



Preparation of South Africa's Fourth National Communication and Fourth Biennial Update Report under the UN Framework Convention on Climate Change (UNFCCC)

Part I: Project Information

GEF ID

10509

Project Type

EA

Type of Trust Fund

GET

CBIT

☐ CBIT

Project Title

Preparation of South Africa's Fourth National Communication and Fourth Biennial Update Report under the UN Framework Convention on Climate Change (UNFCCC)

Countries

South Africa

Agency(ies)

UNEP

Other Executing Partner(s):

International Mechanisms and Reporting Unit, Branch: Climate Change, Sustainable Development and Air Quality, Department of Environment, Forestry and Fisheries, Republic of South Africa

Executing Partner Type

Government

GEF Focal Area

Climate Change

Taxonomy

Focal Areas, Climate Change, United Nations Framework Convention on Climate Change, Enabling Activities, Capacity, Knowledge and Research, Strengthen institutional capacity and decision-making, Influencing models, Communications, Stakeholders, Awareness Raising, Local Communities, Indigenous Peoples, Type of Engagement, Information Dissemination, Consultation, Participation, Civil Society, Private Sector, Gender results areas, Gender Equality, Knowledge Generation and Exchange, Capacity Development, Training, Knowledge Generation, Workshop

Rio Markers**Climate Change Mitigation**

Climate Change Mitigation 2

Climate Change Adaptation

Climate Change Adaptation 2

Type of Reports	Submission Date	Expected Implementation Start	Expected Completion Date	Expected Report Submission to Convention
UNFCCC Biennial Update Report (BUR)	3/11/2020	7/1/2020	12/31/2023	3/31/2021

Type of Reports	Submission Date	Expected Implementation Start	Expected Completion Date	Expected Report Submission to Convention
UNFCCC National Communications (NC)	3/11/2020	7/1/2020	12/31/2023	8/31/2023
Duration				
42In Months				
Agency Fee(\$)				
80,940				

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
CCM-EA	GET	852,000	85,200
		Total Project Cost(\$)	852,000

B. Project description summary

Project Objective

To support the Republic of South Africa prepare and submit its Fourth National Communication (NC 4) and Fourth Biennial Update Report (BUR 4) that comply with the United Nations Framework Convention on Climate Change (UNFCCC) reporting requirements while responding to its national development goals.

Project Component	Expected Outcomes	Expected Outputs	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
1. Preparation of South Africa's NC 4 and BUR 4	1.1. South Africa update tools and approach to meet its NC 4 and BUR 4 reporting requirements under the UNFCCC	1.1.1. BUR 4 and NC 4 prepared and submitted to UNFCCC by March 2021 and August 2023 respectively.	745,550	72,300
		1.1.2 A self-assessment and stocktaking exercise for preparation of the project proposal for subsequent BUR and NC completed	20,000	900
PMC	Project Management Cost		86,450	12,000
Sub Total (\$)			852,000	85,200
Project Management Cost (PMC)				
Sub Total(\$)			0	0

Project Management Cost (PMC)

Total Project Cost(\$)	852,000	85,200
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C. Source of Co-Financing for the Project by Name and by Type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Government	Department of Environment, Forestry and Fisheries	In-kind	Recurrent expenditures	85,200
Total Co-Financing(\$)				85,200

Describe how any "Investment Mobilized" was identified

Not Applicable

D. GEF Financing Resources Requested by Agency, Country and Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)
UNEP	GET	South Africa	Climate Change	CC Set-Aside	852,000	80,940
Total Gef Resources(\$)					852,000	80,940

Part II. Enabling Activity Justification

A. ENABLING ACTIVITY BACKGROUND AND CONTEXT

Provide brief information about projects implemented since a country became party to the convention and results achieved

The Constitution of the Republic of South Africa empowers the Department of Environment, Forestry and Fisheries - DEFF (formerly known as the Department of Environmental Affairs -DEA) to continue to endeavor for the full realization of the right to an environment that is not harmful to the health and well-being of South Africans and all those who live in our country. DEFF is mandated to give effect to the right of citizens to an environment that is not harmful to their health or well being, and to have the environment protected for the benefit of present and future generations. To this end, the department provides leadership in environmental management, conservation and protection towards sustainability for the benefit of South Africans and the global community. The DEFF therefore plays a central coordinating and policy making role and is responsible for providing guidance and ensuring that there is a clear alignment of policies and international obligations when it comes to climate change. Government has also entrusted the DEFF to fulfill the country's commitments to the UNFCCC. Accordingly, in 2011, Government endorsed the National Climate Change Response Policy (NCCRP), presenting the vision for an effective climate change response, and the long-term just transition to a climate-resilient and lower carbon economy and society.

The Policy aims to effectively manage inevitable climate change impacts through interventions that build and sustain South Africa's social, economic and environmental resilience and emergency response capacity (adaptation) (DEA 2011). Key economic sectors such as agriculture, water, biodiversity, health, marine fisheries, disaster risk reduction, tourism are identified as the most vulnerable and threatened under the current climate change scenarios and projections (DEA 2013). In as far as the transition to low carbon is concerned, the Policy indicates that South Africa will make a fair contribution to the global effort to stabilize GHG concentrations in the atmosphere at a level that avoids dangerous anthropogenic interference with the climate system within a time frame that enables economic, social and environmental development to proceed in a sustainable manner. The policy encourages the department to coordinate climate change activities with sector departments, various ministries, provinces and local government; and Civil Society Organizations (CSOs) including private sector and within the country.

South Africa is certainly making substantial progress towards becoming a low carbon and climate resilient society. As a signatory to the United Nations Framework Convention on Climate Change (UNFCCC), the South African government, in partnership with climate change stakeholders and role players, continue to strengthen their efforts of achieving and stabilizing greenhouse gas (GHG) concentrations in the atmosphere, hence reducing carbon footprints and preventing harmful human activity interference in the climate system. The NCCRP acknowledged that climate change remains a threat to sustainable development and livelihoods, and South Africa continues to develop programmes and projects targeted at addressing climate change, mainstreaming of climate change into development policies as well as the effective monitoring and reporting on GHG emissions, mitigation and adaptation actions (DEA, 2018). At both domestic and international level, there is also a need to align the Sustainable Development Goals (SDG), Sendai Framework for Disaster Risk Reduction and the Paris Agreement. Frameworks and policies play a significant role in the current efforts required for developing countries to become low carbon and climate resilient economies.

South Africa has well been reporting to the COP under the UNFCCC on the actions it has undertaken to implement the Convention. Having ratified the UNFCCC, its Kyoto Protocol, and the Paris Agreement, South Africa is also guided by COP decisions to submit national communications (every four years) and the biennial update reports (every two years). To this effect, South Africa has implemented three enabling activities projects that informed the preparation and submission to the UNFCCC of three National Communications and three Biennial Update Reports between 2000 and 2019. The GEF INC project was implemented from 2000 through 2003, the period during which INC report for South Africa was prepared and submitted to the UNFCCC. The SNC was submitted to the UNFCCC in 2011. The 3rd enabling activity for South Africa was to develop the Third National Communication as well as the 1st BUR. South Africa developed the 1st BUR to the COP under the UNFCCC using the financial support from GIZ. The 1st BUR of South Africa was submitted to the UNFCCC in December 2014. The 3rd enabling activities was implemented for developing South Africa's TNC, BUR2 and BUR3. The BUR2 was developed internally by the DEFF, which was DEA at the time within the chief directorate climate change monitoring and evaluation in order to build capacities of the staff. The GEF funding which was for developing BUR2 was then re-directed to BUR3. The BUR2 was submitted to the UNFCCC in December 2017. The TNC was submitted in August 2018 whilst the BUR3 was submitted in June 2019. All BURs of South Africa were submitted with stand-alone National Inventory Reports. BUR1 was submitted with the 2000-2010 NIR, BUR2 with the 2000-2012 NIR whilst BUR3 was submitted with the 2000-2015. All the NIRs submitted with BURs were compiled using the 2006 IPCC guidelines.

The quality of these reports has improved over time as experts get to better understand the application of tools and methodologies as recommended by the Intergovernmental Panel on Climate Change (IPCC) and UNFCCC. The first BUR of South Africa submitted to the UNFCCC on 17 December 2014 was analyzed by a team of technical experts (TTE) in the first round of technical analysis of BURs from non-Annex I Parties, conducted from 18 to 22 May 2015. The TTE, in consultation with South Africa, identified nine capacity-building needs related to the facilitation of reporting in accordance with annex III to decision 2/CP.17, and to the participation in ICA in accordance with annex IV to decision 2/CP.17, taking into account Article 4, paragraph 3, of the Convention. After the publication of its summary report, South Africa participated in the first workshop for the facilitative sharing of views (FSV), convened in Bonn on 20 and 21 May 2016 where South Africa provided an overview of its national circumstances, institutional arrangements and national greenhouse gas (GHG) inventory of anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol, with time-series data since 2000 estimated using the IPCC 2006 guidelines, its emissions in 2010 (518.2 million tonnes of carbon dioxide equivalent, including the land use, land-use change and forestry sector) and sectoral emission trends over the period 2000–2010. South Africa also presented an overview of the 52 mitigation actions reported in its BUR, for 16 of which the mitigation potential was estimated and for 6 of which the emission reduction potential was accurately assessed. Additionally, it presented a comparative graph of GHG emissions for the period 2000–2010, indicating the major mitigation actions and how they helped to bring down actual emissions compared with the 'business as usual' scenario. South Africa covered: the design of its domestic measurement, reporting and verification (MRV) system; quantified bilateral and multilateral climate finance received, including sources; and the challenges it faced in and lessons learned from the overall ICA process, concluding with an update on the follow-up to its first BUR and quantified effects of key mitigation actions presented in its second BUR. Over the course of the presentation, South Africa addressed written questions submitted to it in advance through the secretariat by interested Parties. The questions were mainly focused on the following areas: best practices and lessons learned in putting in place the domestic MRV system and institutional arrangements to improve capacity and enhance reporting over time; experience in the development of a measurement and evaluation system for coordinating the national inventory compilation process; the coordination and implementation of the flagship programmes; how different types of effect, including any negative impacts, of the mitigation actions were assessed; and the challenges faced during the preparation of the GHG inventory due to the lack of data or data collection mechanisms.

South Africa submitted its second BUR on 28 December 2017, more than two years from the submission date of its first BUR. South Africa indicated capacity-related challenges and staff turnover within DEFF, previously known as the DEA at the time, as contributing to the delay. The technical analysis of the BUR took place from 5 to 9 March 2018 in Bonn. The technical summary report was published on 10 January 2019. As documented in the summary report, the Team of Technical Experts (TTE) noted improvements in the

reporting in the second BUR of South Africa compared with the first BUR. Significant improvements had been made to the GHG inventory by incorporating more detailed Activity Data (AD), Emission Factors (EFs) and parameters across the sectors, and establishing a new GHG inventory improvement programme that will facilitate projects aimed at improving AD, country-specific methodologies and EFs for most of the key categories. The TTE also noted that South Africa has improved the transparency of reporting on the quantification of emission reductions for some mitigation actions and provided information on methods and assumptions. In addition, South Africa has improved the reporting on the tracking of financial support received. South Africa also participated in the facilitative sharing of views for the 2nd BUR in Bonn, Germany on the 20th of June 2019. During the FSV, South Africa was commended by other parties for having developed the BUR2 internally and asked to share experience on some of the lessons learnt including experience with the public consultation processes; in its presentations, it was observed that one of the key actions implemented by South Africa is the use of a carbon tax, carbon offsets, Desired Emission Reduction Outcomes (DEROs) for sectors, company level carbon budgets, as well as regulatory standards. Carbon tax and carbon budgets are aligned and are of a voluntary nature, however, they represent a good incentive for companies to reduce their taxes and keep track of companies' emissions.

