

# Facilitative Sharing of Views BUR4 of South Africa

## Bonn, Germany 6 June or 7 June 2023





## **Presentation Outline**

Summary of BUR and recent developments since the BUR submission

- National context
- GHG inventory
- Mitigation actions and effects
- Barriers and support needed and received
- ETF transition and implementation







# National Context: IA for compilation of BUR, including the ICA Process





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### National Context: IA for the NIR compilation

National entity	DEFF
National inventory coordinator	Chief Directorate: Climate Change Monitoring and Evaluation Sub-directorate: National GHG Inventory Compilation
Sector lead compilers	Energy (DEFF) IPPU (DEFF) AFOLU (Gondwana) Waste (DEFF)
Data providers	DMRE DEFF DALRRD SAPA ARC UP StatisticsS Sasol SAISI FSA Sasol SAPIA Refineries production plants FAO FASA DMRE SARS







### National Context: Overarching Structure for Tracking mitigation actions and Support





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### **GHG** Inventory

- South Africa's GHG emissions are estimated using the 2006 IPCC Guidelines & covers sources and removals by sinks from anthropogenic activities for the major GHGs: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, PFCs, and HFCs.
- GHG emissions excl. FOLU were 448 874 Gg CO2e in 2000 and these increased by 14.2% by 2017 to 512 660 Gg CO2e. GHG missions (incl. FOLU) were 436 734 Gg CO2e in 2000 and these increased by 10.4% to 482 016 Gg CO2e.
- The *Energy* sector is the largest contributor to South Africa's total emissions (excl. *FOLU*), contributing 80.8% towards these emissions in 2017. The main contributor is the increased demand for liquid fuels in road transportation, manufacturing industries, construction, civil aviation, a residential and commercial sectors
- The *IPPU* sector contributed an average of 7.0% to the total emissions excluding FOLU between 2000 and 2017 The main drivers in the *IPPU* sector are the metal industries, particularly *Iron and steel production* and *Ferroalloy production*.
- The AFOLU sector (excl. FOLU) contributed an average of 10.3% to total emissions (excl. FOLU) between 2000 and 2017. The main driver of change in the AFOLU emissions (excl. FOLU) is the decrease in the livestock population.
- The Waste sector emissions have increased from 13 558 Gg CO2e in 2000 to 21 249 Gg CO2e in 2017 The emissions in this sector are driven mainly by population growth.







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#### **Mitigation Actions and effects**

#### **National Context for Mitigation actions**

- In line with South Africa's first submitted NDC, South Africa's GHG emissions by 2025 and 2030 will be in a range between 398 and 614 MtCO2e, as defined in national policy.
- South Africa has since submitted the updated first NDC in 2021, with updated and more ambitious GHG emissions target. The main driving policies for addressing climate change mitigation in South Africa include the NCCRP, NDP 2023.
- Overarching mitigation policies to support implementation include the carbon tax, carbon budgets as well as Pollution Prevention Plans that will later be enforced through the Climate Change Act (currently at Bill stage) as mitigation plans.

### Key Mitigation actions are organised by IPCC Sectors including Energy, IPPU, AFOLU and Waste

#### Energy Sector

Key policies, plans & strategies include Integrated Resource Plan, the National Energy Efficiency, Strategy, the Green Transport Strategy, National Land Transport Act. The Carbon Tax, Carbon, Budgets and Pollution Prevention Plans also impact with key mitigation actions being tracked including the Renewable Energy Independent Power Producer Programme (REIPPP), Section 12L Energy Efficiency Tax Incentive, Fuel Switch- Natural Gas, , Municipal Energy Efficiency Programme, Electric Vehicles, Bus Rapid Transit System, Recycling Enterprise Support Programme, etc.

#### IPPU Sector

Key actions implemented include the Nitrous Oxide reduction projects during production of nitric acid.

#### AFOLU Sector

Key actions in the AFOLU sector include Afforestation, Conservation Agriculture , Forest and woodland restoration and rehabilitation, Grassland rehabilitation and Thicket Restoration

#### Waste Sector

Key mitigation policy and action include the waste management strategy



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### Support Received and Needed (finance, technology, capacity-building)

#### **Financial Support Received**

 South Africa has received in excess of USD 4 billion in financial support from bilateral and multilateral sources that support or benefit climate change action in the country. Approximately 88.9% of the funds were in the form of loans (USD 4 343 million), and the rest being grants(USD 542 million). These climate finance flows were recorded for the period 1 January 2018 to 31 December 2019.



#### **Financial Support Needed**

 South Africa still needs more support in the form of grants rather than loans. Financial support for the implementation of the NDC is reported in tabular format. Mitigation measures include the implementation of the REIPP, EE Programme, National transport Strategy, Fuel switching measures, Afforestation and reforestation programmes and waste management flagship programme. In adaptation, financial support is needed for the implementation of the NAS/NAP including sectoral adaptation strategies in health, water, biodiversity, urban, rural and coastal settlements



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### Support received and needed (finance, technology, capacity-building)

Planned Improvements	<ul> <li>Having MOUs with data providers.</li> <li>Developing Provincial Climate Change Database and linking it to the National database to reduce reporting fatigue.</li> <li>Linking NCCRD to another project database that are in DFFE.</li> <li>Ensuring that personnel maintain and update tracking tools on SharePoint</li> </ul>
Constraints	<ul> <li>Hosting Infrastructure and system maintenance.</li> <li>Lack of Funding for continuous maintenance and IT support system.</li> <li>Lack of funding to develop provincial sub-systems.</li> <li>Lack of a centralised system to maintain and update the offline tracking tools</li> </ul>
Technology support Needs (Mitigation & Adaptation (Tables 4.7 & 4.8 of BUR4)	<ul> <li>Energy monitoring and management system.</li> <li>Utilise waste material (such as old tyres) as fuel in cement production.</li> <li>Separation at source and waste recovery services by small businesses.</li> <li>Early warning systems for forecasting extreme events</li> <li>Desalination technologies for brackish water, ground water, mine water, and seawater.</li> </ul>
Capacity Support needed (Table 4.6 of BUR4)	<ul> <li>Enhance technical capacity to develop a land mapping system which allows for the integration of various spatial datasets to inform the land cover matrix</li> <li>Support sector-specific priority data generation processes to improve the GHG inventory. Projects to provide information on country specific emission factors in all sectors, particularly: Waste sector, Direct and indirect N2O emission factors for emissions from managed soils and manure management</li> <li>Capacity around tracking of mitigation policies and measures and the assessment of mitigation policies and measures. Done through training courses (basic and complex).</li> </ul>



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## **ETF Transition and Implementation**

Data Collection for BTR1 already under way

Reviewing of existing tools and align them to support reporting under the ETF Securing funding to develop provincial systems for other provinces and linking them to the National Climate Change Response Database.

Funding to be secured to employ more personnel

2000 to 2022 NIR currently being complied to be submitted with BTR1 BUR5 support chapter will also include CTFs on support from Decision5/CMA.3





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# Written Questions and Answers Exchanged Through FSV Portal as of 25 May 2023









# **THANK YOU!**

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Thank You