# Table of Contents


Page

**FOREWORD** **i**

**Acknowledgements** **ii**

**Members of the EMS Policy & Strategy Working Group** **ii**

**Acronyms** **iii**

**1.0 INTRODUCTION**

1.1 EMS and Sustainable Development **1**
1.2 Environmental Management Systems **2**
1.3 The Benefits, Opportunities, Challenges **3**
1.4 The Policy and Strategy Development Process **4**

**2.0 THE POLICY**

**2.1 GUIDING PRINCIPLES** **5**

**2.2 POLICY STATEMENTS** **6**

**2.3 POLICY GOALS** **10**

**3.0 STRATEGIES** **11**

**4.0 FUNDING STRATEGY** **22**

**5.0 MONITORING & EVALUATION** **22**

**6.0 SUPPORTING DOCUMENTS** **22**

**APPENDIX – Overview of trends in EMS implementation globally and locally**

# FOREWORD

Jamaica has been putting in place policies and programmes for a sustainable future, one which balances economic growth and development and environment and social justice needs. We have been utilizing new tools, new forms of collaboration and innovative policy directions and regard the preparation of an Environmental Management Systems (EMS) Policy as an important aspect of this approach. In embarking on this policy initiative, Jamaica is taking account of national priorities and being proactive in responding to international trends. Very few developing countries have yet taken this step.

Policymaking is often sectorally segmented and time horizons tend to be short term. This policy, however, seeks to be integrative and looks ahead to medium and long-term impacts.

The purpose of this policy is to-

- Articulate the Government's commitment to the promotion and use of EMS.
- Establish the role of the government, private sector and communities in the use of EMS.
- Provide the framework for integrating and sustaining existing policies and activities related to EMS by bringing together new tools and new forms of collaboration.
- Put in place the necessary institutional, regulatory and promotional measures to ensure successful uptake of EMS.
- Ultimately improve Jamaica's environment and its competitive advantage.

The key challenge in making progress to sustainable development is bridging the gap between talk and action. Governments must not only enunciate policies but must implement measures to ensure that the desired results are achieved.

The EMS Policy and Strategy are based on the principle that all citizens of Jamaica are individually and collectively responsible for the quality of our environment: we will use our natural resources in a sustainable manner to achieve economic growth and international competitiveness, and we must encourage responsible environmental behaviour.

The implementation of EMS will be provided through the use of agreements, environmental awareness, economic incentives and flexible regulatory mechanism for both the public and private sectors.

We view this EMS policy initiative as a practical step in our quest to achieve a quantum leap for Jamaica on the sustainable development pathway leading to an improved quality of life for all in Jamaica.

Seymour Mullings

Seymour Mullings, MP

Deputy Prime Minister & Minister of Land and Environment

## *ACKNOWLEDGEMENTS*

The NEPA/Natural Resources Conservation Authority and Ministry of Land and Environment wish to thank the Environmental Management Systems (EMS) Policy & Strategy Working Group and its team of Consultants and Administrative Support for designing and coordinating the consultation process and preparing the document. Thanks must also be extended to the many organisations and individuals that have participated in the EMS discussions and consultations by attending and/or presenting papers at the various meetings and seminars. The GOJ/USAID Coastal Water Quality Improvement Project was instrumental in providing funding and technical assistance.

### Members of the EMS Policy & Strategy Working Group

Miss Leonie Barnaby – Ministry of Land & Environment
Dr. Mearle Barrett – NRCA
Mr. Stewart Forbes – ENACT
Miss Denise Forrest – CWIP
Mrs. Elaine Gordon – Bureau of Standards
Mrs. Pauline Gray – JEA
Miss Althea Johnson – Ministry of Tourism
Mrs. Margaret Mais – JAMPRO – National Industrial Policy
Mr. Hopeton Peterson – PIOJ
Mrs. Velma Sharpe – JMA
Mrs. Winsome Townsend – NRCA [Chairperson of Working Group]
Mr. Richard Wright – Ministry of Finance & Planning

**Administrative Support and Recording Secretary** - Mr. Dean Bennett

**Consultants**

Dr. Ira Feldman – Major Countries and Benchmark Countries

Mr. Robert Wynter and Ms. Margaret Orane – Target Sectors

Dr. Michael Witter – Economic Considerations

Mr. Hugh Hyman – Legislative Instruments and related mechanisms.