The TNC of South Africa was submitted to the UNFCCC in August 2018. The TNC as well followed suggested UNFCCC guidelines for developing countries in reporting on national circumstances; a national Greenhouse Gas (GHG) Inventory for the period 2000-2012; climate change over South Africa in terms of trends and projected changes, vulnerability assessments and national adaptation strategies; measures to mitigate climate change; and other information relevant to the Convention (including a technology needs assessment, research and systematic observations and climate change education, training, awareness and capacity building needs). In the TNC, South Africa described the planning and reporting documents prepared at national level as part of international reporting commitments. The National greenhouse gas inventory for the period 2000 to 2012 was presented. The annual GHG inventories for the period 2000 to 2010 were recalculated based on availability of improved activity data and updated emissions factors. Extensive ensembles of projected climate change futures for both national and provincial were available for the TNC, derived using both statistical and dynamical downscaling techniques. These projections make feasible the identification of plausible climate futures for each of the South African provinces, and in some cases, the identification of actionable messages for adaptation. In South Africa, there is a constantly growing body of sectoral knowledge on climate change vulnerability. The country saw a great expansion of information from the Second National Communication (2011) to the much more detailed and in-depth LTAS reports (2013/2014). Building upon the work conducted in the Long Term Adaptation Scenarios (LTAS) Research programme (DEA 2013), TNC reviewed and prioritized the most significant climate change risks and vulnerabilities for the following sectors; Agriculture and Forestry, Water Resources, Forestry, Terrestrial Ecosystems, Coastal Zone, Health, Urban and Rural Settlements, and Disaster Risk Management

South Africa submitted the 3rd BUR on 5 June 2019 and its NIR in June 2019. The 3rd BUR therefore remains a recently submitted climate change report of South Africa. Information reported in BUR-3 on national circumstances builds on the work reported and included in the BUR-2 and TNC. Information on the geographic profile and general climatic conditions for South Africa is updated to include current efforts and measures that South Africa has undertaken to address climate change. The latest published national greenhouse gas (GHG) inventory for South Africa is presented for the period of 2000 to 2015. The inventory covers all four sectors as per the 2006 Intergovernmental Panel on Climate Change (IPCC) guidelines, namely Energy, Industrial Process and Product Use (IPPU), Agriculture, Forestry and Other Land Use (AFOLU), and Waste. South Africa's aggregated gross GHG emissions (i.e. excluding FOLU) were 439 238 Gg CO₂e in 2000 and these increased by 101 616 Gg CO₂e (or 23.1%) by 2015. South Africa's aggregated net GHG emissions, including Forestry and Other Land Uses (FOLU), were 426 214 Gg CO₂e in 2000 and these increased to 512 383 Gg CO₂e by 2015. Between 2000 and 2015 the average annual growth was 1.43%, with the Energy sector being the main contributor to this increase. Improvements were made to the IPPU sector in the recently completed 2015 inventory, so only a few minor changes and updates were included in this inventory. One change was to correct the hydrated lime emission factor for lime production emissions.

In the *Livestock* category minor adjustments were made to cattle herd composition data, while for manure management updated manure management system usage data (Moeletsi & Tongwane, 2015) were incorporated. In addition, for manure N₂O the country specific N excretion rate for horses, mules and asses and poultry were included and the swine N excretion rates were updated. These improvements then also had implications for the inputs to the direct N₂O emission estimates for managed soils. In addition, other changes made to the *Direct N₂O from managed soils* were an adjustment of the Crop residue calculations to conform with IPCC methodology, and the addition of the FSOM component (which is the amount of N in mineral soils that is mineralised in association with loss of soil C from soil organic matter as a result of changes to land management). In Indirect N₂O from manure management emissions from leaching/runoff were excluded as, according to IPCC, these should only be included if country specific information is available.

In the *Land* category several updates were made. In order to improve transparency, the land change matrix data was linked to the land areas and plantation areas were not adjusted to Forestry SA data. Secondly the soil area overlay data (of land use change, climate and soil type) was adjusted to account for any mapping overlay losses of area so as to ensure consistency with the biomass land area data. Lastly, and probably the most significant change, was the adjustment of the data to include the 20-year default transition period for converted lands. In the previous inventory this was not accounted for.

In the Aggregated and non-CO₂ sources on land category, under *Direct N₂O from managed soils*, the Crop residue calculations were adjusted to conform with IPCC methodology and the FSOM component (which is the amount of N in mineral soils that is mineralised in association with loss of soil C from soil organic matter as a result of changes to land management) was included. In Indirect N₂O from manure management emissions from leaching/runoff were excluded as, according to IPCC, these should only be included if country specific information is available. Updated FAO data were incorporated into the HWP estimates.

In the waste sector the solid waste disposal data was improved by incorporating country specific population data, waste generation rates and the percentage of waste going to solid waste management into the FOD model for the years 1950 to 1999. In addition, the fraction of methane in developed gas was previously indicated to be 0.52 and this was corrected to the IPCC default value of 0.5. No further improvements were made in the other waste categories due to the recent improvements in the 2015 inventory.

An update to the information on mitigation actions with quantified effects that were presented in BUR-1, BUR-2 and the 2nd Climate Change Report are presented in BUR-3 for the period 2000-2015. The annual greenhouse gas emission reductions were estimated at 96 MtCO₂e/year, 101 MtCO₂e/year, 112 MtCO₂e/year and 119 Mt CO₂e/year for 2012, 2013, 2014 and 2015 respectively. The emission reductions are related to the progress made by government and parastatals. Emission reductions mainly occurred in the energy sector, 93% for the period 2000-2015. It is estimated that the private sector has reduced its greenhouse gas emissions by 7.5 Mt CO₂e in 2016 and 6.8 Mt CO₂e in 2017. Cumulative greenhouse gas emission reductions in 2015 of the private sectors were not reported in Carbon Disclosure Project reports. An update on policies and programmes that contribute toward giving effect to the country's climate change mitigation goals is also provided in the chapter. The Near-term Priority Flagship Programmes, for example, have provided a focal point for attracting and leveraging investment from both the private and public sectors. This investment in climate change response has been used to integrate the actions of different spheres of government and other key stakeholders in the private sector and civil society to achieve collective climate impact.

In 2017, the Department also promulgated the Greenhouse Gas Emissions reporting and National Pollution Prevention Plan regulations, to assist with access to GHG data information and measures that are being implemented to reduce emissions, respectively. Subsequent to this, a Carbon Tax Act was signed into law for implementation from 1 June 2019. Furthermore, the Department is currently working on a Climate Change Bill to help support the mandatory implementation of climate change responses in the country. These substantial policy steps that are being undertaken by the country to curb greenhouse gas emissions and transit to a climate resilient society. The Climate Change Bill of 2018 is intended to build an effective climate change response and a long term just transition to a climate resilient and lower carbon economy and society. The Bill specifically provides for a coordinated and integrated response to climate change that seeks to effectively manage climate change impacts, enhance adaptive capacity and build resilience. In order to

make a fair contribution to support the global effort to stabilise greenhouse gas concentrations, the Bill seeks to ensure that the country determines its GHG emission trajectory. Sectoral emission targets and carbon budgets, consistent with the trajectory, are the means to achieve the desired emission reductions and to regulate the implementation of mitigation actions. The phasing out of synthetic GHG emissions is also contemplated in the Bill. Relating to climate change mitigation, the bill gives effect to the “polluter pays” principle and aims to price carbon by internalising the costs of emitting carbon. The Carbon Tax design also allows for purchasing of offsets to incentivise actions and measures that reduce, avoid or sequester greenhouse gas emissions.

The overall mitigation system aimed at achieving the national goal and contributing towards South Africa’s nationally determined contribution (NDC) submitted to the UNFCCC in 2015, was introduced in phases. Phase one (2016-2020) is voluntary as there is no legal basis to set emission limits for sectors or companies. The second and subsequent phases (post-2020 period) will only become mandatory when climate change response legislation is in place (Climate Change Act). One key component of the Post 2020 South African mitigation system will be the use of Sectoral Emission Targets (SETs) as an instrument that places quantitative limits on future greenhouse gas emissions to allow South Africa to fulfil its climate change mitigation ambition. The SETs will be determined for three rolling five-year periods. National government departments (i.e. so-called SET departments) will be allocated responsibility to ensure that emissions remain within the limits of the first five-year period. These departments will be tasked with developing and implementing Policies and Measures (PAMs) to ensure emissions from relevant activities within the sector to remain within SET limits. To set up SETs for individual government departments, the targets will be based on an assessment of the mitigation potential, best available mitigation options, science, evidence and a full assessment of the costs and benefits.

Three research studies which could inform the SETs development have already been conducted, namely the Mitigation Potential Analysis (MPA), Projected Greenhouse Gas Pathways (“Pathways”) and the impact of climate change mitigation Policies and Measures (PAMS). The overall objective of the MPA was to conduct a bottom-up assessment of mitigation potential in key economic sectors in order to identify a set of viable options for reducing GHG emissions. Both the Pathways and PAMS studies considered the greenhouse gas effects of mitigation policies and measures on the projected greenhouse emissions of the country. The country has achieved remarkable success in setting policy direction for mitigation in each of the emission sectors. Important measures in the Energy sector include the Integrated Resource Plan 2018, the post 2015 National Energy Efficiency Strategy and the Integrated Demand-side Management Programme. The Integrated Resource Plan 2018 proposes South Africa’s electricity generation mix until 2050 and is unique to previous plan updates due to the increased capacities of renewable energy sources included in the energy supply mix. Sector specific energy efficiency targets have been set in the post 2015 National Energy Efficiency Strategy for industry; transport; public and commercial and agriculture to be achieved by 2030.

The Monitoring and Evaluation System for the Energy; Waste; Agriculture, Forestry and Other Land Use, and Industrial Processes and Product Use Sectors which goes beyond a monitoring function to evaluate climate change impacts and the effectiveness of responses in South Africa to support the improvement of mitigation policy was also developed. The institutional and monitoring and evaluation needs are also described in the Bill. The National Monitoring and Evaluation System also referred to as the National Climate Change Information System, is part of the national effort to track South Africa's overall transition to a low carbon and climate resilient economy by offering a series of decision support tools to inform policy and decision-making. It is a web-based platform (<https://ccis.environment.gov.za/#/>) that collates data from a range of sources for the purpose of specific reporting requirements; and integrates systems from other stakeholders locally and abroad. The information presented in the NCCIS is applied to meet tailored user needs such as providing insights regarding the country’s progress in responding to climate change and achieving national and international goals and targets including the National Determined Contributions (NDC). It showcases vital information for domestic and international. The NCCIS collects data/information from a range of data custodians that uses internationally recognized methodology to collect and analyses data/information (including quality assurance and control). One such example is the work that is led by the South African Weather Service on climate indices which has adopted the methodology and guidelines from the World Meteorological Organization. Future work for NCCIS include creation of sub national subsystems and sector specific subsystems building on the work that has already been done on NCCIS.

