

Clean Development Mechanism South Africa
Designated National Authority



energy

Department:
Energy
REPUBLIC OF SOUTH AFRICA

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Programme of Activities (PoA)

Project reference number (office use only)	
Date received (office use only)	
<p>NOTES ON COMPLETING THIS DOCUMENT</p> <ol style="list-style-type: none"> 1. Please provide the Programme of Activities Design Document (PoA-DD) in both hard-copy (one copy) and electronic formats (MSWord) 2. This information submitted to the DNA will remain confidential. 3. Please ensure that all fields are filled in as far as possible to allow for proper consideration of the proposed project. Please indicate if information is not available for any particular item and reasons for the unavailability of information. 	

Part A: Programme of Activities (PoA) Details

Programme of Activities (PoA) title	Installation of energy efficient ventilation fans
Coordinating/Managing entity (CME) name	Carbon Protocol of SA
Component Project Activity 1 (CPA1) title	CPA 001 under the registered PoA 'Installation of energy efficient ventilation fans'
Date of PoA Submission	2012/08/03

Project Developer	
Coordinating/Managing entity (CME) name	Carbon Protocol of SA
Organizational Category	Not-for-profit organization

Legal Status	Section 21 Company
Street Address	c/o Lloyd Christie 150 West Street Sandton Johannesburg Gauteng Province 2196 Republic of South Africa
Postal Address (if different from above)	As above.
Website Address	http://www.carbonprotocol.org/
Main Activities	<p>The Carbon Protocol of SA is a not-for-profit collaboration of concerned and interested parties in South Africa that sets consistent and transparent standards to calculate, verify and publicly report greenhouse gas emissions into a single registry. The Registry supports both voluntary and mandatory reporting programs and provides comprehensive, accurate data to reduce greenhouse gas emissions.</p> <p>The Carbon Protocol of SA is hosting a platform for Programmes of Activities (PoA) under the Kyoto Protocol. This is an open platform for which the Carbon Protocol of SA will be the Coordinating/Managing Entity (CME) as specified under the strict Kyoto rules and requirements. Each PoA will be managed separately to ensure that the interest of both the underlying projects and project owners are protected.</p> <p>The Carbon Protocol of SA will, through this open platform, fulfill an integral role in the implementation and sustaining of PoAs in Africa for the duration of 28 years. The Carbon Protocol of SA will ensure that each PoA that joins will be managed in a professional manner that ensures that its specific needs are addressed and that the interests of the PoA and project owners are managed effectively.</p>
Summary of Financial Performance in last fiscal year	This is confidential
Contact Person(s)	Ms Hildegard Niehaus
Telephone	+27 72 348 1505
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Email Address	info@carbonprotocol.org
Project Partners	
Provide the following Information for all project partners (copy and paste relevant sections of the table if information is to be provided on more than one partner organisation)	
Name	There are no project partners. This section is intentionally left blank.
Nature of partner	N/A
Organizational Category	N/A

Legal Status (if private company)	N/A
Street Address	N/A
Postal Address (if different to Street Address)	N/A
Website Address	N/A
Main Activities	N/A
Contact Person(s)	N/A
Telephone	N/A
Fax	N/A
Email Address	N/A
Contractual Arrangements	
Contractual arrangements between various entities involved	The Carbon Protocol of SA is hosting a platform for this energy efficient ventilation fan Programme of Activities (PoA). The Carbon Protocol of SA will be the Coordinating and Managing Entity (CME) of this Programme of Activities.

Part B: Project Overview (Technical Summary, Location and Schedule)