# ACRONYMS

CIDA - Canadian International Development Agency
CWIP – Coastal Water Quality Improvement Project
EAST – Environmental Audits for Sustainable Tourism
EEPI – Environmental Economic Policy Instruments
EMS – Environmental Management Systems
ENACT – Environmental Action Programme
GOJ – Government of Jamaica
HACCP – Hazard Analysis Critical Control Points
IDB – Inter-American Development Bank
ISER – Institute of Social and Economic Research
ISO – International Organisation for Standardisation
JAMPRO – Jamaica Promotions Limited
JaNEAP – Jamaica National Environmental Action Plan
JBS – Jamaica Bureau of Standards
JMA – Jamaica Manufacturers Association
JTURDC – Joint Trade Union Research & Development Council
PIOJ – Planning Institute of Jamaica
PSOJ – Private Sector Organisation of Jamaica
TTBS – Trinidad & Tobago Bureau of Standards
MIF – Multilateral Investment Fund
MIND – Management Institute for National Development
MIOB – Mona Institute of Business
NEEAPSD – National Environmental Education Action for Sustainable Development
NEEC – National Environmental Education Committee
NIP – National Industrial Policy
NRCA – Natural Resources Conservation Authority
NEPA – National Environmental & Planning Agency
NWC – National Water Commission
OUR – Office of Utilities Regulation
SDC-J – Sustainable Development Council of Jamaica
SIRI – Sugar Industry Research Institute
SMEs – Small and Medium-sized Enterprises
SRC – Scientific Research Council
UK – United Kingdom
UNDP – United Nations Development Programme
USA – United States of America
USAID – United States Agency for International Development
UWICED – University of the West Indies Centre for Environmental Development
WG – Working Group
WRA – Water Resources Authority

# 1.0 Introduction

## 1.1 EMS and Sustainable Development

Sustainable Development is about how we live on this earth. Sustainable Development means that we must seek to balance the growing of economic capital with the protection of our natural resources for the purpose of improving our quality of life.

The challenge to policy makers is the integration of economic, environmental and social considerations and furthermore to see that policy is supported by effective management.

**Definitions of Sustainable Development:**

*'Passing on to future generations an equal or enhanced stock of economic, natural and social capital.'*

*'Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'*

*'An evolving process that improves the economy, the environment, and society for the benefit of current and future generations.'*

The long-term policy objective of the Government of Jamaica is Sustainable Development. In this regard, the Government has taken several initiatives relating to long-term planning and sustainable development viz.:

- Development of the three-year Jamaica National Environmental Action Plan (JaNEAP) in 1995 with the publication of JaNEAP Status Reports annually and a complete update in 1999.
- In 1998, the National Environmental Education Action Plan for Sustainable Development 1998-2010 was completed.
- The Sustainable Development Council of Jamaica (SDC-J) was formed under the UNDP Regional Capacity 21 project, as an advisory body to promote discussion on sustainable development.

However, despite these initiatives there still are gaps between planning and implementation. Closing the implementation gap means paying close attention to the management side of the Sustainable Development equation.

*EMS is one of the tools that can be used by businesses, the public sector and municipalities to improve their environmental performance by controlling, reducing, and preventing the impact of their activities on the environment thus ensuring sustainable development.*

There are a number of emerging models, which can help to close the implementation gap while placing Jamaica firmly along the path to sustainability. An Environmental Management System (EMS) is one of the tools that many agencies are using to manage their sustainable development agenda. Based on the management concept - plan, do, check, and act – an EMS is being used to close the gap between planning and action towards continuous improvement.