South Africa has reported and provided updates on the development, the institutionalization and the operationalization of the National Climate Change Monitoring and Evaluation System in its previous Biennial Updates Reports. The country has adopted a phased approach in the roll out and enhancement of the Monitoring and Evaluation System and periodic updates are provided on the progress achieved in the operationalization of the system through the biennial update reporting cycle. The current update provides progress made in terms of ‘system refinement’ and enhancement as outlined in the 3rd National Biennial Update Report under Phase 3 of the system development. The system enhancement and refinement that have been planned to be implemented in the 2019/2020 fiscal year encompasses the following system upgrades:

1. Expanded system integration and upgrades that to incorporate additional domestic sub-systems
2. Enhanced user reporting, analytics and data visualization capabilities
3. Setting up a fully operational system
4. Improved domestic reporting

The full operationalization of the national monitoring and evaluation system of South Africa is currently funded by the GEF, through the Capacity Building Initiative for Transparency (CBIT) project of South Africa. The National Climate Change Information System (NCCIS) falls within the national monitoring and evaluation system and in this se, the NCCIS acts as a repository for information on climate change mitigation, adaptation and research projects within the M&E System which is illustrated in the figure below;

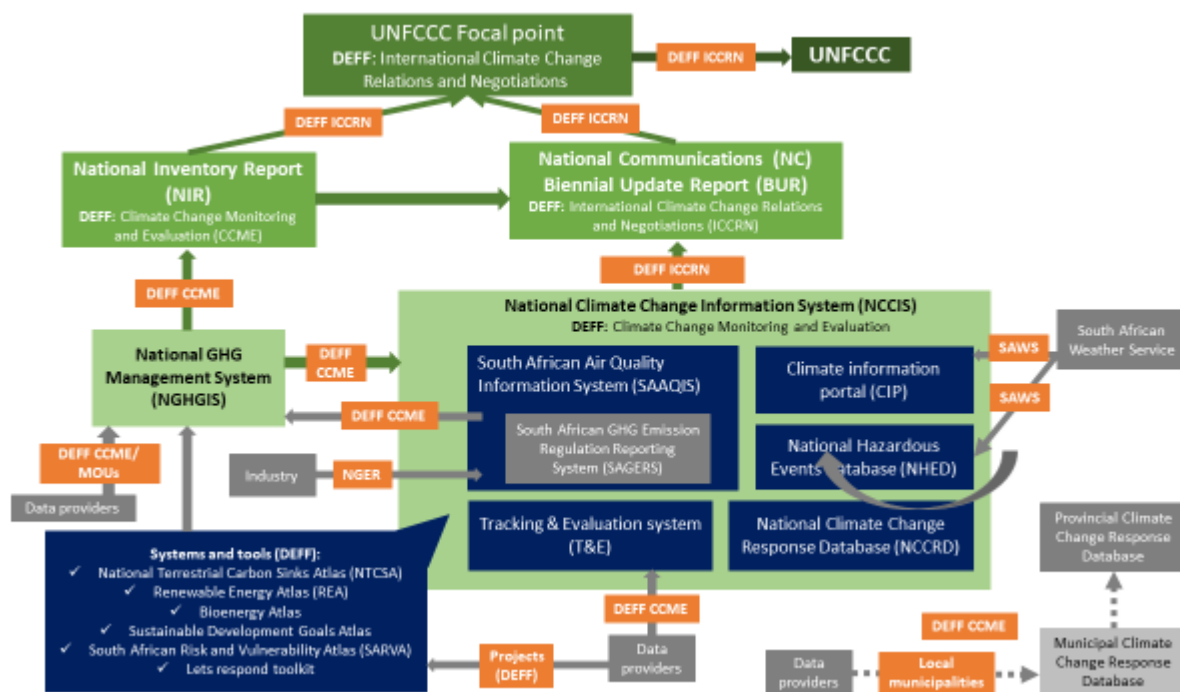


Figure 1: Summary of South Africa's Climate Change Response M&E System

In addition, South Africa established a National Greenhouse Gas Inventory System (NGHGIS) in 2017. The NGHGIS is a secure web-based SharePoint platform that allows document management, sharing and storage. It serves as a GHG Inventory process management tool. The NGHGIS objective is to streamline the data management, documentation, governance and institutionalization of the GHG compilation process thus improving the transparency of the GHG inventory and ensuring the availability of this information for the compilation of subsequent GHG inventories. The 2000-2015 GHG inventory report submitted as part of BUR3 has well been documented as below in the NGHGIS. The NGHGIS includes the following critical components to achieve the latter.

- Institutional arrangements and data flows
- Inventory work plan;
- Stakeholders (organizations, contact details, linked to input datasets);
- Input data sets (linked to the stakeholders);
- QA/QC objectives;
- QA/QC checks;
- Lessons learnt and Improvements

The Greenhouse Inventory Expert will be hired through the CBIT project of South Africa to assist with the maintenance of the NGHGIS for both the 2000-2017 and 2000-2019 GHG inventories. All data components of the systems as described above will be documented. The CBIT project will also ensure that all the data providers as described in the institutional arrangements of the 2000-2017 and 2000-2019 are well trained on inventory compilation to build nation-wide capacities on GHG inventories and associated methodologies so that data providers can understand in detail the value of data provided as well as the sectoral contributions to emissions.

South Africa is requesting for funds from the GEF to develop the 4th National Communications and 4th BUR. The NC4 and BUR4 project will take full consideration of the capacity-building needs, gaps, and constraints in various thematic areas as reported in the previous national communications and BURs as well as technical summary reports from the International Consultation and Analysis (ICA) process and lessons learnt during Facilitative Sharing of Views (FSV) of the ICA, which include and are not limited to: - capacity building on methodologies, reporting and understanding the depth of different thematic areas. The full amount of US\$ 852,000 requested for NC4 BUR4 project will enable South Africa to address capacity building needs identified, the ICA recommendations and in meeting its future transparency requirements under the Paris agreement. Considering that BUR4 is expected to be completed in March 2021; while Parties are expected to submit their initial BTRs in December, 2024, the human and institutional capacities built overtime, through the CBIT and NC4/BUR4 processes, and improvements made thereof, will contribute to improving the quality of the reporting process of the BTR..

B. ENABLING ACTIVITY GOALS, OBJECTIVES, AND ACTIVITIES

The proposal should briefly justify and describe the project framework. Identify also key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable. Describe also how the gender equality and women's empowerment are considered in project design and implementation

The **immediate objective** of the project is to assist the Republic of South Africa to prepare its fourth national communication and fourth biennial update report consistent with the guidelines for the preparation of biennial annual update reports and national communication for Non-Annex 1 Parties, which is contained in the Annex III to decision 2/COP.17 and submit them to the UNFCCC by March 2021 in respect of BUR4 and by August 2023 in respect of NC4. The project has been designed with one outcome, i.e. to support South Africa in updating its tools and approach to meet the NC4 and BUR4 reporting requirements under the UNFCCC. This outcome will be realized through the following two outputs; -

§ BUR4 and NC4 prepared and submitted to UNFCCC by March 2021 and August 2023 respectively.

§ A self-assessment and stocktaking exercise for preparation of the project proposal for subsequent BUR and NC completed

This project has been prepared in line with UNFCCC COP guidance on provision of resources to Non-Annex I countries to prepare National Communications (NCs) and Biennial Update Reports (BURs) and is in conformity with Objective 3 of the GEF-7 Climate Mitigation Strategy, which focuses on fostering enabling conditions for mainstreaming mitigation concerns into sustainable development strategies. In accordance with convention guidance, this project is implemented on an agreed full cost basis requiring only in-kind contribution by GEF-eligible countries.

Stakeholder Analysis, Institutional Arrangements and Participation for the NC4 and BUR4 Project Implementation:

The Department of Environment, Forestry and Fisheries (DEFF) is responsible, on behalf of the Government of South Africa, for implementation of the UNFCCC, Kyoto Protocol and Paris Agreement. The DEFF has been appointed as the UNFCCC National Focal Point and the GEF Political Focal Point. Under UNEP/GEF Project "Republic of South Africa: Preparation of the Fourth National Communication and Fourth Biennial Update Report to the United Nations Framework Convention on Climate Change", the United Nations Environment Programme (UNEP) will serve as the GEF implementing agency. UNEP will provide DEFF and the Chief Directorate: Climate Change International Relations and Negotiations with all necessary general management and monitoring support during the implementation of the BUR4 and NC4 project. The UNEP will report on the project's performances to the GEF. The project will be executed by CD: CCIRN on behalf of the DEFF of South Africa in consultation with UNEP. As national executing agency, the CD: CCIRN will be primarily responsible for the planning and management of the project activities, accounting, reporting, monitoring and evaluation of the project (Fig 2).

Preparation, and implementation of this project will be coordinated by DEFF, under the oversight of the PSC for International Reporting and Climate Change. The Directorate: International Mechanisms and Reporting (DIMR) will act as Chair of the PSC and will ensure effective communications between all key actors (UNEP, DEFF, CD: CCIRN) and other relevant partners. The Directorate: International Mechanisms and Reporting, will determine the need to employ a Project Coordinator, on part-time basis under the Project Management Unit (PMU) for the BUR4 and NC4 Project.

The PSC to guide the NC4 and BUR4 Project already exists for South Africa, and it consists of representatives of national governments whose mandates are affected or have an impact on climate change response in South Africa. PSC is composed of the representatives from the following departments and it is chaired by the Department of Environment, Forestry and Fisheries.

Members of the PSC includes representatives from the following sectors:

- Department of Environment, Forestry and Fisheries
- Department of Agriculture, Land Reform and Rural Development (DALRRD)
- Department of Women & Children
- Department of Cooperative Governance (DCoG)
- Department of Health (DoH)
- Department of Higher Education and Training (DHET)
- Department of Human Settlements (DHS)
- Department of International Relations and Cooperation (DIRCO)
- Department of Mineral Resources and Energy (DMRE)
- Department of Planning, Monitoring and Evaluation (DPME)
- Department of Public Enterprises (DPE)
- Department of Public Works and Infrastructure (DPWI)
- Department of Science and Innovation (DSI)
- Department of Trade, Industry and Competition (the DTIC)
- Department of Transport (DOT)
- Department of Water and Sanitation (DWS)
- National Treasury (NT)
- Statistics South Africa (Stats SA)

The Project Steering Committee (PSC) will facilitate the project activities coordination, providing transparency and guidance, ensuring high-level support and sustainability of the project results and having decision-making power over all aspects of the project implementation. The PSC will meet every four months to evaluate progress of work, advise project execution, and where necessary provide overall direction and oversight to the project. The PSC will inform, on regular basis (at least once a year) the members of the IGCCC and National Climate Change Committee, on the progresses in the implementation of the BUR4 and NC4 Project. It is to be remembered that the IGCCC and NCCC are also two critical platforms for Climate Change discussions in South Africa.

Relevant stakeholders representing key governmental organizations, academic institutions, education and research institutions, private sector, civil society and environmental NGOs with mandates relevant to the UNFCCC will participate and contribute to the NC4 and BUR4 development process. The table below presents the key stakeholders and description of their engagement in the preparation and implementation of this project.

Table 1: The key stakeholders and brief description of their engagement in the project design and implementation

Name of key stakeholders	Responsibility/expertise	Role in project
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Name of key stakeholders	Responsibility/expertise	Role in project
National Committee on Climate Change	<p>The National Climate Change Committee (NCCC) was set up to consult with stakeholders from key sectors that impact on or are impacted by climate change. The Committee advises on matters relating to national responsibilities with respect to climate change, and in relation to the UNFCCC and the Kyoto protocol. It also advises on the implementation of climate change-related activities.</p> <p>NCCC include both the IGCCC and Civil Society Organizations ranging from Business, Labor, Non-governmental organizations, academic institutions and the public at large.</p>	Oversight of and support for the National Advisory Panel for the long-term strategy on GHG, mitigation, and adaptation transparency, in fulfillment of its own mandate.
Intergovernmental Committee on Climate Change (IGCCC)	IGCCC is government coordination body responsible for formulating and implementing environmental agreements across government. The IGCCC coordinates across government departments and is subsidiary to and reports within the NCCC.	Oversight of and support for the National Advisory Panel for the long-term strategy on GHG, mitigation, and adaptation transparency, in fulfillment of its own mandate.
Department of Environment, Forestry and Fisheries (DEFF).	Institution responsible for implementation of international environment treaties to which the Republic of South Africa is a Part (including UNFCCC). Representatives of the GEF Points.	<p>Coordination of capacity building across key departments and national and sub-national government</p> <p>Build a national roster of MRV experts in the public sector</p> <p>Participation in the training programme in M&E GHG and mitigation and supervised in-depth work</p>
Department of Basic Education and the Department of Higher Education.	Education, training and public awareness.	Support the assessment of the level of awareness and understanding of climate change issues and policy toward climate change education, training and public awareness.
Key government departments such as DoE, DST, DoT, DAFF, DTI, EDD, NT, DPE, DIRCO	M&E System GHG & mitigation reporting	Participation in the training programme in M&E GHG and mitigation and supervised in-depth work.
Provincial government	M&E System adaptation reporting	Jointly organize regional workshops in M&E adaptation training
District municipalities	M&E System adaptation reporting	Host district feedback sessions in M&E adaptation training

Name of key stakeholders	Responsibility/expertise	Role in project
Local authorities	M&E System adaptation reporting	Participation in the regional workshops and district feedback sessions in M&E adaptation training
Academic / research bodies	Lead climate change: scientific and technology research, development and implementation. M&E System adaptation reporting	Develop training programme in M&E GHG and mitigation Supervise in-depth work on difficult theoretical and methodological problems in transparency
National Research Foundation (NRF)	South Africa's National Research Foundation(NRF) is the intermediary agency between the policies and strategies of the Government of South Africa and South Africa's research institutions.	Review applications and make provisions for bursary funding for student studies to fill transparency capacity gaps presented by the National Advisory Panel on CC Transparency

The civil society plays an important role in discussions guiding climate strategy through the NCCC and the IGCCC. The NCCC meets on a quarterly basis, following an annual work plan, and has representatives from: -

§ Interested Non-governmental organizations and community-based environmental organizations

§ Academic and research institutions

§ Business and Industry

§ Eskom (the national electricity supply company)

§ Labor

§ Individual members are designated representatives from the defined stakeholder groups involved in climate change.

