



GREEN ELEMENTS POLICY

JULY 2011

Record of Revisions

| Release # | Date of Board Approval | Section | Page | History of Revision | Signature |
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POLICY AND PROCEDURES

1.0 STATEMENT OF INTENT:

The Jamaica Social Investment Fund (JSIF) recognizes environmental protection as one of our guiding principles and a key component of sound business practices. JSIF commits to exercising sound management of the environmental impacts of its projects....Specifically JSIF commits to:

- > Advance environmental stewardship by contributing to environmental protection, pollution prevention, and efficient use of resources.
- > Continually improve our processes such that our environmental performance and that of our contractors and community partners is enhanced.
- Strive to make environmental considerations and stakeholders concerns an integral part of decision making.
- Enhance the environmental wellbeing of communities in which we operate (either by the nature of the project or the means by which the project is completed).
- > Maintain an awareness of emerging technologies that may lead to improved environmental performance and implement those that are economically feasible.

The statements above form part of JSIF's commitment to environmental stewardship. This document seeks to define how this stewardship will be applied in our field operations. It specifies how green elements will be designed into works activities and implemented; additionally it will specify how JSIF will mitigate environmental issues that may not be directly on a JSIF project site, but may have impact on the wider beneficiary community.

2.0 APPLICABILITY

The policy will guide JSIF's approach to the design and implementation of green elements to all of JSIF's building designs. Additionally it will outline how JSIF will respond to environmental issues which while not directly related to a project site, is in close proximity and presents an environmental issue for the community.

3.0 DEFINITIONS

Green Elements: Activities, fixtures, approaches, use of space, application of technology, which when incorporated into the construction of buildings i) enables the efficient use of natural resources ii) reduces pollution iii) fosters harmony with the environment v) protects the environment and vi) fosters a healthy, safe and comfortable environment for the users.

Environmental Issues: These relate to any activity which negatively impacts the bio physical environment, these may include issues related to poor drainage, dust, soil and water pollution, poor waste management etc.

4.0 RELATED POLICIES / REFERENCES

- JSIF's Environmental Policy
- JSIF's EMS Manual and Procedures Manual

5.0 IMPLEMENTATION PROCEDURES

5.1 Integration of Green Elements and Environmental Mitigation

5.1.1 Project Design

Based on the Terms of References for Formulation, our Consultants will be required to design green elements into the design of buildings. Designs will integrate the application of *inter alia*:

- Solar and photo-sensory lighting externally
- Water harvesting techniques
- Water re-use and recycle technologies
- Low consumption fixtures (sanitary fittings, lighting bulbs etc.)
- Designation of green spaces with low maintenance (native plants etc.)

5.1.2 Project Implementation

The JSIF will ensure that environmental considerations are made at the design stage as well the implementation / construction phase. At the construction phase, JSIF Officers must identify and mitigate environmental issues associated directly and / or indirectly with the project site and or immediate community.

Where issues are identified by an Officer other than the Environmental Officer (EO), the issue must be brought to the EO to outline how it must be resolved.

5.1.3 Contract Management

All designs that have been formulated, will at the outset consider green elements related to energy usage, designation of green spaces, water harvesting and re-use, lighting and fixtures. Additionally, signs related to environmental awareness and site safety will form part of JSIF's project signage. These would therefore be included and costs noted within the project Bills of Quantities.

Issues identified during construction will be reviewed, mitigations developed and implemented. Where these activities can be carried out by the Contractor on site, he will be so instructed. Where an external party is required to resolve the issue, payment will be made under the existing Contract. Each works project will therefore include a Provisional Sum to be applied as directed by the Project Engineer acting on instructions of the Environmental Officer.

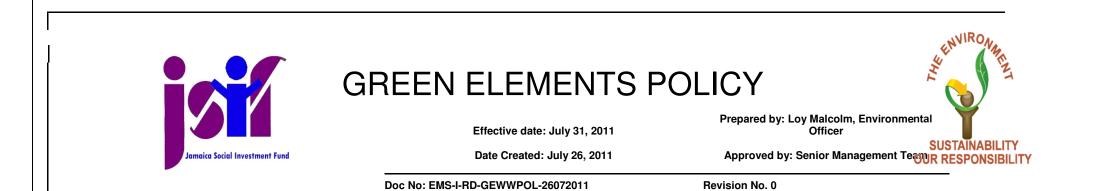
6.0 **RESPONSIBILITIES**

Outlined below are the responsibilities of various Officers within JSIF:

- Technical Review Committee Detailed review of drawings, designs and Bills of Quantities to ensure that the requirements of the policy are addressed.
- Environmental Officer Based on the requirements of the policy, identify activities to be added, and rates developed within the JSIF Cost Database.
- Project Officer Ensure that items are included in Bills of Quantities in fulfillment of JSIF's policies and procedures. By extension the Project Officer must ensure performance on the part of the Formulator and Contractor.
- MIS Ensuring that the Fund Manager, specifically the Cost Database module is maintained.