## 1.2 Environmental Management System (EMS)

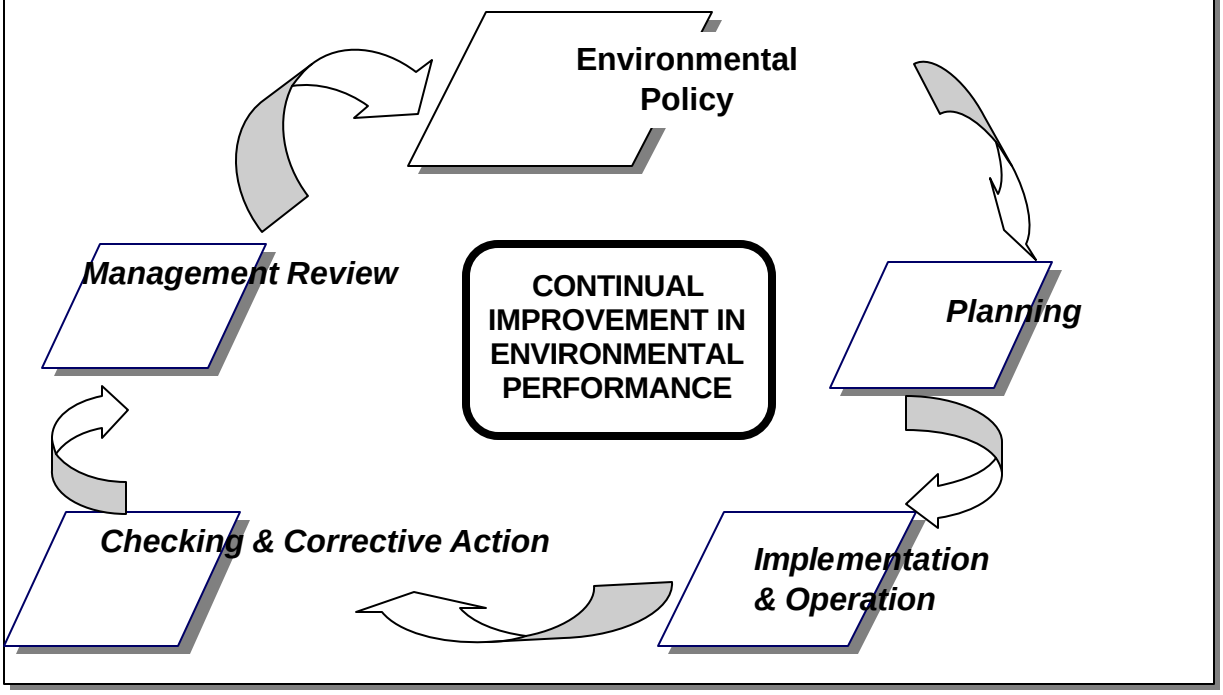
An Environmental Management System is a management tool which enables an organisation (business, government department or municipality) to address the impacts of its products, services and processes on the environment.

EMS is being increasingly accepted, adopted and implemented by industry, services, utilities, government and commercial enterprises concerned with the achievement and demonstration of sound environmental performance by controlling, reducing, and preventing the impact of their activities on the environment [Appendix]. The EMS approach is also being rapidly adopted as a means of achieving continual improvements in internal efficiencies within operations thereby helping to reduce costs and achieve a competitive advantage.

International standardisation covering environmental management have been developed to provide organisations with the elements of an effective management system which, can be integrated into the decision-making process to achieve environmental, protection, efficiency and economic objectives. The International Organisation for Standardisation (ISO) has developed the ISO 14000 series of EMS standardisation. Among the series ISO 14001 is the certifiable standard and specifies the requirements for the management system.

**ISO Model**

An environmental management system is part of the overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, process and resources for developing. Implementing, achieving, reviewing and maintaining the environmental policy.



There are other models of EMS which are based on the ISO model. The Green Globe standard has been adopted internationally by the tourism sector while in Europe there is the Eco-Audit and Management System (EMAS), a voluntary scheme aimed at achieving on-going improvements in environmental performance in industry. Depending on the business and its relationship with suppliers, an organization may choose to become certified to any one of the internationally accepted standards relevant to the business sector. However, certification is optional and is only one of several benefits of the EMS approach as a result some organizations may choose to implement the management system without opting for certification.