Technical Summary of the project	
Objective of the Project	The goal of this PoA is to reduce greenhouse gas emissions through the installation of energy efficiency ventilation fans at sites across South Africa. These ventilation fans will reduce the electricity consumption from the national grid.
Project Description	
<p>This programme of activities (PoA) aims to overcome the barriers facing the installation of energy efficient ventilation fans at sites across South Africa. Ventilation fans are used to provide large flows of air with the objective of controlling temperature, replenishing oxygen, or removing moisture, particulates, and carbon dioxide. This is achieved through the rotation of a number of blades which are connected to a hub and shaft, and driven by a motor or turbine. Ventilation fans are commonly used in the mining and manufacturing industries.</p> <p>The proposed project activity will improve the energy efficiency of existing or new ventilation fan systems through the installation of lower electricity consuming fans which deliver a similar air flow as conventional ventilation fans.</p>	
Project Constraints	
There are no constraints affecting project operations or commissioning.	
Technology to be employed	Each Component Project Activity will involve the installation of a number of energy efficient ventilation fans at sites across South Africa.
Greenhouse Gases Targeted	This project will target CO ₂ .
Emission reductions	The first component project activity under this programme of activities will result in emission reductions of 58,512 tCO ₂ e/ year.
Baseline & Additionality Assessment	<p>Baseline: The baseline is the product of energy consumed by the existing ventilation fans and the emission factor of the national grid.</p> <p>Additionality: Additionality will be demonstrated using a barrier analysis.</p>
Monitoring	<p>The following will be monitored:</p> <ul style="list-style-type: none"> - Number of fans installed - Operational hours of the fans - Scrapping records of the fans
Type of project/activities	
a. Energy Supply	Not applicable
b. Energy Demand	This project involves energy efficiency in underground ventilation systems.
c. Industrial Process	Not applicable
d. Transport	Not applicable
e. Waste Management	Not applicable
f. Forestry/ land use	Not applicable
g. Other	Not applicable
Project Boundary	
The project boundary is the physical, geographical location of each ventilation fan installed.	
Indicate Emissions outside the Project Boundary	There are no significant and measurable net emissions of GHGs that are attributable to the project outside of the project boundary.

Location of the Project	
Province	All provinces in the Republic of South Africa
Nearest city/large town	Not applicable
Brief description of the location of the project site	This programme of activities will be located at various sites across South Africa where it is possible to improve the energy efficiency of ventilation fans.

Project Schedule/Timetable	
Earliest Project Start Date	01/01/2013
When is the expected first year of CER delivery	2014
Project Lifetime	28 years
Project End Date	31/12/2041
Crediting Period	10 years
Current Status or phase of the project	The project activity is in the preparation stage.
DNA Approval	This project has not been previously submitted to the DNA for approval.
Approval by other bodies	Not applicable

Part C: Performance Against the DNA's Sustainable Development Criteria

South Africa has identified the following sustainable development criteria and indicators against which each CDM project will be assessed. Please provide your interpretation of how this project will address each of these **criteria and indicators** where they are relevant to the project. If the space provided is not sufficient please append additional information as required.

NOTE: For all indicators which are of relevance to the project show how the performance of the project against these indicators can be objectively monitored and measured on an ongoing basis.

1. Economic: Does the project contribute to national economic development?

South Africa's national electricity provider, Eskom, carried out planned electricity supply interruptions at the beginning of 2008. These interruptions were caused by the demand for electricity exceeding the supply of electricity. During the interruptions, grid electricity was not accessible. Promoting energy efficiency in South Africa will reduce the pressure on the current energy infrastructure, thereby making important contributions to the country's economic sustainability.

There will be a transfer of knowledge from the countries supplying the energy efficient technology to South Africa, and the project will contribute to foreign reserve earnings for South Africa via carbon credit sales revenue.

2. Social: Does the project contribute to social development in South Africa?

The project created 50 jobs during the implementation phase. The implementation of the project improved the working conditions of the people operating the mine.

3. Environmental: Does the project conform to the National Environmental Management Act principles of sustainable development?

Please provide brief comment for each of these below.

i) That the disturbance of ecosystems and loss of biological diversity are avoided, or where they cannot be avoided, are minimised and remedied

There is no disturbance of ecosystems and loss of biological diversity in this project.

ii) That pollution and degradation of the environment are avoided, or where they cannot be altogether avoided, are minimised and remedied	There are no pollution and degradation of the environment in this project.
iii) That the disturbance of landscapes and sites that constitute the nation's cultural heritage is avoided, or where it cannot be altogether avoided, is minimised and remedied	There will be no disturbance of landscapes and sites that constitute the nation's cultural heritage in this project.
iv) That waste is avoided , or where it cannot be altogether avoided, minimised and reused or recycled where possible and otherwise disposed of in a responsible manner	There is no significant waste in this project.
v) That the use and exploitation of non-renewable resources is responsible and equitable , and takes into account the consequences of the depletion of the resource	There is no significant use of non-renewables in this project.
vi) That the development, use and exploitation of renewable resources is responsible and equitable , and takes into account the consequences of the depletion of the resource.	The project will reduce electricity consumption from a predominantly coal-fired grid.
vii) That a risk averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions	A reputable electrical engineering firm is being used for project implementation.
vii) That negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied	The impacts on the environment are improved by implementing this project.
Other comments Please provide any other comments on how this project contributes to sustainable development in South Africa (optional)	
Not applicable	