The project implementation progress will be presented at the National Climate Change Working Group known as the Intergovernmental Committee on Climate Change (IGCCC). The IGCCC has been established to operationalize cooperative governance in the area of climate change, to foster the exchange of information, consultation, agreement, assistance and support among the spheres of government with respect to climate change and government's response to climate change. This project will utilize the same stakeholders and institutional arrangements developed and designed for the CBIT, to encourage coherence, sharing of information and knowledge, and capacity building.

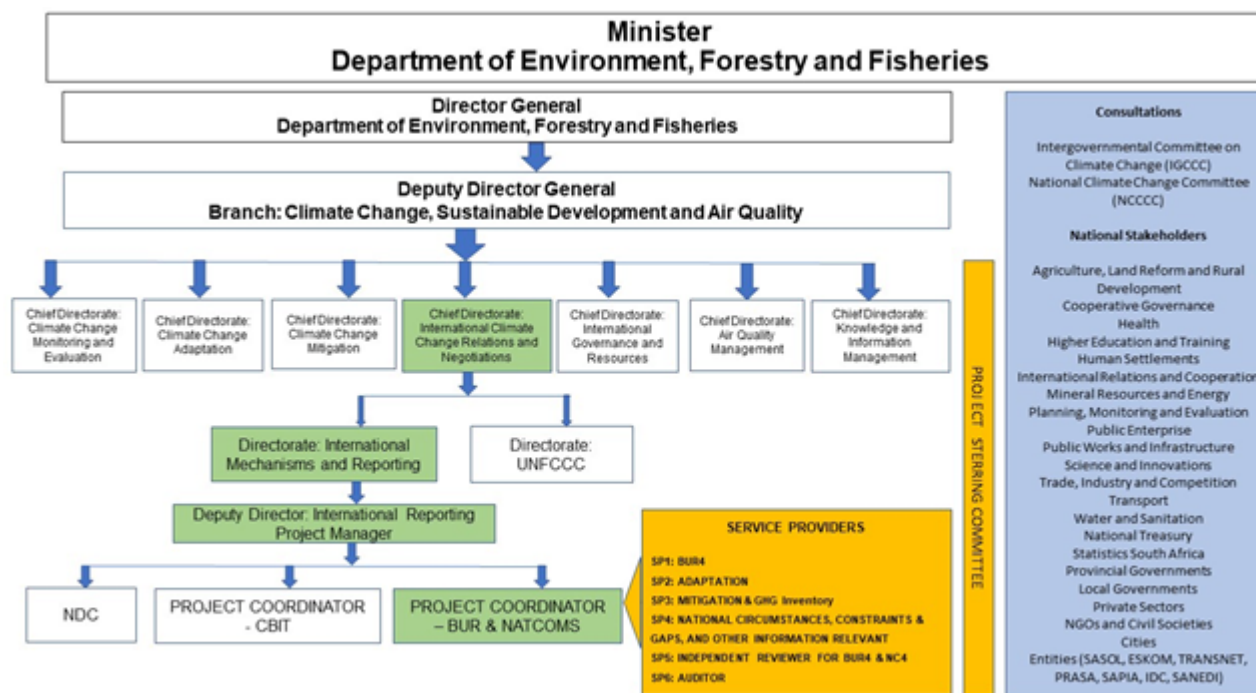


Figure 2: Institutional arrangements for BUR4 and NC4 project implementation: (project steering committee, consultation platforms, national stakeholders and national working group. Note that the Project Coordinator post is still vacant and will be filled to enable project implementation).

The PMU will be in charge of project implementation activities as per agreed Project Implementation Plan (PIP) and will be responsible for the day-to-day management of the project, monitoring, and evaluation. The PMU will coordinate all activities and will provide services and carry out activities such as procurement and delivery of project inputs, and their conversion into the project outputs. The National Project Manager (NPM) will be the PMU head and will be responsible for the effective, efficient and timely implementation of project activities. The NPM will report to the Project Steering Committee of the DEFF and UNEP and will coordinate the implementation of all project activities with them. The PSC members are the same, as those in the CBIT project, to enhance coordination and linkages of the implementation of South Africa's CBIT project as well as compilation of BUR4, NC4, 2000-2017 NIR and 2000-2019 NIRs.

The project will be led by the Project Coordinator (PC), who will be responsible for all the project management, administrative and financial matters related to the project under the supervision of the project manager who is the deputy director for international reporting on climate change. The Project Coordinator will co-ordinate all project activities with

National Project Manager, service providers, PSCs, data providers, thematic area experts, including UNEP, UNFCCC secretariat, GEF, and national institutions to ensure smooth and appropriate execution of project activities. DEFF will appoint Service Providers who will assist in the preparations of the BUR4 and NC4 as indicated in Figure 1.

This Service Providers will develop the following Chapters:

- Service Provider 1: Preparations of the BUR4
- Service Provider 2: Development of the Adaptation Chapter of the NC4
- Service Provider 3: Development of the Mitigation Chapter and GHG Inventory (2000 – 2019)
- Service Provider 4: Development of the National circumstances, Constraints and Gaps, and Other Information relevant to the Convention Chapter
- Service Provider 5: Independent Reviewers
- Service Provider 6: Auditor

Annex A of this proposal provides the terms of references for BUR4 and NC4 preparation that includes the scope of work to be covered by the respective service providers.

The Service Providers will report to the National Project Coordinator. The Project Coordinator will be supported by the PSC and the Intergovernmental Panel on Climate Change (IGCCC). Both will serve as an advisory body for the project, to monitor, evaluate, assess progress and flow of functions for effectiveness and will come with recommendations for improvements, if any identified. The national experts/consultants to be involved in the project implementation will be selected and hired from the relevant institutions that take lead in the area of climate change and/or are relating to the project objectives and will represent public institutions, academia, education and research institutions, NGOs, private sector, and when necessary, also the central administration bodies. In order to broaden the experience of the national teams, the national experts/consultants will participate in relevant sub-regional, regional and international training workshops when such opportunities arise. Also, it would be beneficial to ensure the sharing of experiences and lessons learned with other countries on climate change issues and implementation of the NCs by participation of the NPM to the Subsidiary Body for Scientific and Technological Advice, Subsidiary Body for Implementation meetings and/or Conference of Parties (COP) to the UNFCCC. Appropriate financial resources will be allocated throughout the project cycle to ensure proper and meaningful stakeholder engagement.

South Africa adopted the value of Gender Equality into the country 's governance processes with the establishment of the new dispensation in 1994 and enshrined it in the 1996 Constitution of South Africa, the same year in which it ratified the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1996, women should be able to participate on an equal footing with men, and enjoy the same rights as men, in all sectors. The establishment of South African Policy Framework for Women Empowerment and Gender Equality (WEGE) has laid the foundation in terms of strategies government must embark on to achieve women empowerment and gender equality. WEGE is supported by the Gender Equality Strategic Framework for the Public Service which aims to facilitate the development of mechanisms and interventions by departments, DEA included, to the create an enabling environment, equality of opportunities, mainstreaming of gender equality and, creating of a barrier-free workplace, illustrative of a transformed Public Sector.

Furthermore, the government has signed and ratified several sub-regional, regional and international instruments for which it should report SA progress on their implementation. Among these are the SADC Declaration on Gender and Development, SADC Protocol on Gender and Development, AU Protocol to the Charter on Human and People's Rights on the Rights of Women in Africa, Convention on the Elimination of All Discrimination against Women (CEDAW), Millennium Development Goals (MDG), 2030 Agenda for Sustainable Development and the Beijing Platform of Action (BPA). All these instruments seek to promote women and girls' human rights, women's empowerment and gender equality.

National departments are working on their own policy on WEGE. For example, in relation to transparency in climate mitigation, the Department of Energy (DoE) approved a DoE Policy on WEGE. The policy laid a foundation for gender equality and empowerment in the energy sector. It includes making provision for the accountability of gender mainstreaming through M&E. reporting, gender audits, disaggregated data, gender analysis of gender mainstreaming to be placed at the highest level. The objective is to support better planning that incorporates gender perspectives.

In addition, South Africa recognizes the link between gender and the environment, and the role of women in the planning, management and preservation of the environment. The National Environmental Management Act, 1998 specifically provides that 'the vital role of women and youth in environmental management. The department of Environment, Forestry and Fisheries is committed to gender mainstreaming, this commitment is reflected in the country's National Strategy towards Gender Mainstreaming in the Environment Sector. The Strategy outlines, how the sector can, and should, entrench values of gender mainstreaming and gender equality within the running of its environmental programmes. The purpose of this strategy is to,

- Ensure that initiatives in the sector are aimed to support the creation of policies that support gender mainstreaming.
- Ensure gender analyses and mainstreaming during the development of new projects and including gender perspective into the whole project cycle management.

The objectives of the strategy are to:

- Ø Provide strategic guidance for gender mainstreaming in the environment sector.
- Ø Provide direction on how gender mainstreaming for the environment sector can be put into practice.
- Ø Provide a framework for gender mainstreaming and outlining funding opportunities.

The Expanded Public Works Programmes is one of the environmental initiatives that ensures South Africa start implementing adaptation actions on the ground and these kind of programmes contributed toward gender equality through the implementation of the following;

- Working for Water (WfW) - has a target of women recruitment of 60%, youth (20%) and disabled (5%). The programme has provided jobs and training to approximately 20 000 people 52% of which are women.
- Working for Land (WfL) project - has targets of 60% women, 20% youth and 2% disability.

· Working on Fire (WoF) - employs more than 5000 young men and women 85% of whom are youth, 37% are women (the highest level in any comparable fire service in the world).

· The strategy and programmes can be accessed from the link below.

