The President is elected by the National Assembly. Under the Constitution, the President is permitted to serve a maximum of two five-year terms.
Language	Eleven official languages: Afrikaans; English; isiNdebele; isiXhosa; isiZulu; Sesotho sa Leboa; Sesotho; Setswana; siSwati; Tshivenda; and Xitsonga.
Population	52.3 million people(Statistics South Africa, 2013)
Currency	South African Rand (ZAR)
Time	Two hours ahead of GMT
Internet domain	.za
Capitals	Pretoria (administrative) Cape Town (legislative) Bloemfontein (judicial)
Flag	

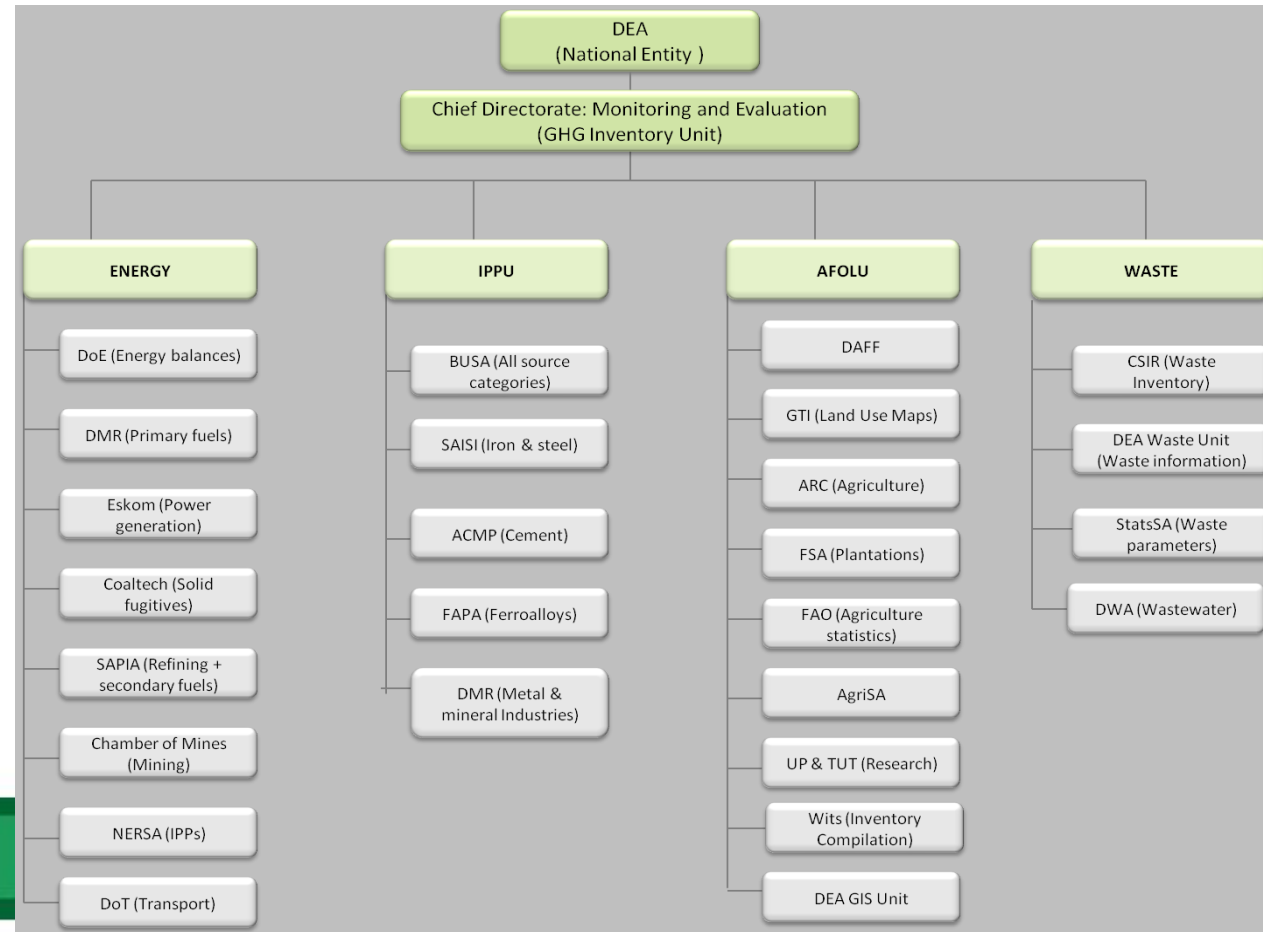


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# National GHG Inventory Report: Institutional Arrangements

- 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.