7.0 RECORDS

All records associated with this procedure will be managed in accordance with the JSIF Document Management Procedure.



JAMAICA SOCIAL INVESTMENT FUND GREEN ELEMENTS PROGRAMME

| PROGRAMME | POLICY STATEMENT | OBJECTIVES | TARGET | PERSON RESPONSIBLE | |
|------------------------|--|---|--|--|--|
| Energy Conservation | JSIF is committed to reducing energy use and demand by considering as first resort, the implementation of energy efficient and conservation technologies in its operational activities. | To reduce energy consumption at JSIF's finally completed building projects and to lower long term operating and maintenance costs | To modify TORs, requiring consultants to incorporate and specify green energy technologies in project formulations. | PM, Environment | |
| | | | Install energy saving electrical fixtures at all building projects by December 15, 2012 | | |
| | | To increase the number of energy efficient appliances provided by JSIF | With immediate effect, the Admin Department purchase only energy efficient appliances and equipment e.g. stoves, refrigerators and computers | Technical Officers Project Officers Environmental | |
| | | To increase the use of alternative energy at JSIF's project sites | 80% of external lights at active works buildings projects are solar by December 15, 2012 | Officer | |
| | | | To install solar panel in 2% of active works buildings projects by Jan 1, 2013 | | |
| | | To promote energy conservation and use efficiency at all building construction projects | Develop and distribute energy conservation booklet to all clients following completion of each project | Environmental Officer | |
| Water Conservation | JSIF is committed to water resources management and therefore will implement any practicable | • | To modify TORs requiring consultants to incorporate and specify the water efficient technologies included project | PM, Environment | |
| Page 1 of 3 | | | | | |

| | conconvotion | | designs. December 15, 2012 | | |
|-----------------------|---|--|---|---|--|
| | conservation. | To increase the use of water conservation technologies at JSIF's project sites | To install water saving technologies including low flush faucets, self-closing faucets, and high efficiency toilets at all works building by December 15, 2012. | Tech. Review Comm. Technical Officers Project Officers Environmental Officer | |
| | | To reduce water pollution caused by JSIF's project activities | To provide training for TOs and establish an onsite monitoring programme to help prevent water pollution. | Environmental Officer | |
| | | To promote awareness of water resource management | Develop a draft water conservation booklet for CBOs by March 30, 2012. | Environmental Officer | |
| Waste Management | JSIF is committed to the implementation of proven waste management practices and technologies as standard operational procedures in order to minimize waste disposal and environmental impacts. | To manage the use and disposal of construction waste | Modification of costing approach to ensure appropriate costs are assigned to the activity and disposal is managed. December 15, 2012 | | |
| | | To reduce waste disposal from JSIF's funded livestock farming projects and all works projects | To modify TORs requiring consultants to incorporate a composting unit or biogas digester in the formulations for all livestock farms. December 15, 2012 | Environmental Officer | |
| | | | To establish a composting unit or biogas digester at 50% of livestock farms by June 30, 2012. | Tech. Review Comm. Technical Officers Project Officers Environmental Officer | |
| | | To increase awareness of livestock waste management | Distribution of composting guidelines at all livestock | Environmental Officer | |
| | | To prepare a guideline for the construction, operation and maintenance of composting units | farms following project final completion | | |
| reen Space clusion | Except under conditions where there are suitable existing vegetation, no building construction project shall be deemed finally completed without the establishment of a dedicated green space or permanent plants in the ground. The green space must be established to minimize environmental impacts associated with landscaping by selecting native plants that are adaptable to the environment; low maintenance; non-noxious; and aesthetic. | permanent plants at all building | To modify TORs requiring formulators to include green space in all project design. December 15, 2012 | PM, Environment | |

| I | To reduce soil erosion and dust pollution at | | |
|---|--|---|--|
| | project sites by establishing vegetative | 1110% of huilding projects have a dedicated green share I | Tech. Review Comm. Technical Officers Project |
| | 10 improve the sectnetic value of INFC | 100% of plant stock are locally produced and adaptable to the environment, and hardy (lessened water requirements). December 15, 2012 | |