Moreover, the government of South Africa hosts women every year in environmental conference and dialogues with specific themes related environmental issues. This serves as awareness raising and further serves as a platform to share experiences and success as well as progress in gender mainstreaming in the environmental sector. The country has also taken several actions in the last five years to integrate gender perspectives into policies and programmes for disaster risk reduction, climate resilience and mitigation. These include:

Ø Supporting women’s participation and leadership, including those affected by disasters, in disaster risk reduction, climate resilience and mitigation policies, programmes and projects

Ø Strengthening the evidence base and raised awareness about the disproportionate vulnerability of women and girls to the impact of environmental degradation and disasters

Ø Promoting access of women in situations of disaster to services such as relief payments, disaster insurance and compensation

Ø Introducing, strengthening and implementing gender-responsive laws and policies related to disaster risk reduction, climate resilience and mitigation (e.g. disaster laws addressing vulnerability of women in disaster)

The implementation of BUR4 and NC4 project will take into consideration gender issues, it is suggested that country level women’s networks that can help to better incorporate gender concerns into climate change strategies and decision-making will be identified. Further, opportunities to incorporate into project designs local knowledge that strengthens the roles of women will also be identified. The project will put an emphasis on understanding how the unique social and economic roles played by women is crucial to the effective implementation of sectoral and national projects and programs to adapt and to mitigate climate change in the Republic of South Africa. Gender analysis during this proposal development noted that women were equitably represented at least at 40%. Several activities will be undertaken to ensure gender equality is adequately addressed during the implementation of the project: -

Table 2: Description of Gender roles in the project

Task	Gender Design Features/activities
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Task	Gender Design Features/activities
Cross-cutting strategies	<p>§ A Sociologist with gender expertise shall be included in project to include gender equality considerations during the project inception phase, and participation in the project activities.</p> <p>§ All project stakeholders will be sensitized regarding the implications of gender-related legislation in South Africa.</p> <p>§ Equal training opportunities and transfer of skills will be available for men and women.</p> <p>§ Persons employed on the project team should be in line with the COJ employment equity (EE) policy/gender policy.</p> <p>§ All training materials, technology and methodology of dissemination are to be women friendly (e.g. avoiding gender stereotypes and using appropriate illustrations).</p> <p>§ Where appropriate, all project recording and reporting will be disaggregated by gender.</p> <p>§ Impacts measurement to include an aspect to measure gender equality (in ownership, needs, access to resources).</p>

Task	Gender Design Features/activities
Promote gender equality in procurement processes	§ Procurement process will be equally open in terms of gender. Text for procurement processes will be worded carefully to avoid gender stereotypes.
Design gender sensitive template and guidelines, and activities are adopted in the training workshops and feedback sessions on adaptation, M&E	§ Template for data and information submission to differentiate between male and female participants § Template for data and information submission to include requests for gender differentiated data
Design gender sensitive curriculum content in the tailor-made training programme on GHG and mitigation	§ Including descriptive examples of gender differentiation in energy use and activity emissions § Design practical exercises that sensitize participants to data bias and gender impacts of mitigation
A gender training workshop will be held each year of the project	§ Gender Training on differentiation and equality in climate adaptation, mitigation, GHG, project reporting

Although the role of women in the climate change adaptation actions is better understood in the South Africa, the role of women in climate change mitigation strategies has received relatively little attention until this moment. This is because programs to address GHG mitigation issues have been perceived to be rather technical or scientific in nature. However, attempts would be made during the project inception workshop to clearly identify ways and means of engaging women in mitigation actions implementation in South Africa. The project inception workshop (PIW) Report is understood to be a key reference document and will be prepared and shared with participants to formalize various agreements and plans decided during the meeting. It will be a key deliverable of the project.

During the last two months, the PMU will prepare a comprehensive Terminal Project Report (TPR). The TPR will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results.

C. DESCRIBE THE ENABLING ACTIVITY AND INSTITUTIONAL FRAMEWORK FOR PROJECT IMPLEMENTATION

Discuss the work intended to be undertaken and the output expected from each activity as outlined in Table A

The project is designed with one outcome and two outputs. The main outcome of the project is that South Africa is supported to update tools and approaches to meet its NC4 and BUR4 reporting requirements under the UNFCCC

The two expected outputs under this outcome are as follows: -

Output 1.1.1 BUR4 and NC4 prepared and submitted to UNFCCC by March 2021 and August 2023 respectively. Activities to be undertaken under this output will result in drafting of the following Chapters of the BUR4 and NC4 reports; -

- National Circumstances and Institutional arrangement
- National GHG inventories
- Measures to facilitate adequate adaptation to climate change
- Measures to mitigate climate change
- Information on mitigation actions and their effects
- Constraints and gaps; related financial, technical and capacity building needs including support needed and received to enable the preparation and submission of Fourth Biennial Update Report.
- Information on domestic measurement, reporting and verification (BUR)
- Other relevant information (Integrating climate change considerations into social, economic and environmental policies and actions, Development and transfer of environmentally sound technologies (ESTs), Climate change research and systematic observation, Climate Change Education Training and Public Awareness, Capacity building, Information and networking, Gender and climate change, Technical Assistance

Output 1.1.2. A self-assessment and stocktaking exercise for preparation of the project proposal for subsequent BUR and NC completed. This output will be undertaken within four months after completion of NC4 report, to facilitate a seamless transition to subsequent NC and BUR, in this case transition to South Africa's NC5 and BUR5 and/or Biennial Transparency Report

The following section provides detailed information under each output

Output 1.1.1: NC4 and BUR4 for South Africa prepared and submitted to UNFCCC by August 2023 and March 2021 respectively

1.1.1.1. National Circumstances and Institutional arrangement

Project Inception Workshop

The DEFF will organize a Project Inception Workshop (PIW) to launch the NC4 and BUR4 Project in South Africa. PIW will be held within the first 2 months of the start of the project. The inception workshop will involve all key stakeholders identified in the proposal and will provide an opportunity for project team members to familiarize themselves with the scope of their work and interact with potential stakeholders. The main objectives of the workshop are to present the project's objective, planned activities and expected outputs; identification of stakeholders to be involved in the climate change national reporting process as well as clarification of the project implementation modalities/ finalize the institutional arrangement for preparation of the NC/BUR report. The workshop will provide an opportunity for the DEFF to outline its modality of delivering the project outputs through the support of the service providers, who'd be working closely with the relevant stakeholders. This will be crucial for building ownership of the project results and to review and agree on the first year's annual work plan. The Project Inception Workshop report, as a key deliverable of the NC4 and BUR4 project will be prepared and submitted to UNEP.

Compilation of the Chapter on National Circumstances and Institutional arrangement

The DEFF will appoint service providers 1 and 4 to draft the National Circumstances chapters of BUR4 and NC4 respectively. The appointed service providers will draft the chapters in consultation with DEFF and the PSC. Once the chapters have been integrated to the main reports, they will be subjected to public consultations and independent review processes. Activities to be undertaken under national circumstances and institutional arrangements include;

- Describe the existing institutional arrangements relevant to the preparation of the National Communications on a continuous basis, in compliance with the guidelines set by Decision 17CP/8, paragraph 5
- Compile and use information gathered during stock taking exercise and stakeholder consultations in the description of the National Circumstances; i.e. description of geographic characteristic; population; economy and sector profiles; education;
- Validate the gaps of information identified under stocktaking exercise in the light of recent national development priorities, the basis of which the country will address climate change and adverse impacts
- Identify the relevant sources of information, establish links to get the data as necessary, fill the gaps, update and add the new information, focusing on features which may affect the country's ability to deal with mitigation and adaptation to climate change, information regarding the specific needs and concerns arising from the adverse effects of climate change and/or the impact of the implementation of response measures;
- Draft chapter on "National circumstances" in compliance with the guidelines set by decision 17/CP.8, paragraph 3, 4 and 5, circulate it for comments, receive comments, incorporate them and finalize the Chapter: National Circumstances and institutional arrangement under NC4 and BUR4.

1.1.1.2. National GHG inventories

Service providers 3 and 1 will be procured by DEFF to draft the GHG Inventory Chapter for NC4 and GHG inventory chapter of BUR4 respectively. The BUR3 will cover the 2000-2017 GHG Inventory whilst the NC4 will cover the 2000-2019 GHG inventory. Both inventories will be improved further following the previous improvements and recommendations from the TTE. The service providers will work in collaboration with DEFF to draft the chapters and to address public comments and independent review comments, as well as finalization for submission to the UNFCCC. Once the chapters have been integrated to the main reports, they will be subjected to public consultations and independent review processes. The following activities will be undertaken under the GHG inventories:

- Technical capacity building including participation in international/regional/national workshops and trainings on GHG inventory. The project will support national experts or DEFF to participate in relevant GHG inventory trainings as appropriate with prior approval from the IA. The trainings will be in the form of nationally organized training workshops on relevant GHG inventory topics and participation in regional training workshops relevant to convention reporting.
- The service providers will describe the institutional arrangements for compiling the NIR of South Africa, and cooperation between government agencies and other entities involved in the preparation of the inventory, as well as institutional, legal and procedural arrangements to prepare the inventory as documented in the NIR.
- Design surveys and forms to collect activity data and undertake the required actions for collecting on regular basis the necessary activity data.
- Identify research needs and undertake the required actions for developing national emission factors and country specific methodologies in a scientific sound and consistent manner, provided that they are more accurate than the IPCC defaults and are documented transparently.
- Inventory data management system developed, activity data collected, maintenance and data recording and archiving processes in the Inventory Management system for producing BURs/NCs in a coherent manner supported.
- Describe the process for official consideration and approval of the inventory prior to its submission to the UNFCCC.
- Compile the national inventory of greenhouse gas sources and sinks for 2000-2017 in the frame of BUR4 and 2000-2019 under NC4 following the 2006 IPCC Guidelines. Service providers will analyze and present the national inventory of greenhouse gas sources and sinks for 2000-2017 in the frame of BUR4 and 2000-2019 under NC4 following the 2006 IPCC Guidelines. The National Inventory Reports (NIRs) for 2000-2017 under BUR4 and 2000-2019 under NC4 will be compiled by the GHG Inventory Directorate within the DEFF. The data collected and analyzed will be uploaded and documented into the NGHGIS of South Africa.
- Provide information on methodologies used in the estimation of GHG emissions by sources and removals by sinks including recalculations and any improvements thereof, and a brief explanation of the sources of EFs and AD as detailed in the 2000-2017 NIR and 2000-2019 NIR.
- Report on the uncertainty assessment of the National Inventory of GHG Sources and Sinks, provide information on the level of uncertainty with inventory data and their underlying assumptions, and describe the methodologies used for estimating these uncertainties.
- Report the results of Key Category Analysis (KCA) for the reported inventory years to prioritize activities based on the NIR.
- Describe and explain the national trends in emissions by sector and gases
- Technical peer review of the 'National Inventory Reports: 2000-2017 under BUR4 and 2000-2019 for NC4, Greenhouse Gas Sources and Sinks in South Africa' performed by independent experts and/or organizations who did not participate to the development of the national inventory. Public consultations for the Reports: 2000-2017 under BUR4 and 2000-2019 for NC4 will be undertaken and the comments and inputs received addressed as well as develop and archive the public response database
- Address all inputs/comments received under the GHG inventory chapters of BUR4 and NC4 in consultation with the DEFF GHG Inventory Directorate
- Incorporate the inputs/comments received from the public consultation, peer reviews and independent review of South Africa's 2000-2017 and 2000-2019 NIRs under BUR4 and NC4 respectively.
- Cabinet approval and publication of the 'Reports on National GHG Inventory System of South Africa'.

- Report on the completeness check, data storage and archiving procedures as well as planned improvements.

1.1.1.3. Measures to facilitate adequate adaptation to climate change

DEFF will procure one service provider (service provider 2) to draft the Adaptation Chapter for the NC4. The appointed service provider will update the adaptation chapter building from the TNC, in consultation with DEFF and the PSC. The adaption chapter will be subjected to public consultations and independent review processes. In drafting the chapter, the service provider will;

- Document the status quo of adaptation programmes and interventions in South Africa,
- Review and evaluate sectoral strategies and measures and their contribution for adapting to climate change,
- Provide an assessment on barriers and enablers, and factors facilitating adequate adaptation
- Identify and describe climate risks and potential impacts entailed: (1) characterize climate variability; extremes and hazards, (2) assess impacts, (3) develop risk assessment criteria and (4) assess current climate risks;
- Provide a review on adaptation communication and reporting, and factors for facilitating adaptation communication;
- Describe current socio-economic conditions, inclusive through: (1) clarifying system boundaries, 2) developing system indicators, and (3) analyzing system critical characteristics;
- Identify and describe vulnerability (to both socio-economic conditions and climate) inclusive through identifying key vulnerable groups (priority systems); (2) clarifying exposure to climate risk (using socio-economic indicators); and (3) assessing current vulnerability (the conjunction of climate hazards and socio-economic conditions);
- Explore adaptation experience and adaptive capacity, inclusive through: (1) scoping and synthesis of information on existing policies and measures relevant to adaptation in the priority systems, and (2) assessing system's capacity to adapt to current climate hazards.
- Review the National Risk and Vulnerability Assessment Framework and relevant work areas;
- organize two national workshops on 'Risk and Vulnerability Assessment' to consult relevant stakeholders and identify approaches, tools and methods to be used under the V&A assessment.
- Technical capacity building including participation in international/regional/national workshops/meetings/trainings on V&A. The project will also support national experts or DEFF to participate in relevant V&A trainings as appropriate with prior approval from the IA. The trainings will be in the form of nationally organized training workshops on relevant V&A topics and participation in regional training workshops relevant to convention reporting.
- Assess and describe Adaptation measures focusing on integration of climate change concerns into national development plans, National and Sub national levels policies.
- Assess and review attributes for impacts and vulnerability vs adaptation actions and indicators, and linkages between adaptation actions and indicators to track progress;
- Review the policy process for the National Adaptation Plan and other key priority sectors, for implementation.
- Provide an assessment of implementation and support needs for adaptation priorities, strategies and policies.
- Address all comments and inputs from both processes in consultation with DEFF and the PSC and finalize the chapter.

