

# NS-243 - Lighting system optimization by replacing incandescent and other lights with energy efficient LED lights

## Zimbabwe

### NAMA Seeking Support for Preparation

#### A Overview

A.1 Party

Zimbabwe

A.2 Title of Mitigation Action

Lighting system optimization by replacing incandescent and other lights with energy efficient LED lights

A.3 Description of mitigation action

To play its part in climate change mitigation, the Government has decided to replace incandescent lights and other lights in households, government and commercial premises by LED lights which are more efficient. This programme is a Government driven demand side management (DSM) initiative to reduce electricity consumption in households, government and commercial buildings as well as street lighting. This initiative will address both climate change issues and energy shortage. Energy is in short supply in the country and in the SADC region.

So far the Ministry of Energy and Power Development has carried out a pilot project at its head office, where incandescent bulbs have been replaced by LED lights. The National Electricity Utility and the Energy Regulator have done likewise at their head quarters. The pilot project realised at least 515 000 kWh of electricity annually mitigating more than 531 tCO<sub>2</sub> equivalent of carbon emissions. The planned retrofitting of 250W with 90W LED lights in the City of Harare (capital of Zimbabwe) is expected to reduce electricity consumption by at least 40 GWh per year and reducing GHG emissions by at least 23 443 tCO<sub>2</sub>. However due to financial constraints the programme may take time to be done at a national scale. The LED lights which have been used are imports because there is no capacity to manufacture in the country. This means that there are a lot of issues that include technology transfer, financing the completion of the programme and awareness creation to get the product accepted by the general public.

The Government is seeking support for preparation of a NAMA on lighting system optimisation to enable the programme to be implemented as a NAMA.

A.4 Sector

Energy supply  Transport and its  
 Residential and Commercial Infrastructure

A.5 Technology	<input type="checkbox"/> buildings <input type="checkbox"/> Agriculture <input type="checkbox"/> Waste management <input type="checkbox"/> Other <input type="text"/>	<input checked="" type="checkbox"/> Industry <input type="checkbox"/> Forestry
	<input type="checkbox"/> Bioenergy <input checked="" type="checkbox"/> Energy Efficiency <input type="checkbox"/> Hydropower <input type="checkbox"/> Wind Energy <input type="checkbox"/> Carbon Capture and Storage <input type="checkbox"/> Land fill gas collection <input type="checkbox"/> Other <input type="text"/>	<input type="checkbox"/> Cleaner fuels <input type="checkbox"/> Geothermal Energy <input type="checkbox"/> Solar Energy <input type="checkbox"/> Ocean Energy <input type="checkbox"/> Low till / No till
A.6 Type of action	<input checked="" type="checkbox"/> National/ Sectoral goal <input checked="" type="checkbox"/> Strategy <input checked="" type="checkbox"/> National/Sectoral policy or program <input type="checkbox"/> Other <input type="text"/>	<input type="checkbox"/> Project: Investment in machinery <input type="checkbox"/> Project: Investment in infrastructure <input type="checkbox"/> Project : other
A.7 Greenhouse gases covered by the action	<input checked="" type="checkbox"/> CO2 <input checked="" type="checkbox"/> N2O <input type="checkbox"/> PFCs <input type="checkbox"/> Other <input type="text"/>	<input checked="" type="checkbox"/> CH4 <input type="checkbox"/> HFCs <input type="checkbox"/> SF6

### B National Implementing Entity

B.1.0 Name	Ministry of Energy and Power Development
B.1.1 Contact Person 1	Mr. Malan Manyundo
B.1.2 Address	2nd Floor John Boyne Building Corner Innez Terrace Street/ Speke Avenue Private Bag 7758, Causeway Harare, Zimbabwe
B.1.3 Phone	+2634703320/2, +263 733 287 661 , +263 777 659 560
B.1.4 Email	mmanyundo@gmail.com
B.1.5 Contact Person 2	Ms Shorai Kavu
B.1.6 Address	2nd Floor John Boyne Building Corner Innez Terrace Street/ Speke Avenue Private Bag 7758, Causeway Harare, Zimbabwe
B.1.7 Phone	+2634703320/2, +263 733 361 402,+263778240482
B.1.8 Email	kavkajongwe@gmail.com
B.1.9 Contact Person 3	
B.1.10 Address	
B.1.11 Phone	
B.1.12 Email	
B.1.13 Comments	

### C Expected timeframe for the preparation of the mitigation action

C.1	Number of months for completion	6
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### D Currency

D.1	Used Currency	<input type="text" value="AED"/> Conversion to USD: 1
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### E Cost

E.1.1 Estimated full cost of preparation	500000
E.1.2 Comments on full cost of preparation	The cost of preparation stated above is justified by the fact that there is need to hire a consultant to carry out a baseline survey that is required to prepare the NAMA. The amount will be split between paying for consultant services, awareness raising and costs of workshops that will be held.