## 1.3 Benefits, Opportunities and Challenges

In the business sector, an environmental management system is seen as a tool to improve internal efficiencies, increase competitiveness and profits. In the financial sector, banks and insurance companies are requiring assessments of environment risks before funding projects and an EMS is seen as a way of reducing risks and verifying environmental performance. The New York and London Financial markets have introduced a 'Sustainability Index' and also annual environmental reporting requirements for companies listed on the exchange. Governments are 'greening' their own operations as well as influencing the supplier chain by implementing a green procurement strategy [Appendix]. Environmental regulators are using EMS as an alternative regulatory pathway and a mechanism for achieving regulatory flexibility. In addition, globalisation, Agenda 21 and other international environmental agreements, and trade arrangements are fuelling the need for approaches to improve a company or nation's ability to compete. Issues related to access to markets, financing and consumer pressure demand that organizations demonstrate their environmental performance and this can best be done through the implementation of an EMS.

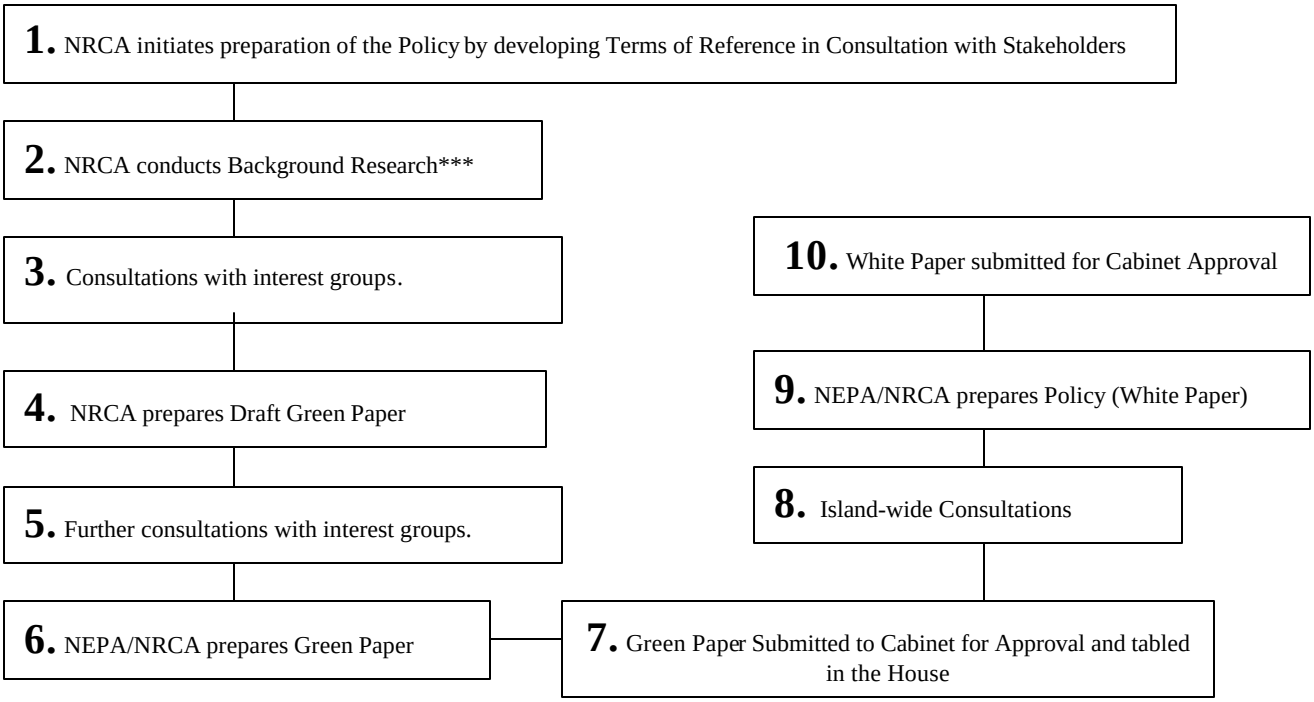
Environmental management encompasses a full range of issues including those with strategic and competitive implications. The drivers for EMS implementation internationally are as follows:

- Global competition
- Market pressures
- Improving efficiencies
- Public image/Stakeholder demands
- Enhanced competitive advantage
- Environmental protection
- Financial requirements