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# National GHG Inventory: Methods & Series

- **2006 IPCC Guidelines** for National Greenhouse Gas Inventories and **the IPCC Good Practice Guidance (GPG)**. Experience since 2<sup>nd</sup> National Communication.
- **GWPs –IPCC’s Third Assessment Report.**

GHG Inventory Published	Time Series					
Initial National Communication	1990	1994	1996 IPCC guidelines			
Second National Communication	1990	1994	2000	2006 guidelines		
First Biennial Update Report	2000	2001	2002	2003	2004	2005
	2006	2007	2008	2009	2010	2006 guidelines



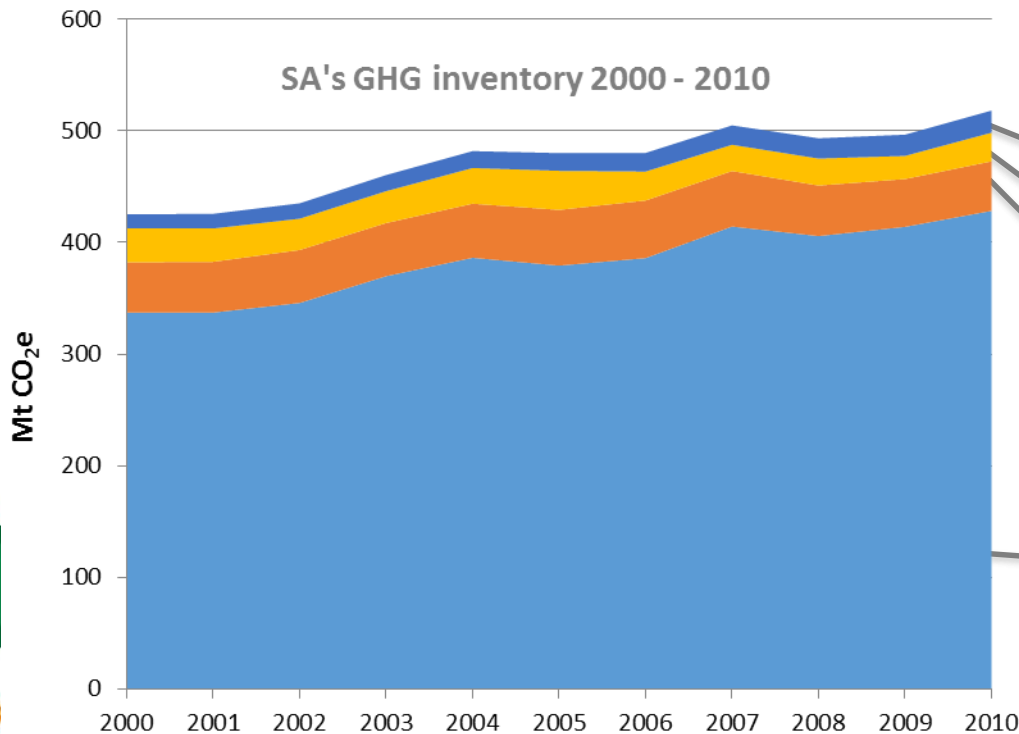
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# National GHG Inventory: Summary

- South Africa's 2010 national emissions (including the LULUCF sector) was **518.2 million tonnes CO<sub>2</sub>e**.
- Emissions increased by 21.9% compared with 2000 levels



Between 2000 and 2010:

Waste ↑ by 59.3%.

AFOLU ↓ by 15.7%.

IPPU ↓ by 1.2%.

Energy ↑ by 27.0%.