1.1.1.4. Measures to mitigate climate change

Mitigation chapter for the NC4 will be drafted by service provider 3 who will work in collaboration with DEFF to draft the chapter and to address public comments and independent review comments, as well as finalization of the chapter. In drafting the chapter, the following activities will be undertaken by the Service Provider in consultations with DEFF;

- Collect information through the NCCIS, on adopted and implemented policies and measures, as well as on those in the planning stage, which have the most significant impact in affecting GHG emissions and removals, taking into consideration that each policy and measure should be presented by sectors and subdivided by greenhouse gas, as an estimate for a particular year such as 2000, 2005 2010, 2015, 2020, 2025 and 2030 not for a period of years.
- Describe the overall policy context, including any national targets for greenhouse gas mitigation, strategies for sustainable development or other relevant policy objectives should also be covered.
- As the per policies and measures (PAMs) study conducted, identify a set of mitigation policies, measures and technology options by using a multi-criteria analysis and by developing alternative approaches of win-win measures that could be implemented faster, cheaper and easier, taking into account the national socio-economic and sustainable development priorities, as well as the national commitments under the UNFCCC.
- Identify barriers and capacity needs for implementation of policies and measures to mitigate climate change which are currently under the planning stage; propose new policy interventions and financing schemes (GEF, WB, bilateral and others) to enhance the process of implementing the policies and measures to mitigate climate change, in compliance with the guidelines set by Decision 17CP/8, paragraphs 39-40.
- Describe the ways in which progress with policies and measures to mitigate climate change is monitored and evaluated over time.
- Describe institutional arrangements for monitoring climate change mitigation policy; as well as relevant information on inter-ministerial decision-making processes or bodies.
- Consider the GHG inventory for the 2000-2019 and identify the mitigation options of the most important future sources and sinks sectors as per the results from the PAMs study.
- Report on the relevant macro-economic data and set assumptions for the purpose of baseline (without measures) and mitigation (with measures and with additional measures) scenarios development.
- Assess to what extent the mitigation measures are already foreseen and developed under the National Strategies, Programs and Action Plans.
- Review the status of the relevant policy and legal framework, including sectoral implementation and summarize findings, propose additional mitigation measures to be considered.
- Develop at sector level (energy, agriculture, transport, industry, forestry, waste management) mitigation scenarios ('with measures' and 'with additional measures' projections) for the 2010-2030 time frames, by using top down and bottom up models, in compliance with the guidelines set by Decision 17CP/8, paragraphs 38-39.
- The 'with measures' and 'with additional measures' projections have to be developed and reported for the years 2010, 2015, 2020, 2025 and 2030 in a tabular format by sector and by gas for each of these years together with actual inventory data for the period 2000 to 2019
- The 'with measures' and 'with additional measures' projections have to be reported also in an aggregated format for each sector as well as for a national total, by using the global warming potential (GWP) values agreed upon by the Conference of Parties.

- The estimated and expected total effect (not cumulative savings) of implemented and adopted policies and measures ('with measures' and 'with additional measures' projections against the 'without measures' projections) will be assessed, as well as the cost of GHG reduction and the penetration rate of measures proposed under the mitigation scenarios for each sector, in compliance with the guidelines set by Decision 17CP/8, paragraphs 40.
- Develop the draft Chapter on 'Measures to Mitigate Climate Change', providing relevant information by key sectors (Energy, AFOLU, IPPU and waste), subdivided by greenhouse gas (carbon dioxide, methane, nitrous oxide and F-gases).
- Circulate the draft chapter for internal and external review, receive and incorporate comments, finalize Chapter on 'Measures to Mitigate Climate Change' to be submitted as part of the NC4.
- Organize a national workshop on 'Climate change Mitigation Assessment' in final term period of the NC4 implementation phase, for the purpose of reviewing and approval of the content of the draft Chapter on 'Climate Change Mitigation'.
- Archive and document all the related information and/or studies on climate change mitigation.
- Conduct meetings of the Working Group on GHG Mitigation

1.1.1.5. Information on mitigation actions and their effects

The information on mitigation actions and their effects chapter of the BUR4 will be compiled by service provider 1 in consultations with DEFF. The following activities will be undertaken under this component;

- Technical capacity building including participation in international/regional/national workshops and trainings on mitigation policies and measures and their effects. The project will also support national experts or DEFF to participate in relevant GHG mitigation trainings as appropriate with prior approval from the IA. The trainings will be in the form of nationally organized training workshops on relevant GHG mitigation topics and participation in regional training workshops relevant to convention reporting.
- Describe the overall policy context, including any national targets for GHG mitigations; strategies for sustainable development, long-term mitigation strategies and other relevant policy objectives should be covered.
- Describe the way in which progress with policies and measures to mitigate GHG emissions is monitored and evaluated over time. Provide status report on institutional arrangements for the monitoring of GHG mitigation policies in selected sectors.
- Document and describe information on climate change mitigation policies and measures by selected sectors (i.e., energy, transport, industry/industrial processes and product use, agriculture, forestry/LULUCF, waste management/waste, other sectors and cross-cutting), indicating which GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ and NF₃) are affected by which policies and measures.
- Update the mitigation policies and measures database, including: the name of policy or measure; sector(s) affected; the GHG(s) affected; objective and/or activity affected (in quantitative terms, to the extent possible); type of instrument (i.e., economic, fiscal, voluntary agreement, regulatory, information, education, research or other); status of implementation and time frame for implementation (i.e., no longer in place, in the planning stage, has been adopted or is under implementation); brief description of the policy or measure (including estimated changes in activity levels and/or emissions and removals due to adopted and implemented policies and measures reported and a brief description of estimation methods); start year of implementation; implementing entity or entities; estimate of mitigation impact for a particular year (in kt CO₂ eq.); information on costs of

policy or measure (for adopted and implemented measures include funds already provided and/or future budget allocated). This data will be collected through the institutional arrangements supporting the NCCIS of South Africa and uploaded into the tracking and evaluation portal of South Africa upon completion of the chapter.

- Compile and draft Chapter 3: ‘Information on mitigation actions and their effects’ of the BUR4 of the South Africa to the UNFCCC in line with the UNFCCC BUR guidelines for parties not included in Annex I of the Convention.
- Update for selected sectors (i.e., energy, transport, industry/IPPU, agriculture, forestry/LULUCF and waste management/waste) the mitigation options leading to low emission development pathway.
- By using available models and software (i.e., ENPEP, LEAP, IPCC software, etc.), update to the 2035 horizon, for selected sectors and on a gas-by-gas basis (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ and NF₃), the following mitigation scenarios: (1) WM – with measures scenario (projections shall encompass currently implemented and adopted policies and measures) and (2) WAM – with additional measures (projections shall encompass planned policies and measures), when emissions projections shall be presented relative to actual inventory data for the preceding years (the starting point should be the most recent inventory year).
- For each model or approach used, in the extent possible, (i) explain for which gases and/or sectors it was used; (ii) describe its type and characteristics (i.e., top-down model, bottom-up model, accounting model or expert judgment); (iii) describe the original purpose that it was designed for and, if applicable, how it has been modified for climate change purpose; (iv) summarize its strengths and weaknesses; (v) explain how it accounts for any overlap or synergies that may exist between policies and measures; (vi) provide references to more detailed information related to each model or approach used; (vii) report the main differences in assumptions, methods employed and results between the projections reported in the current national communication and those reported in the previous national communication; (viii) discuss qualitatively and, where possible, quantitatively, the sensitivity of the projections to underlying assumptions; (ix) report information on key underlying assumptions and values of variables, such as GDP growth, population growth, tax levels, international fuel prices and any relevant information on factors and activities for each sector.
- Analyze and present on a quantitative basis in a tabular format the projections and information on historical emissions and removals; projections shall be provided in an aggregated format for each sector as well as for a national total, using GWP values agreed upon by the COP (to ensure consistency with inventory reporting, emission projections related to fuel sold to ships and aircraft engaged in international transport shall be reported separately and not included in the national total); information should be presented for 1990, 1995, 2000, 2005 and subsequent years that end in either a zero or a five up to the most recent inventory year; projections should be presented, starting from the most recent inventory year and for subsequent years that end in either a zero or a five, extending at least 15 years from the most recent inventory year.
- Organize a national workshop on climate change mitigation actions and total effects of policies and measures, presenting the results to the PSC.

1.1.1.6. Constraints and gaps; related financial, technical and capacity building needs including support needed and received to enable the preparation and submission of Fourth Biennial Update Report.

Service providers 4 and 1 will compile respective chapters of NC4 and BUR4 respectively under this component in consultations with DEFF and the PSC. The service providers will summarize constraints, gaps and needs identified and draft the respective BUR4 and NC4 chapters on Constraints and Related financial, technical and Capacity Needs’. Once compiled, BUR4 and NC4 chapters will also be subjected to public consultations and independent review processes. The specific activities to be undertaken under this section are;

- Review the status of the constraints and financial, technical, institutional, methodological and capacity gaps from previous studies, associated with the implementation of activities, measures, and programs envisaged under the UNFCCC and with the preparation and improvement of NCs on a continuous basis, in compliance with the guidelines set by Decision 17CP/8 paragraph 49 and Decision 2/CP.17, annex III, paragraph 14 in the frame of BUR4 .
- Identify new constraints, gaps and needs (technical, institutional, methodological, financial and capacity) related to each thematic area (greenhouses gas inventory, climate change mitigation assessment, vulnerability and adaptation assessment, integration of climate change concerns into sustainable development programs, development and transfer of ESTs, research and systematic observations, education, training and public awareness) and propose measures to overcome and fill them, in compliance with the guidelines set by decision 17CP/8 paragraph 49-55.
- Provide updated information on financial resources, technology transfer, capacity-building and technical support received from the Global Environment Facility, Annex II Parties and other developed country Parties, the Green Climate Fund and multilateral institutions for activities relating to climate change, including for the preparation of the current biennial update report as per decision 17CP/8 paragraph 50 and decision 2/CP.17, annex III, paragraph 15.
- Prepare and provide in the Chapter on Constraints and related financial, technical and Capacity Needs and/or in the Annex to the Fourth National Communications of South Africa under the UNFCCC, a list of projects proposed for financing, in accordance with Article12, Paragraph 4, of the Convention in preparation for arranging the provision of technical and financial support.
- Summarize constraints, gaps and needs identified and draft the Chapter 4 of BUR4 and chapter 5 of NC4 on Constraints, gaps and Related financial, technical and Capacity Needs including information on support needed and received to enable the preparation of BUR4.
- Circulate the draft Chapters for internal and external review, receive and incorporate comments, finalize Chapters on Constraints and Related financial, technical and Capacity Needs' to be submitted as a part of the BUR4 and NC4.

1.1.1.7. Information on domestic measurement, reporting and verification (BUR)

Information on domestic measurement, reporting and verification chapter of BUR4 will be prepared by service provider 1 in consultations with DEFF. The following activities will be undertaken under this section;

- Technical capacity building including participation in international/regional/national workshops/trainings on domestic measurement, reporting and verification. The project will also support national experts or DEFF to participate in relevant domestic MRV trainings as appropriate with prior approval from the IA. The trainings will be in the form of nationally organized training workshops on relevant domestic MRV topics and participation in regional training workshops relevant to convention reporting.
- Domestic MRV system ensured functional to support the implementation of the NAMAs and of the LEDS.
- Provide information on protocols and operations procedures of the MRV system.
- Conduct and document MRV and establish a reporting process
- Compile and draft Chapter 5: 'Domestic MRV arrangements for mitigation actions' of the BUR4 of South Africa to the UNFCCC.