Indicators in Support of the Project Approval Criteria

	Category	Indicator	Comment
Environmental	Impact on local environmental quality	<ul style="list-style-type: none"> • Impact of the project on air quality • Impact of the project on water pollution • Impact of the project on the generation or disposal of solid waste • Any other positive or negative environmental impacts of the project (such as impacts on noise, safety, visual impacts, or traffic) 	<ul style="list-style-type: none"> • The project will improve air quality by reducing greenhouse gas emissions. • There will be negligible water pollution associated with this project • There will be no generation of solid waste, or disposal thereof in this project • The overall impact of this project on the local environmental quality is positive.
	Change in usage of natural resources	<ul style="list-style-type: none"> • Impact of the project on community access to natural resources • Impact of the project on the sustainability of use of water, minerals or other non renewable natural resources • Impact of the project on the efficiency of resource utilisation 	<ul style="list-style-type: none"> • The project will reduce coal usage in South Africa.
	Impacts on biodiversity and ecosystems	<ul style="list-style-type: none"> • Changes in local or regional biodiversity arising from the project 	<ul style="list-style-type: none"> • This project has no influence on the local or regional biodiversity.

Indicators in Support of the Project Approval Criteria

Category		Indicator	Comment
Economic	Economic impacts	<ul style="list-style-type: none"> • Impact of the project on foreign exchange requirements • Impact of the project on existing economic activity in the area • Impact of the project on the cost of energy • Impact of the project on foreign direct investment 	<ul style="list-style-type: none"> • The project will contribute to foreign reserve earnings for South Africa via the carbon credit sales revenue.
	Appropriate technology transfer	<ul style="list-style-type: none"> • Positive or negative implications for the transfer of technology to South Africa arising from the project • Impacts of the project on local skills development • Demonstration and replication potential of the project 	<ul style="list-style-type: none"> • The project is replicable. The development of the programme offers the opportunity to establish a new industry within the South African economy.

Indicators in Support of the Project Approval Criteria

Category		Indicator	Comment
Social	Alignment with national provincial and local development priorities	<ul style="list-style-type: none"> • How the project is aligned with provincial and national government objectives • How the project is aligned with local developmental objectives • Impact of the project on the provision of, or access to, basic services to the area • Impact of the project on the relocation of communities if applicable • Contribution of the project to a any specific sectoral objectives (for example, renewable energy targets) 	The project decreases the use of grid electricity and thus reduces greenhouse gas emissions. This will help reach the target the South African government committed to; the reduction of the country's emissions by 34% from business as usual by 2020.
	Social equity and poverty alleviation	<ul style="list-style-type: none"> • Impact of the project on employment levels? (specify the number of jobs created/lost; the duration of time employed, distribution of employment opportunities, types of employment, categories of employment changes in terms of skill levels and gender and racial equity) • Impact of the project on community social structures • Impact of the project on social heritage • Impact of the project on the provision of social amenities to the community in which the project is situated • Contribution of the project to the development of previously underdeveloped areas or specially designated development nodes 	The project will create 50 jobs in the implementation and monitoring phases of the project.

Indicators in Support of the Project Approval Criteria

Category		Indicator	Comment
General	General Project Acceptability	<ul style="list-style-type: none">Is the distribution of project benefits deemed to be reasonable and fair?	<ul style="list-style-type: none">This is a green initiative by business and the distribution of benefits is deemed to be fair and reasonable.

Part D: Finance

Project Costs	
Development Costs (R's)	Not currently available
Installed Costs (R's)	Not currently available
Other Costs (R's)	Not currently available
Total Project Costs (R's)	Not currently available
Sources of Finance	
Equity	Not currently available
Debt (long term)	Not currently available
Debt (short term)	Not currently available
Amount not identified (R's)	Not currently available
Total CDM Contribution sought	Not currently available
Expected Price of CER in case of a contract to purchase for: A period of 7 years A period of 10 years A period of 14 years (2x7 years)	Not currently available
Indicate the projected Internal Rate of Return for the project with and without CER revenues.	Not currently available
Constraints on tradability of carbon credits	None
Preliminary discussions with potential purchasers	Confidential