The challenges for effective application of the EMS Policy and Strategy framework are as real as the opportunities. One of the difficulties lies in removing the levels of ignorance surrounding the use of the tool. Often, an EMS has been regarded as only relevant to the "environmentalist" and as a result its cross cutting nature and applicability to business and government have not been fully appreciated. Overcoming this barrier will require an engagement and commitment from the highest level of organisations. Public engagement through a process of environmental education, which will not only sensitise people but change behaviour, is a significant challenge. The challenges facing small and medium size enterprises (SMEs) must be taken into account as these types of businesses are in the majority of those operating in the country. Developing the necessary skill base will also be critical to the successful promotion of environmental management systems. Finally, removing the culture of implementation inertia within the public and private sectors and building a foundation of close collaboration among stakeholders will be a necessary ingredient to success.

## 1.4 The EMS Policy and Strategy Development Process

The development process of the policy and strategy is outlined below:




Steps 1 - 7 consisted of several meetings with stakeholders to discuss development of the policy as well as a presentation to the Cabinet Sub-Committee on Land & Environment. After the research was completed (step 2) and a draft green paper prepared, meetings were held with select interests groups to discuss elements of the draft policy. These steps have culminated with the submission of this green paper to Cabinet.

**Steps 8 – 10 are to be carried out upon approval of this Green Paper by Cabinet.**

In October, 1999 the Natural Resources Conservation Authority (NRCA) convened a multi-sectoral Working Group to devlop a draft EMS Policy and Strategy. The Working Group, drawn from a wide cross-section of stakeholders, extended its reach by consultations with a number of organizations both locally and internationnaly. To support its work the EMS Policy & Strategy Working Group reviewed the status of EMS and EMS implementation in major countries (UK, Japan, Europe, USA, and Canada), in benchmark countries (Cuba, Costa Rica, Columbia, Malaysia, Israel, Barbados, Trinidad & Tobago and Guyana) and in economic sectors (bauxite, tourism, coffee, rum and agro-industry). The legislative and economic scenario was also reviewed.

***This Research resulted in the preparation of the following reports which informed the EMS Policy & Strategy:

1. **EMS Policy & Strategy Supporting Document - The Major Countries Report**
2. **EMS Policy & Strategy Supporting Document - The Benchmark Countries Report**
3. **EMS Policy & Strategy Supporting Document - Key Economic Sectors Report**
4. **EMS Policy & Strategy Supporting Document - Legislative Instruments Report**
5. **EMS Policy & Strategy Supporting Document - Economic Incentives Report**

**These reports are available at the** http://www.nepa.gov.jm **and at the documentation centres/libraries of the following institutions: NEPA/NRCA, Ministry of Land & Environment, JBS, PIOJ, JEA, JAMPRO, JMA, PSOJ, UWICED, MIOB, SDN, ISER and Parish Libraries.**

# 1.0 The Policy

## 2.1 Guiding Principles

**The EMS Policy and Strategy embody the following principles:**

- Natural resources are a part of the nation's capital and need to be managed for sustainable growth. Exploitation of the island's natural resources in pursuit of economic development should therefore be carried out in a sustainable manner that protects the environment and shall constitute an integral part of the development process of the nation.

- An Environmental Management System is a management tool to achieve sustainable development concepts, policies, plans, and projects. Keeping to the path of sustainable development is an essential reason for the EMS Policy and Strategy. The Government of Jamaica will provide leadership by "greening" its own operation as a first step towards responsible environmental stewardship.

- The Polluter Pays Principle and the Users Pay Principle require that there is the establishment of a set of sanctions, and charges for the use of natural resources and other environmental facilities, and the degradation of the environment, while granting incentives to encourage more environmentally responsible behaviour.

- All citizens of Jamaica are individually and collectively responsible for the quality of the environment. Environmental issues therefore require the full participation of all. Environmental awareness of civil society will be facilitated and participation encouraged by making information on environmental issues as widely available as possible to the various publics.