1.1.1.8. **Other relevant information**

A report on non-climate related impacts, opportunities and benefits on sustainable development objectives will be prepared and included in the NC4 and BUR4. The appointed service providers will collect and present any other information relevant to the achievement of the objective of the Convention as well as compile and draft Chapter 5: 'Other information relevant to the achievement of the objective of the Convention' for NC4 and chapter 6 of BUR4 of South Africa to the UNFCCC. Service providers 4 and 1 will draft the respective chapters of NC4 and BUR4 respectively under this component in consultations with DEFF and the PSC. The following specific activities will be accomplished under other information relevant to the achievement of the objective of the convention with respect to BUR4:

- Collect and present any other information relevant to the achievement of the objective of the Convention, including information on gender and climate change (i.e., roles and responsibilities of women and men; opportunities for women to share knowledge with climate change specialists; sector specific programs on women's resilience and long-term adaptation to climate change effects; gender representation in project management committees and institutional frameworks and capacity building actions; capacity weaknesses in climate change gender mainstreaming, etc.).
- Compile and draft Chapter 6: 'Other information relevant to the achievement of the objective of the Convention' of BUR4 of South Africa to the UNFCCC.

The following specific activities will be accomplished under each of the below subsections of other information relevant to the achievement of the objective of the convention with respect to NC4:

1.1.1.8.1. **Integrating climate change considerations into social, economic and environmental policies and actions**

- Assess and review the National Climate Change Adaptation Strategy objectives integration into social, economic and environmental policies;
- Assess the framing, process and approaches applied in the development of the national adaptation strategy described, and the state of preparedness for NAS implementation is documented.
- Raise the awareness of the national climate change adaptation strategy, to policy makers, especially those in national planning authorities, on climate change issues in the country and policies to guide interventions.
- Organize two national and provincial training workshop for planners, policy and decision makers from all relevant ministries and government agencies;
- Raise awareness on the linkages between the NCCAS and other key national policies such as national development plans, disaster management frameworks, IDP, etc.
- Assess the feasibility of integrating climate change priorities and objectives into the national sectoral plans, provincial and local government, planning, education processes and draft a short report for inclusion in the Fourth National Communication sub chapter;

1.1.1.8.2. **Development and transfer of environmentally sound technologies (ESTs)**

- Report the final technology needs assessment study of South Africa of 2019 in the technology development and transfer sub-chapter.
- Develop the draft sub chapter on: 'Activities Related to Technology Transfer of the NC4' of South Africa under the UNFCCC and circulate it for external review, incorporate the comments received from the review process and finalize the Chapter.
- Archive and document all the information on activities related to technology transfer and related studies.

1.1.1.8.3. **Climate change research and systematic observation**

- Establish the 'Research and Systematic Observation Team', identify and employ the 'Research and Systematic Observation Team Leader' and national experts in targeted areas of relevance
- Assess the general policy on funding of research and systemic observation in South Africa;
- Assess the efforts made by the Government of South Africa and state institutions with regard to: climate process and climate system studies, including paleo-climatic studies, modeling and prediction, including general circulation models: research on the impacts of climate change and response options and research and development on mitigation and adaptation technologies.
- Assess the information on the current status of national plans, programs and support for ground and space-based climate observing systems, including long-term continuity of data, data quality control and availability, and exchange and archiving of data will be reported as well in such areas like: atmospheric climate observing systems, including those measuring atmospheric constituents, terrestrial, including hydrological climate observing systems; support obtained from developed countries to establish and maintain observing systems and related data and monitoring systems.
- Assess and review the Long-Term Adaptation Scenarios, Risk and Vulnerability Atlas research programmes and provide gaps and needs for considerations
- Conduct an in-depth assessment of research programmes pertaining to climate change to identify gaps and constraints and develop the draft chapter,
- Develop the draft sub-chapter on Climate Change Research and Systematic Observation of the NC4 on South Africa under the UNFCCC;
- Circulate the draft sub-Chapter on 'Climate Change Research and Systematic Observation' for internal and external review, incorporate the comments received from the review process and finalize the Chapter;
- Further constraints and specific financial, technical and institutional needs for capacity-building on research, systematic observation and early warning systems will be identified and highlighted.
- Conduct a national review workshop on research and systematic observation for comments and inputs.
- Archive and document all the information on activities related to climate change research and systematic observation and related studies.

1.1.1.8.4. **Climate Change Education Training and Public Awareness**

- Assess the general level of awareness and understanding of climate change issues and policy toward climate change education, training and public awareness. The DEFF will work with both the Department of Basic Education and the department of Higher Education.

- Assess the National Curriculum and the efforts made by the Government (e.g. Department of Basic and Higher Education & Training) regarding primary, secondary and tertiary climate change education.
- Assess the available information on the implemented or planned public information initiatives, campaigns and programs.
- Assess the available information on the implemented or planned training programs;
- Assess the available information on climate change information centres.
- Assess the available information on the international cooperation to promote education, training and public awareness.
- Assess the gaps, needs and priorities in the climate change education, training and public awareness.
- Conduct meetings of the climate change education, training and public awareness working group.
- Build and ensure a periodic update of the content of the Climate Change Management Department website in order to build and add further climate change information, as and when necessary, as well as to signpost, interact, coordinate and engage citizens on climate change, providing a consistent clear, authoritative and credible voice.
- Launch and implement a broad country-wide campaign (including a number of media, television, radio, public lectures, the internet face-to-face events, partnerships and so on) to engage citizens on climate change issues, address the confusion and powerlessness which can impede 'people taken action', and encourage genuine and sustained behaviour change to help reduce individual CO2 emissions. **This will be done by the DEFF in collaboration with the Department of Basic Education and the department of Higher Education.**
- Develop a youth engagement initiative on climate change campaign with the objective to build literacy around the reality of climate change and scientific consensus around the causes and encourage behavioural change.
- Develop and publish Climate Change leaflets, pamphlets, posters, banners, T-shirts which will raise awareness and encourage individuals to take action to tackle climate change.
- Organize four workshops, the first raising awareness of the national policy makers, especially those involved in the national environmental planning process, while the second, third and fourth are meant to raise awareness of the teaching staff, employees of Agriculture, Water and Local Authorities.
- Develop the draft Chapter: Education, Training and Public Awareness of the NC4 of South Africa under the UNFCCC.
- Circulate the draft Chapter: 'Education, Training Public Awareness' for internal and external review, incorporate the comments received from the review process and finalize the sub-chapter Education, Training and Public Awareness of the NC4 of South Africa under the UNFCCC.
- Archive and document all the information on activities related to education training and public awareness and related studies.

1.1.1.8.5. **Capacity building**

- Conduct training workshops on climate change at different levels.
- Promote synergies for implementing the UNFCCC and other global environmental agreements, such as Convention on Biological Diversity (CBD) and United Nations Convention to Combat Desertification (UNCCD) from a sustainable development perspective.
- Hold capacity building activities for strengthening institutional framework for climate change management, strengthening existing national research and training institutions in order to ensure the sustainability of the capacity-building programmes.
- Compile a report containing information on steps taken to implement capacity building activities at national, sub-regional including the implementation of South Africa's CBIT project.
- Write a sub-chapter on capacity building for inclusion in NC4.

1.1.1.8.6. **Information and networking**

- Create a database of national experts who are participating in the preparation of the NCs.
- Compile relevant information on South Africa's Participation and contribution to local and regional information networks on climate change issues including the Southern African MRV Network
- Write a sub-chapter on information and networking for inclusion in NC4

1.1.1.8.7. **Gender and climate change**

- Assess and report on various existing policies and strategies relating to gender and climate change,
- Organize three annual Gender- specific workshops in relation to climate change issues
- Assess gender mainstreaming in the national and sub national climate change response strategies and development plans and recommend findings from gender and climate change analyses to development planning processes e.g. new policies and strategies.
- Write a sub-chapter on Gender and climate change in South Africa

1.1.1.9. **Technical Assistance**

Regional and/or international consultant (s) will be selected competitively by DEFF as appropriate to provide assistance in the preparation of NC4 and BUR4 in specific approaches, tools and methods to be used for the planned activities under the GHG Inventories (i.e., for undertaking peer review of specific chapters of the NIR) and/or under the capacity building (i.e., for providing support to formulate internationally supported project proposals), etc. The technical assistance budget line is expected to support any additional capacity building needs that may arise as different experts are engaged in drafting various sub components under output 2. The following specific activity will be undertaken as appropriate:

- Engage regional and/or international consultant(s) (ICs) as appropriate, to provide technical assistance/training in the preparation of NC4 and BUR4 in specific approaches, tools and methods to be used for the planned activities under the GHG Inventories, for instance undertaking peer review of specific chapters of the NIR and/or conducting capacity building trainings relevant to the convention reporting.

1.1.1.10. **Compilation and production of BUR4 and NC4**

Information prepared from sections 1.1.1.1 to 1.1.1.8 will be finally compiled into BUR4 and NC4 reports and submitted to the UNFCCC. Output one of this project will therefore be realized through compilation and submission of BUR4 and NC4 to the UNFCCC after completion of activities under sections 1.1.1.1 to 1.1.1.8 as explained above. BUR4 and NC4 will be compiled, published and posted onto the UNFCCC website. The following activities will be undertaken;

- Compile the NC4 and BUR4 of South Africa to the UNFCCC and circulate it for comments and review.
- Publish the NC4 and BUR4 of South Africa and submit it officially to the UNFCCC.
- Print 2 NIRs, BUR4 and NC4 of South Africa for relevant stakeholders
- Organize two national conference to present the NC4 and BUR4 of South Africa to the UNFCCC to the civil society, relevant stakeholders and partner institutions.

Independent Reviewer for BUR4 and NC4

The DEFF will procure services of the Service Provider 5 to independently review the BUR4 and NC4. In conducting the independent review, the service provider will ensure that the BUR4 and NC4 comply with the guidelines of Biennial Update Report and National Communications for Parties not included in Annex I of the Convention. The service provider will also ensure that South Africa takes into consideration the inputs received during the public consultation process as well as any recommendations as a result of the ICA of BUR3 and other previous ICA processes.

The independent reviewer shall:

- conduct a technical analysis of compliance with the guidelines for both BUR4 and NC4
- assess additional themes that have been added in BUR-4 that were not included in BUR-3 as well as their relevance and significance
- conduct a thorough assessment to what extent have the findings and recommendations of the technical analysis of BUR-3 and other previous BURs have been considered in BUR-4.

- make recommendations on how the 4th BUR can be improved such that it prepares South Africa for the 5th BUR as well as for the Biennial Transparency Report (BTR) under the Enhanced Transparency Framework (ETF).
- conduct scientific edit of the BUR4 and NC4 as well as integrate all chapters of the NC4 by ensuring the following:
 - assess if scientific language used in the reports is consistent throughout the reports.
 - conduct editing of the language throughout the reports.
 - edit the formatting used in the reports, the consistency in language, numbering and naming of headings and sub-headings as well the referencing. The recommended referencing style is the Harvard System of referencing.