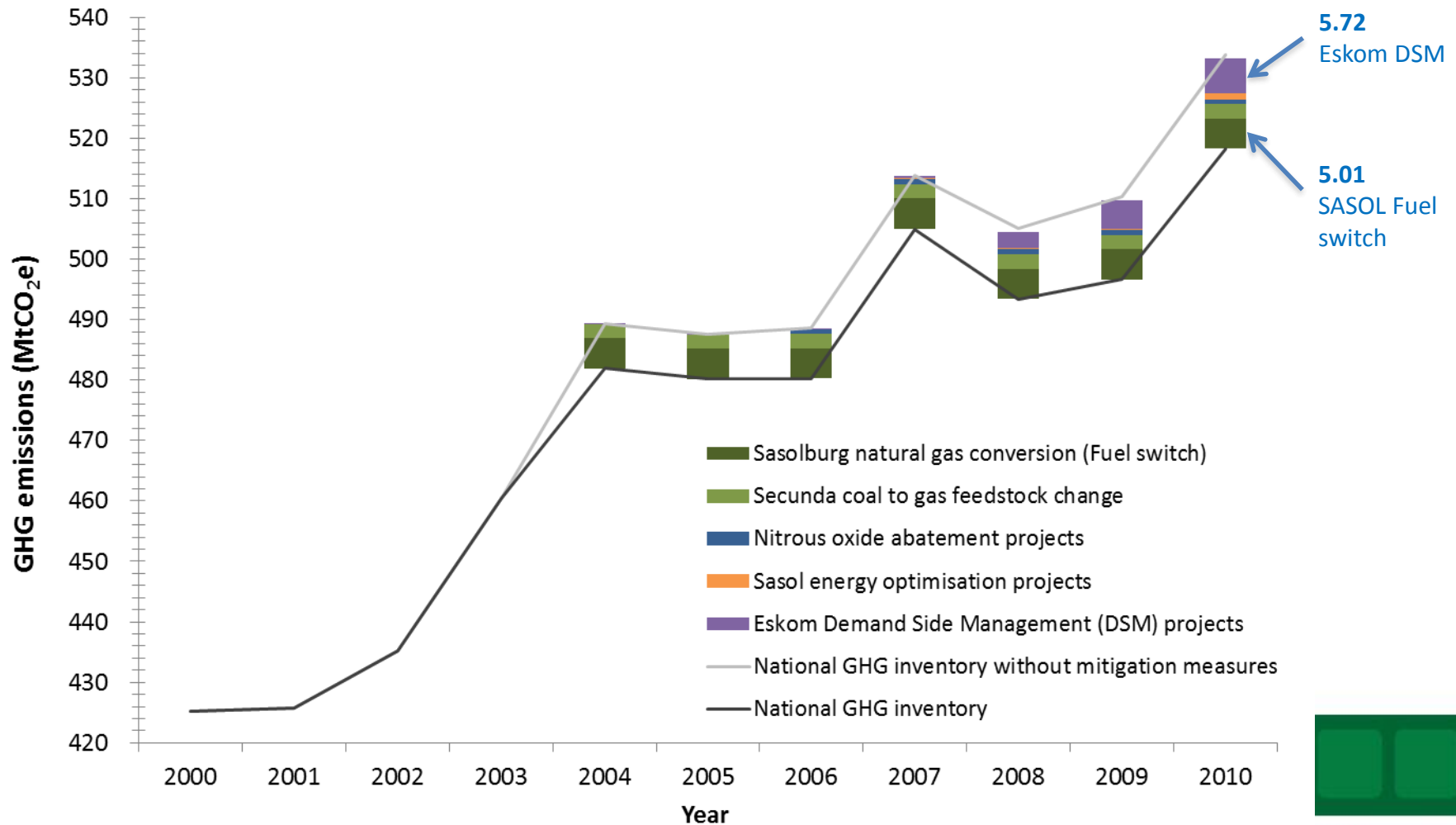
# Mitigation Actions

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

Name of Policy/ Instrument /Strategy/ Plan	Primary Purpose	GHG	Type of Instrument	Administering government agency/ Actors	Time Horizon	Estimated emission reductions (MtCO <sub>2</sub> e)	Co-benefits
Municipal Energy Efficiency and Demand Side Management (EEDSM)	Grant funding is given to local municipalities to implement energy efficiency measures within the municipal infrastructure	CO <sub>2</sub>	Economic	Department of Energy	Since 2004	0.5 (2004 up to end of 2012)	<ul style="list-style-type: none"> <li>Reduce energy consumption</li> <li>Reduce air pollution</li> <li>Reduce electricity bills</li> <li>Skills development</li> <li>Job creation.</li> </ul>