### F Support required to prepare the mitigation action

F.1.1 Amount of Financial support	500000										
F.1.2 Type of required Financial support	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td><input checked="" type="checkbox"/> Grant</td> <td><input type="checkbox"/> Guarantee</td> </tr> <tr> <td><input type="checkbox"/> Loan (sovereign)</td> <td><input type="checkbox"/> Equity</td> </tr> <tr> <td><input type="checkbox"/> Loan (Private)</td> <td><input type="checkbox"/> Carbon finance</td> </tr> <tr> <td><input type="checkbox"/> Concessional loan</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Other <input style="width: 100px;" type="text"/></td> <td></td> </tr> </table>	<input checked="" type="checkbox"/> Grant	<input type="checkbox"/> Guarantee	<input type="checkbox"/> Loan (sovereign)	<input type="checkbox"/> Equity	<input type="checkbox"/> Loan (Private)	<input type="checkbox"/> Carbon finance	<input type="checkbox"/> Concessional loan		<input type="checkbox"/> Other <input style="width: 100px;" type="text"/>	
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<input type="checkbox"/> Other <input style="width: 100px;" type="text"/>											
F.1.3 Comments on Financial support	The cost of preparation stated above is justified by the fact that there is need to hire a consultant to carry out a baseline survey that is required to prepare the NAMA. The amount will be split between paying for consultant services, awareness raising and costs of workshops that will be held.										
F.2.1 Amount of Technical support	350000										
F.2.2 Comments on Technical support	The cost of preparation stated above is justified by the fact that there is need to hire a consultant to carry out a baseline survey that is required to prepare the NAMA. The amount will be split between paying for consultant services, awareness raising and costs of workshops that will be held.										
F.3.1 Amount of capacity building support	150000										
F.3.2 Type of required capacity building support	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td><input checked="" type="checkbox"/> Individual level</td> </tr> <tr> <td><input checked="" type="checkbox"/> Institutional level</td> </tr> <tr> <td><input checked="" type="checkbox"/> Systemic level</td> </tr> <tr> <td><input type="checkbox"/> Other <input style="width: 100px;" type="text"/></td> </tr> </table>	<input checked="" type="checkbox"/> Individual level	<input checked="" type="checkbox"/> Institutional level	<input checked="" type="checkbox"/> Systemic level	<input type="checkbox"/> Other <input style="width: 100px;" type="text"/>						
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<input type="checkbox"/> Other <input style="width: 100px;" type="text"/>											
F.3.3 Comments on Capacity Building support	Institutional Capacity Building for implementation and MRV										
F.4 Financial support required	<input type="checkbox"/>										
F.5 Technological support required	<input type="checkbox"/>										
F.6 Capacity support required	<input type="checkbox"/>										

### G Relevant National Policies strategies, plans and programmes and/or other mitigation action

G.1 Relevant National Policies	This programme is supported by the national development plans as enshrined in the country's INDC submitted to the UNFCCC. The Zimbabwe Agenda for Sustainable Socio-Economic Transformation(ZimASSET), the national economic blueprint clearly spell out the country's desire for deficient use of energy for both the domestic and commercial sectors. The National Climate Change Response Strategy and the National Energy policy support energy efficiency to address climate change and energy shortage respectively. T
G.2 Link to other NAMAs	.

### H Attachments

H Attachments	Title	Description
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Climate Change Response Strategy.pdf  
 energy\_policy.pdf  
 Zim-Asset.pdf  
 Zimbabwe Intended Nationally Determined Contribution 2015.pdf

1. The National Climate Change Response Strategy  
 2. The National Energy Policy  
 3. The National Economic Blueprint for Zimbabwe  
 4. Zimbabwe INDC submitted to UNFCCC

H.1 Attachment description

H.2 File

I Support received

I.1 Outside the Registry

Not yet received support for NAMAs

I.2 Within the Registry

Support provided	Support Type	Amount	Comment	Date
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