## 2.2 Policy Statements

The following are the policy statements:

**1. A Policy & Strategy based on the Premise that the Benefits of EMS Outweigh Costs**

The implementation of an effective and quality EMS represents a benefit to any organisation in terms of increasing internal efficiencies, reducing waste and costs and improving environmental performance. While there will be initial costs these should be regarded as an investment that will be surpassed by the benefits gained. It is expected that private businesses will finance their own EMS implementation in their own interest bearing in mind the benefits to be gained in enhanced competitiveness.

***One of the primary strategies of Government in promoting the use of EMS will be the creation of an enabling environment and the building of capacity within key government agencies to facilitate the application of EMS in the public and private sectors. This will be done by providing technical assistance through the use of pilot projects, case studies, 'train the trainers programmes', equipping post-secondary educational institutions to deliver courses on EMS and the provision of easily accessible information on EMS.***

**2. Economic Considerations**

Economic considerations are critical in promoting the use of EMS. The challenge for environmental policy is to capture the cost of the environment in production and consumption without dislocating the economy and/or imposing undue burdens on the population. The economic strategy to implement EMS requires that Government establish an appropriate set of sanctions for polluters, charges for the use of natural resources and other environmental facilities and a set of incentives to encourage firms and households toward more environmentally responsible behaviour. Examples of the types of incentives are public recognition through awards for an enterprise and its staff, and certificates of achievement that can be used in projecting the enterprise's image into the marketplace.

A firm with a functioning EMS is more likely to utilise incentives productively. A condition for accessing incentives by the management could be the implementation of an effective EMS.

***The Government, while maintaining and even strengthening the efficacy of its 'stick' sanctions and enforcement capabilities will also***

***provide 'carrots' such as special non-financial incentives schemes. The financial incentives schemes under the NIP will be examined and adjusted, where necessary, to encourage EMS implementation.***

***Enterprises could be required to participate in cleaning up the environment as a sanction for excessive pollution. One sanction for an institution that pollutes could be to require the implementation of a verifiable and effective EMS. This will help organisations to reduce the impact on the environment and continually improve their environmental performance and sustainable business practices, which ultimately will benefit both the institution and the country.***

***The Government will put in place sanctions and fines that will be sufficiently severe to serve as deterrents to polluters. However, sanctions must be enforceable and fines will be sufficiently low as to be affordable and collectible.***

## 3. EMS and the Law and Voluntary Action

An organisation can approach its responsibility to the rule of law, whether primary or secondary legislation, in two different ways viz.:

i. A reactive attitude with environmental legislation being seen as almost intrusive as well as essentially contributing to increased costs.
ii. A pro-active approach which goes beyond compliance to legal requirements and towards environmental excellence. In this scenario, the organisation not only integrates legal, production and market objectives towards ensuring compliance with environmental regulations, but establishes programmes to deal effectively with its waste, reduce its environmental liability and enhances the company's image while reducing costs, improving communication, product acceptance and its competitive advantage.

The concept of 'Due Diligence' for instance, where the polluter accepts responsibility for waste generation 'from cradle to grave', is an example of the proactive approach. The implementation of an EMS will facilitate an organisation in observing due diligence and ensuring a proactive approach to fulfilling its environmental responsibilities.

A company's environmental performance is assessed at a minimum by the use of established standards and targets that are based in law. An important environmental responsibility is therefore to work towards achieving the relevant standards as required by the various laws and regulations but not necessarily to be limited by these standards in setting targets within an organisation. Mechanisms that can be used to

encourage compliance to legislation, as well as promoting environmental excellence are ***agreements*** between the regulator and the regulated, and ***guidelines.***

***The Government will not legislate the use of an environmental management system within organisations. Instead it will promote the voluntary application of a verifiable EMS to be incorporated in agreements and/or guidelines with the regulator. This framework will help to encourage organisations to move beyond compliance towards environmental excellence. Agreements will not replace the existing legislative arrangements but create an alternative regulatory pathway.***

## 4. Regulatory Flexibility

The NEPA/NRCA already has in place targets such as air, water and wastewater standards that are used in evaluating an organisation's environmental performance. However, performance metrics, which incorporate and go beyond the current standards need to be established. Use of an EMS to verify compliance of companies to environmental regulations, albeit within a voluntary framework agreed between the regulator and the company, offers an alternative regulatory pathway as one form of regulatory flexibility. In this scenario an EMS can be used by both the regulator and the regulated as a means of verifying environmental performance by establishing targets, measuring against these targets and taking corrective action.