- 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

# Mitigation Actions (Cont.)



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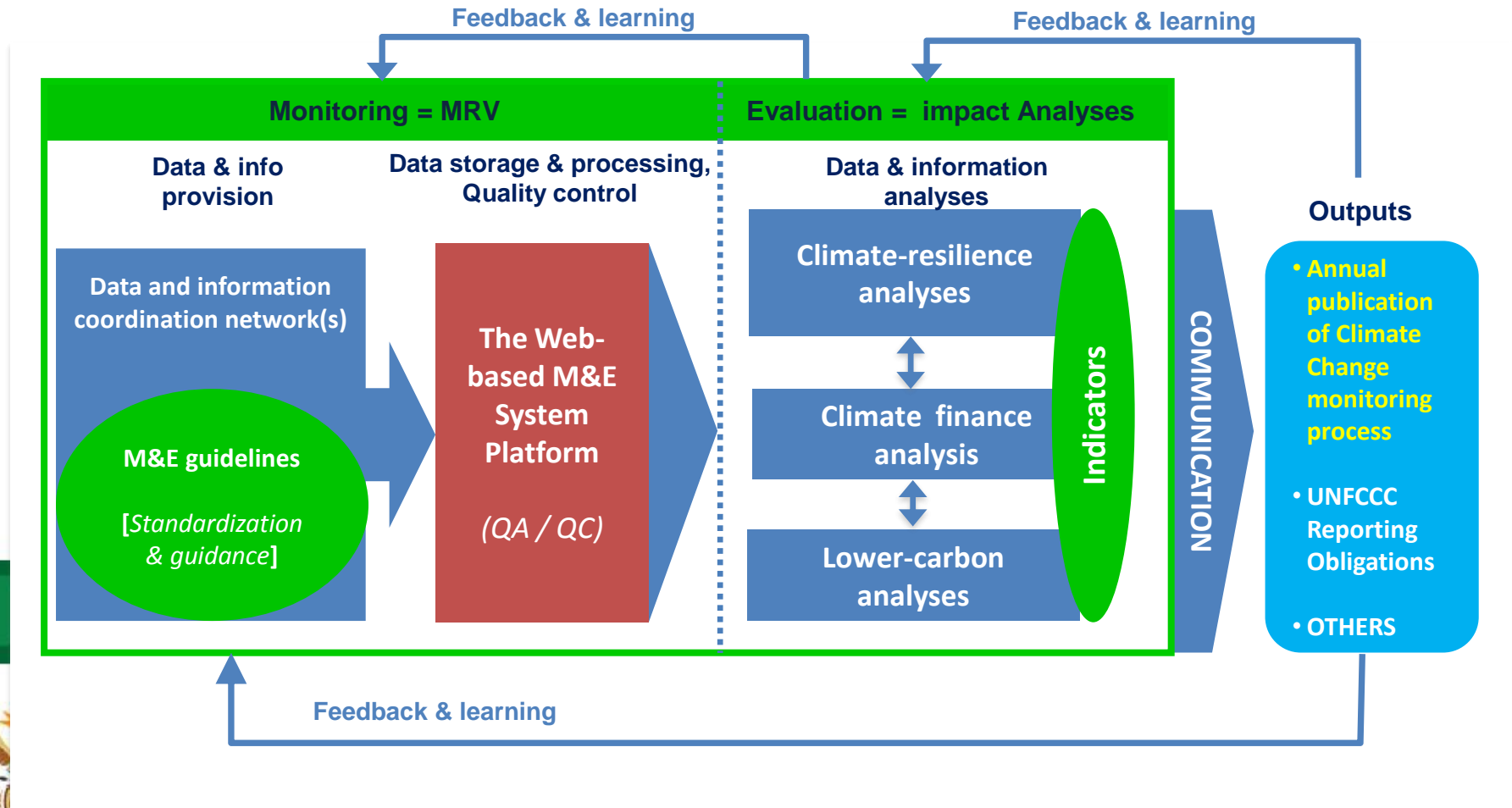