The proposed structure of the BUR4 and NC4:

The proposed structure of the BUR4 of South Africa is as follows:

Executive Summary (Not more than 10 pages)

Introduction

Chapter 1: National Circumstances and institutional arrangement

Chapter 2: National Greenhouse Gas Inventory

Chapter 3: Information on Mitigation Actions and their Effects

Chapter 4: Constraints and gaps and related financial, technical and capacity needs including information on support needed and received for the preparation of the BUR4

Chapter 5: Information on Domestic MRV System

Chapter 6: Other information relevant to the achievement of the objective of the convention including information on gender and climate change

Annexes

The proposed structure of the NC4 of South Africa is as follows:

Executive Summary (not more than 10 pages)

Introduction

Chapter 1: National Circumstances and institutional arrangement

Chapter 2: GHG Inventory

Chapter 3: Programmes containing measures to facilitate adequate adaptation to climate change

Chapter 4: Programmes containing measures to facilitate mitigation climate change

Chapter 5: Other Information Relevant to the Convention

Chapter 5.1: Development and transfer of environmentally sound technologies

Chapter 5.2: Climate Change Research and Systematic Observation

Chapter 5.3: Education, Training and Public Awareness

Chapter 5.4: Capacity-Building

Chapter 5.6: Information on Research Programmes

Chapter 5.7: Information and Networking

Chapter 5.8: Gender and climate change relevant to NC4 preparation

Chapter 6: Constraints and Gaps, and Related Financial Technical and Capacity Needs

Annexes:

Output 1.1.2: A self-assessment and stocktaking exercise for preparation of the project proposal for subsequent BUR and NC completed.

Activities under this output will be undertaken within four months after completion of NC4 report. The stocktaking assessment for preparation of subsequent NCs and BURs aims to allow for a seamless transition to subsequent NC and BUR, in this case transition to South Africa's BUR5/BTR and NC5. The exercise will provide a final qualitative rating of South Africa's institutional arrangements and recommendation for the appropriate time for South Africa to transition to its Initial Biennial Transparency Reporting (BTR) preparation, under the Paris Agreement, as will be guided by the COP Decisions and GEF funding processes.

A summary of activities and results achieved under the BUR4 and NC4 project will be prepared to ensure that the PIP for NC5 and BUR5/BTR project is built upon what has been achieved to avoid duplication of work and propose strategies for increasing synergies with related programmes and institutions. The following activities will be undertaken:

1. Conduct self-assessment and stocktaking exercise, review ICA recommendations and prepare a summary of activities and results achieved upon completion and submission of the BUR4 to the UNFCCC
2. Conduct self-assessment and stocktaking exercise, prepare a summary of activities and results achieved and undertake a qualitative assessment of the state of institutional arrangement capacity for preparation of NCs and BURs/BTRs upon completion and submission of the NC4 to the UNFCCC

Project Management

The BUR4 and NC4 project will be managed by the Department of Environment, Forestry and Fisheries (DEFF). A project coordinator will be contracted, and he/she will be responsible for all the project management, administrative and financial matters related to the project under the supervision of the project manager who is the deputy director for international reporting on climate change. The project coordinator will also be responsible for annual and final financial audits of the project. The annual and final financial audit will be undertaken to assess probity (i.e. correctness, integrity etc.) of expenditure and transactions. The audit on project will follow UNEP's Financial Regulations and Rules and applicable Audit policies. The costs of the following will be charged from the project management budget:

- Salary of the National Project Coordinator (NPC)
- Procurement of one laptop and maintenance of office equipment and consumables
- Annual financial audits

Office space and communication costs will be covered by the Executing Agency (DEFF). The terms of reference of the National Project Coordinator to be contracted is set out in annex A. Respective budgets have been set to meet standard project management costs and/or harmonized with the minimum calculated charges for similar project personnel position in South Africa

D. DESCRIBE, IF POSSIBLE, THE EXPECTED COST-EFFECTIVENESS OF THE PROJECT

This project has been prepared in line with UNFCCC COP guidance on provision of resources to Non-Annex I countries to prepare National Communications (NCs) and Biennial Update Reports (BURs) and is in conformity with Objective 3 of the GEF-7 Climate Mitigation Strategy, which focuses on fostering enabling conditions for mainstreaming mitigation concerns into sustainable development strategies. In accordance with convention guidance, this project is implemented on an agreed full cost basis requiring only in-kind contribution by GEF-eligible countries. The Government of the Republic of South Africa, through its Department of Environment, Forestry and Fisheries will make an in-kind contribution of US\$ 85,200, through its support on overhead related costs and some aspects of technical work.

Having the Department of Environment, Forestry and Fisheries as the Executing Agency of the project ensures continuity of teams/structures established and used for preparation of previous NCs and BURs. This continuity encourages the EA to build on lessons learnt and good practices from previous processes. As national teams get better in applying the recommended NC and BUR guidelines, human and national institutional capacities become strengthened in due course. Continuous preparation of these reports using established institutions, pools of experts and stakeholders that are actively involved at all levels will increase country ownership and the uptake of project findings at all levels. This will result in formulation of national climate policy & plans that are aligned to the Country's priority sectors and its nationally determined contributions (NDCs) under the Paris Agreement.

Figure 1 on South Africa's M& E explains how this project will make use of the national climate information system in place operationalized through the CBIT project. This Inventory system, used for archiving and recording all data and processes, will support the sustainability of compilation of inventories in future. The Greenhouse Inventory Expert to be hired through the CBIT project of South Africa will support maintenance of the NGHGIS for both the 2000-2017 and 2000-2019 GHG inventories under the BUR4 and NC4 respectively. Both the CBIT and NC/BUR projects will also ensure that all the data providers and experts are well trained on GHG inventory compilation to build their capacities on GHG inventories and associated methodologies.

The second project output has been included to support continuous engagement of climate change structures/units in EAs, as well as stakeholders interested in climate change enabling activities, after completion and submission of reports to the UNFCCC. In the absence of this project, once South Africa completes its NC4 and BUR4 preparation, teams and the structures created on project basis, will be spread out and may be lost. The output will also allow South Africa to assess its readiness to initiate the preparation of a subsequent BUR and/or its Initial Biennial Transparency Reports, expected to be submitted to the UNFCCC by 2024.

E. DESCRIBE, DESCRIBE THE BUDGETED M & E PLAN

The project result framework (**Table G**) provides performance and impact indicators for project implementation along with their corresponding means of verification. The project will be monitored through the following M&E activities:

- A Project Inception Workshop at the national level will be held within 2 months of start of project, after the establishment of the Project Management Unit. This will involve all key stakeholders identified during the national consultation process. An Inception Workshop report will be prepared and shared with participants to formalize various agreements and plans decided during the meeting.
- Monitoring NC4 and BUR4 technical progress against expenditures: The Project Coordinator will be responsible for preparation of quarterly progress reports and expenditure statements. Technical progress and financial reports shall be reviewed by the UNEP Task Manager and Fund Management Officer.
- Periodic Monitoring through discussions with key partners: the UNEP Task Manager will conduct periodic monitoring of activities based on the agreed schedule in the Project Implementation Plan to assess status of implementation of project. The monitoring of project activities will identify areas of improvements and will make recommendations on how to address gaps in project implementation.
- At the end of the project, an Operational Completion Report will be prepared, using the most recent UNEP operational completion report template to be obtained from the UNEP Evaluation Office.

Table K below presents a detailed monitoring and evaluation budget and workplan.

Type of M&E activity	Responsible Parties	Budget from GEF (US\$)	Budget co-finance	Time Frame
Project Inception Workshop (PIW)	National Project Management Unit, Technical Expert Groups and UNEP Task Manager to raise awareness, build stakeholder engagement and detailed work planning	US\$ 5,000 (1 workshop * @ US\$ 5,000)	US\$ 0	Within 2 months of project start-up and establishment of the project management unit
Project Inception Report	Project Coordinator & UNEP Task Manager	US\$ 0	US\$ 0	Not more than 1 month after the Project Inception Workshop
Technical progress reports & expenditure statements	National Project Management Unit, Task Manager, Funds Management Officer	US\$ 0	US\$ 0	Four (4) quarterly expenditure and technical progress reports for any given year, submitted by January 31, April 30, July 31 and October 31 (latest) and at the end of the project implementation
Project Monitoring	UNEP Task Manager	US\$ 0	US\$ 0	Continuous
Project Operational Closure	National Project Management Unit, Task Manager, FMO, Consultant(s)	 US\$ 19,000	US\$ 1,900	Initiated no earlier than six months prior to the operational completion of project activities
Total M&E Plan Budget		US\$ 24,000	US\$ 1,900	

F. Explain the Deviations from typical Cost Ranges (where applicable):

N/A

G. PROJECT RESULT FRAMEWORK

	Indicators	Baseline/End of Project Targets	Means of Verification	Assumptions and Risks
Project Objective: To support South Africa prepare and submit its Fourth National Communication (NC4) and Fourth Biennial Update Report (BUR4) that comply with the UNFCCC reporting requirements while responding to its national development goals.	Republic of South Africa prepares and submits NC4 and BUR4 that comply with the UNFCCC reporting obligations while responding to national development goals.	<u>Baseline:</u> 0 <u>BUR Target:</u> – BUR4 completed by March 31, 2021 <u>NC Target:</u> – NC4 completed by August 31, 2023	- BUR4 and NC4 posted on the UNFCCC website - UNFCCC reporting requirements - National Development Strategies	- Adequate political commitment and institutional support for NC/BUR preparation exist
Project Component 1: Preparation of South Africa's NC4 & BUR4				

	Indicators	Baseline/End of Project Targets	Means of Verification	Assumptions and Risks
Outcome 1: South Africa update tools and approach to meet its NC4 and BUR4 reporting requirements under the UNFCCC.	BUR4 which meet the Convention's reporting requirements prepared and submitted to the UNFCCC	Baseline: 0 End Term Targets: - BUR4 completed by March 31, 2021 - NC4 completed by August 31, 2023	- Annual reporting to UNEP. - Annual reports to the COP on the preparation of reports. - BUR4 report posted on the UNFCCC website. - NC4 report posted on the UNFCCC website.	- NC/BUR preparation considered priority in the participating countries - Strong political or institutional commitment to the NC/BUR process - There will be no delays in the national political endorsement processes after technical completion of these reports, to guarantee timely submission of reports to the UNFCCC
	NC4 which meet the Convention's reporting requirements prepared and submitted to the UNFCCC	Baseline: 0 End Term Target: Women's participation in project implementation is documented in the annual reports for all reports submitted to date.	- Annual progress reporting by South Africa to UNEP - Final evaluation	- Adequate political commitment and institutional support for women's equitable participation in project activities exist
	Republic of South Africa documents women's participation in project activities	Baseline: 0 End Term Target: - Republic of South Africa completes the self assessment report by the time of project closure. - Republic of South Africa submit stocktaking assessment and institutional arrangement report for the subsequent NC/BUR/BTR by the time of project closure	- Guidelines for NC/BUR stocktaking and self-assessment report preparation. - 1 NC self-assessment report completed by time of project closure - 1 BUR self-assessment report completed by time of project closure - Final qualitative assessment on human and institutional capacities for NCs and BURs reporting	- Strong commitment of national team to engage stakeholders of high competence and expertise - Stakeholders willingness to participate in the NC/BUR process - Adequate political support to strengthen and/or establish appropriate institutional arrangement for NC/BUR preparation - Interpretation of result
	Republic of South Africa undertakes stocktaking assessment and institutional arrangement for preparation of subsequent NC/BUR			

1

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F. EXPLAIN THE DEVIATIONS FROM TYPICAL COST RANGES (WHERE APPLICABLE)

N/A

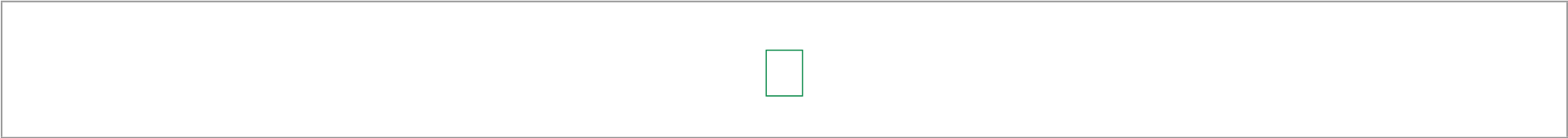
Part III: Approval/Endorsement By GEF Operational Focal Point(S) And Gef Agency(ies)

A. Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Focal Point Name	Focal Point Title	Ministry	Signed Date
Mr. Zaheer Fakir	Chief Director: International Governance and Resource	Department of Environment, Forestry and Fisheries	10/8/2019

B. Convention Participation

Convention	Date of Ratification/Accession	National Focal Point
UNFCCC	9/29/1997	Mr. Maesela Kekana



Submitted to HQ

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