***The Government will, in addition to its existing regulatory mechanism, introduce the use of regulatory flexibility as an alternative regulatory pathway, through the use of an innovative mix of legislation, agreements and guidelines, using EMS to ensure compliance with environmental regulations.***

## 5. Environmental Reporting

The general public is a key stakeholder in the conservation and sustainable use of Jamaica's natural resources. While there is a system of environmental reporting there is no mechanism for public environmental reporting by public or private sector entities. However, public reporting will be a necessary element of a regulatory flexibility approach and will allow for the building of confidence in the process of environmental management. Public environmental reporting is therefore critical in the use of an EMS approach to achieve continuous improvement and set the country on a sustainability path.

***An approach to public environmental reporting will be introduced by the Government in consultation with the range of relevant stakeholders and in keeping with ISO 14000 requirements and international trends.***

## 6. An Informed Citizenry

The general public has an important responsibility in the protection of the environment. However, citizens can only fulfil this role if they are informed and educated in a way that not only sensitises them to the issues but also influences a change in behaviour. To achieve this will require a consistent, targeted education programme on the benefits of environmental protection. Information on the link between a good quality environment and the quality of life of the average citizen must be widely disseminated. The use of an EMS approach to help to achieve that goal in the interest of the public, economic development, the quality of life and future generations must be well understood.

***The Government will place emphasis on increasing the environmental awareness of civil society and influencing attitudinal changes by engaging in an aggressive and sustained public education programme.***

## 7. Institutional Strengthening

The main institutions that will be responsible for implementing the EMS Policy and Strategy will be the National Environment and Planning Agency (NEPA) and the Jamaica Bureau of Standards (JBS). Other agencies such as the National Solid Waste Management Authority, The National Water Commission's Waste Management Division and the Parish Councils will also play a key role in providing the infrastructure base to implement and support sound environmental management programmes.

***These institutions will reallocate their existing resources and will be strengthened with new resources, allowing them to be better able to increase their own internal efficiencies as well as to adequately service the rest of the public sector, the private sector and communities. Where applicable the agencies will be encouraged to implement an EMS to ensure improved environmental performance and continual improvement.***

## 2.3 Policy Goals

The EMS Policy and Strategy aims to achieve the following goals:

**GOAL 1:** To establish the framework within which Environmental Management Systems will be adopted across all sectors of society.

**GOAL 2:** To strengthen the legal and economic framework to facilitate the promotion and implementation of Environmental Management Systems.

**GOAL 3:** To ensure an informed public who will support and advocate for responsible environmental stewardship.

# 3. Strategies

The strategies to support the policy goals are outlined below. These strategies will build on on-going programmes, tackle the weaknesses/challenges that have been identified in the policy development process as well as introduce new initiatives. The EMS Policy & Strategy, is a long-term process and will require on-going monitoring given the dynamics of global issues and their impact on the country's strategic directions. The strategies contemplate a five-year timeframe* during which the programmes and actions will be evaluated and reported on. At the end of this initial five years there will be a complete review, impact analysis and update. This approach is deliberate in order to adopt the EMS model of "**Plan, Do, Check and Act**" which will allow for continuous improvement of the strategies and their accompanying actions.

***Shaded areas indicate period of activity.**

**GOAL 1: To establish the framework within which Environmental Management Systems will be adopted across all sectors of society.**

***Strategy 1.1: Build capacity to plan, implement, monitor and evaluate EMS in the Public Sector***

The Government through the GOJ/CIDA ENACT Programme has already begun to build capacity of public sector institutions to incorporate environmental considerations into corporate plans. In addition, through this programme the Government is implementing an environmental stewardship programme in the Ministry of Finance & Planning and the Ministry of Land & Environment. A "Lessons Learnt" approach will be used to bring the other public sector institutions on board. The EMS Policy/ Strategy will develop and execute a training programme to build capacity to implement EMS in the public sector. The strategy will include institutions at both the national and local government levels. The Government will seek to influence the private sector to market environmentally friendly goods by developing and implementing a Green Procurement Policy and Guidelines. The Government will institute projects to increase awareness of EMS in the private sector and civil society and to provide practical experience.

