

Application Form

Clean Development Mechanism South Africa
Designated National Authority

Submission of CDM project PDD for Approval by DNA



Department of Minerals and Energy

Project reference number (office use only)	
Date received (office use only)	

NOTES ON COMPLETING THIS APPLICATION FORM

1. Please provide this application form in both hard-copy (one copy) and electronic formats (MSWord)
2. 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.
3. If a Project Design Document is being submitted for approval please ensure that it is accompanied by a validation report from an accredited Designated Operational Entity.
4. Please attach any other permits or authorizations that may be of relevance to the submission (such as Environmental Impact Assessment records of decision).

Project Details			
Project Name	SASSA Low Pressure Solar Water Heater Programme		
Submission of: (please put an X in the appropriate box)	Project identification Note (PIN) <input type="checkbox"/> Or Project Development Document (PDD) <input checked="" type="checkbox"/>		
Note: this application form must be accompanied by the completed PIN or PDD			
If a PIN is being submitted are comments on the PIN requested?	n/a	If a PDD is being submitted is a letter of approval being requested?	Yes
Date of Submission	25/08/2010		
Has this project been reviewed previously by the DNA?	Yes the PIN. LoNO was recived on 28 th of June 2010		
Project Location	Rebublic of South Africa (Program of Activity)		
Type of Project	Please select from the following (underline): o Energy Supply (thermal)		
Greenhouse Gases Targeted	Carbon Dioxide (CO ₂)		
Project Start Date	June 23, 2010		
Project End Date	June 2038		

Project Details	
	(According the CDM rules a PoA can have a maximum lifetime of 28 years)
First year of CER Delivery	2011
Total CDM Contribution Sought (R's)	220 mil ZAR which is approximately 22 % of the total costs (this bases on the estimation in NMBM and EEM)

Project Developer	
Name of Organization	Solar Academy of Sub Saharan Africa (Pty) Ltd
Organizational Category	Private Company
Street Address	15 Cleveland Road Cleveland Johannesburg, 2094 South Africa
Postal Address (if different from above)	PO Box 145588 Brackengardens Alberton, 1452 Gauteng South Africa
Contact Person(s)	Chris Nelson
Email address(s)	chrisn@rtc.co.za
Telephone numbers	Office: +27 86 111 1203 Cell: + 27 82 552 4513
Fax	

Project Partners	
Name(s) of Organization	Standard Bank Plc
Organizational Category	Select most applicable (underline): ○ <u>Private Company</u>
Postal Address	20 Gresham Street, London, EC2V 7JE, United Kingdom
Contact Person(s)	Geoff Sinclair
Email address(s)	co2@standardbank.com
Telephone numbers	Office: + 44 20 3145 6890
Fax Number(s)	

Project Partners	
Name(s) of Organization	International Carbon Ltd
Organizational Category	Select most applicable (underline): ○ <u>Private Company</u>
Postal Address	97 Ashley Road, Walton-on-Thames, KT12 1HH , United Kingdom
Contact Person(s)	Laura Lahti

Project Partners	
Email address(s)	Laura.lahti@intlcarbon.com
Telephone numbers	Cell: + 27 795423553
Fax Number(s)	

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?

The project provides hot water service needs in a manner which stimulates decentralised local economic development in South Africa. Further the project supports the target for 10,000 GWh/annum of new renewable energy of the Department of Energy.

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

The project provides a more reliable and sustainable service of hot water for bathing and other household activities. The SWHs will be free of charge and hence reduce costs associated to water heating in low income areas. Further the project will generate job opportunities in NMBM and WMM.

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

The project reduces the consumption of non-renewable natural resources, such as coal, uranium and oil. In addition, the project reduces the emission of airborne particulates (ash) and pollutant gases which cause air quality problems in Nelson Mandela Bay Metropolitan Municipality, Ekurhuleni Metropolitan Municipality, Free State Province, eThekweni Metropolitan Municipality, Western Cape Province, and North West Province.