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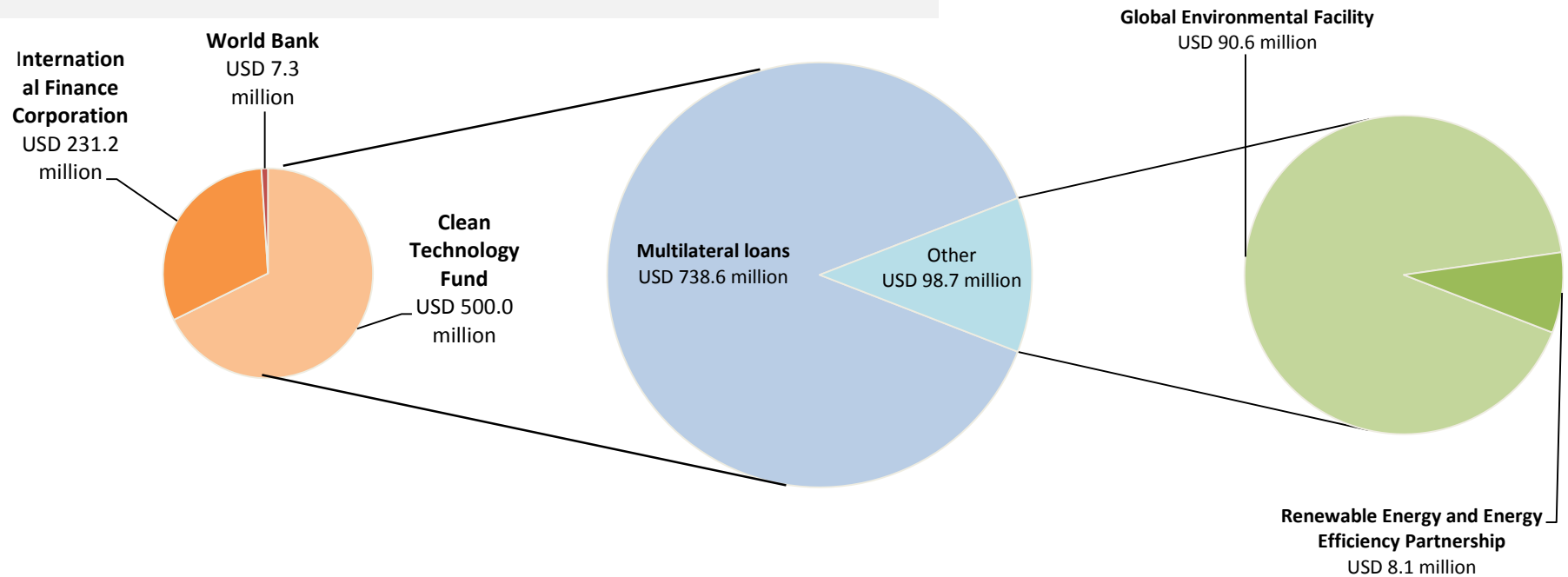
# National Monitoring and Evaluation System