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 as the project is implemented on the roofs of existing and new buildings.
ii) That pollution and degradation of the environment are avoided, or where they cannot be altogether avoided, are minimised and remedied	As indicated above, the pollution and degradation of the environment as a consequence of the project is significantly lower than the 'business-as-usual' situation.
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	The project will not impact on landscapes or sites of cultural significance.
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	Waste will be generated only in the manufacturing and transport state of the activity. The production of thermal energy through solar radiation will not generate any waste.
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	The utilisation of non-renewable resources in the project is required for the manufacture, logistics for distribution and installation of the materials and components of the SWH systems.
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 make use of renewable resources, more precisely of solar radiation to, to generate hot water for customers in NMBM and EMM areas. Hence the project increases the availability of renewable resources for the inhabitants of NMBM and EMM.
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	The project seeks to massively scale up the implementation and utilisation of a technology which has been used for over 50 years. The innovation in the project is focussed on removing the institutional and financial barriers to a large-scale utilisation of SWH systems for domestic hot water service

actions	needs.
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	There are no significant anticipated negative impacts on the environment and/or on people.
Other comments Please provide any other comments on how this project contributes to sustainable development in South Africa The project will have significant positive effects on environment and people.	

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) 	The air quality, water pollution and solid waste impacts of providing hot water services from locally-installed solar water heating systems will be a significant improvement over the current 'business-as-usual' approach, which predominantly bases on coal based electricity.
	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 	The project will utilise renewable energy and reserves of non-renewable resources such as coal and uranium which are currently depleted in the 'business-as-usual' approach to hot water service provision.
	Impacts on biodiversity and ecosystems	<ul style="list-style-type: none"> • Changes in local or regional biodiversity arising from the project 	The project will not affect local or regional biodiversity in a negative manner. It is likely to have rather positive impacts overall on biodiversity and ecosystems in the regions where the coal and uranium are mined and converted into electricity.

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 requirementsImpact of the project on existing economic activity in the areaImpact of the project on the cost of energyImpact of the project on foreign direct investment	The project will have positive local (NMBM, EMM), regional and national economic impacts. It will provide job opportunities and bring direct foreign investment in the country.
	Appropriate technology transfer	<ul style="list-style-type: none">Positive or negative implications for the transfer of technology to South Africa arising from the projectImpacts of the project on local skills developmentDemonstration and replication potential of the project	The project will have significant positive effects on the solar water heating industry in South Africa. Further it will lead to skills development trough installation and maintenance work.

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) 	<p>The project complies with the South African Government's objectives for:</p> <ul style="list-style-type: none"> • Green house gas reduction; • Promotion of CDM; • Reduction on reliance of fossil fuels; • Improvement of environmental quality; • Enhancing economic development and job creation. <p>No community will be relocated due to the project activity.</p> <p>The project aligns with municipality development plan that improves energy efficiency.</p>
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	<p>Social equity and poverty alleviation</p>	<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 	<p>The project will target low income households and the SWHs will be installed free of charge for the municipality and the households. The provision of solar water heaters free of charge will result in improved service delivery to residents and a major social upliftment. Further the positive job creation as part of sustainable economic development program will be beneficial to the whole area.</p> <p>There will be no impact on community social structures, social heritage sites or affect social amenities to the community in which the project will be situated.</p>
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Indicators in Support of the Project Approval Criteria			
Category		Indicator	Comment
General	General Project Acceptability	<ul style="list-style-type: none"> Are the distribution of project benefits deemed to be reasonable and fair? 	<p>The project will benefit the municipality through the provision of electricity from renewable sources, which further will release capacity on the municipal electricity networks. At the community level, as the SWHs are installed free of charge, the customer will have a saving on the electricity bill. At the national the project will lead to emission reductions and contribute towards to more sustainable economy. The benefits of the project are deemed to be reasonable and fair in that no one group is experiencing negative impacts in order for someone else to benefit.</p>