**OBJECTIVE:** To track South Africa's transition to a climate-resilient and lower-carbon economy and society



# Financial Support Received - Multilateral

## Analysis of Multi-Lateral support.



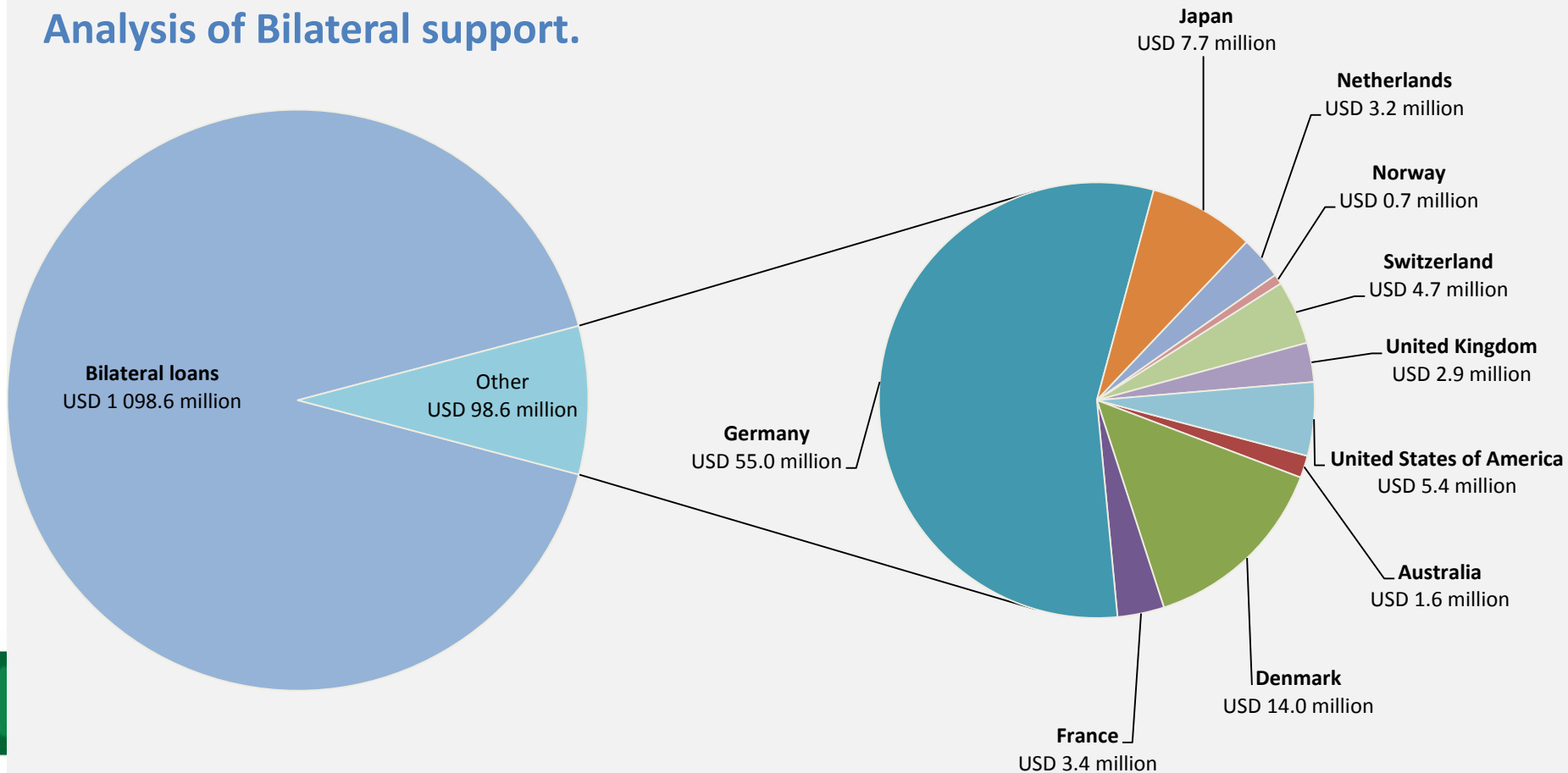
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# Financial Support Received - Bilateral

## Analysis of Bilateral support.



# 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.



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# 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.**



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# 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 1<sup>st</sup> 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



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# Mitigation actions quantified in BUR 2

Theme	Response Measure	Cumulative Emission Reductions (MtCO <sub>2</sub> e)		
		up to 2010	up to 2012	up to 2014
Energy Efficiency	Energy Efficiency Target Monitoring System (EETMS) – overall EE achievements	261.6	377.0	492.3
	Integrated Demand Side Management (IDM)	19.6	37.2	60.3
	Municipal Energy Efficiency Programme	0.02	0.2	0.5
	Industrial Energy Efficiency Improvement Project (IPAP)	0.1	0.4	1.3
	SASOL Energy efficiency projects	1.4	3.3	5.9
Electricity generation	Renewable Energy Independent Power Producers Programme (REIPPP)			3.2
	Eskom Open Cycle Gas Turbines (OCGT)	0.3	0.4	1.0
	SASOL gas turbines	0.9	3.2	6.2
Industrial Feed & Fuel Switch	SASOL coal-to-gas switch	51.5	66.2	80.9
	CNG industry fuel switch	0	0	0.008
Clean Development Mechanism (CDM)	All CDM, excluding Energy Efficiency projects.	9.4	16.5	26.2
Greenfund	Greenfund			0.02
Green Transport	DEA Green vehicles		0.0000004	0.000003
	Transnet Road-to-Rail Programme		0.42	1.78
	Biofuels	0.0003	0.0007	0.0012
	CNG vehicle fuel switch	0	0	0.003
Extended Public Works Programmes	Working for Ecosystems, Land and Energy	Data unavailable	Data unavailable	0.04
<b>Total</b>		<b>323.6</b>	<b>463.6</b>	<b>611.5</b>

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