| ***Roles / Responsibilities:*** | **ACTIONS:** | | **Timeline (years)** |
|---|---|---|---|
| *NEPA/NRCA will assume direct responsibility for actions 1.1.1 to 1.1.3 and 1.1.8 and will collaborate with the relevant entities* in *implementing the other actions.* | 1.1.1 | Identify specific ministries, department and agencies to receive priority attention for capacity building. | **1 2 3 4 5** |
| | 1.1.2 | Train staff in priority ministries, department and agencies. | **1 2 3 4 5** |
| | 1.1.3 | Continue to sensitize the public sector on EMS | **1 2 3 4 5** |
| | 1.1.4 | Incorporate EMS into Corporate Plans of Government departments and agencies. | **1 2 3 4 5** |
| ***Desired Policy/Strategy Outcomes:*** *All public sector institutions implementing EMS and have high level of efficiency and environmental performance* | 1.1.5 | Greening of the Ministry of Finance and the Ministry of Land and Environment as strategic lead public entities. | **1 2 3 4 5** |
| | 1.1.6 | Greening of the other Government agencies. | **1 2 3 4 5** |
| | 1.1.7 | Modify the Procurement Policy to include green procurement guidelines. [See action 2.2.3] | **1 2 3 4 5** |
| ***Outcome Indicators:*** *The number of public sector institutions using EMS. The level of environmental performance of public sector agencies.* | 1.1.8 | Incorporate EMS considerations in the new NIP and the Sustainable Tourism Master Plan. | **1 2 3 4 5** |
| | 1.1.9 | Implement a Pilot Project at the Local Government level, in three Parish Councils. | **1 2 3 4 5** |
| | 1.1.10 | Integrate EMS into all environmental policies. | **1 2 3 4 5** |

***Strategy 1.2: Build the capacity of Jamaica's lead Environmental Agency, the NEPA/NRCA to serve all sectors in the implementation of EMS.***

Jamaica's centrepiece environmental legislation, the NRCA Act, 1991 is the primary legislative instrument with regard to licensing of activities affecting the environment. Section 4 (2) of the Act, clearly facilitates the use of EMS. For instance, Section 4 (2) (h) facilitates the Authority entering into appropriate agreements with enterprises and Section 4 (2) (d) allows for the formulation of standards and codes of practice. In addition, under the NRCA (Permits & Licences) Regulations, 1996, persons granted licences are required to keep all records of the operation including any environmental monitoring for a period of not less than ten years. These elements of the Act are useful tools for promoting the use of EMS.

The Government will build the capacity of the National Environmental and Planning Agency (NEPA), which administers the NRCA Act, so that this institution can adequately serve all sectors of society in the area of EMS. The organisation will be strengthened to effectively monitor EMS implementation and to use the regulatory flexibility approach to environmental monitoring.

***Roles / Responsibilities:***

*NEPA will be responsible for implementing Actions 1.2.1 to 1.2.9.*

***Desired Policy/Strategy Outcomes:***

*NEPA operating a flexible regulatory approach with a voluntary reporting scheme encouraged by incentives for continual improvement combined with strong enforcement.*

***Outcome Indicators:***

*The number of institutions that have entered into Compliance Agreements with NEPA using EMS.*

*The extent to which Compliance Agreements are adhered to.*

**ACTIONS:**

| | | Timeline (years) |
|---|---|---|
| 1.2.1 | Development of NEPA's Environment Policy. | 1 2 3 4 5 |
| 1.2.2 | Implementation of EMS (14001) in NEPA. | 1 2 3 4 5 |
| 1.2.3 | Implementation of a quality management system such as ISO 9000 within NEPA (including training of internal auditors) | 1 2 3 4 5 |
| 1.2.4 | Institutional strengthening support to the Pollution & Waste Management Division of NEPA. | 1 2 3 4 5 |
| 1.2.5 | Strengthening and ISO 9000 and 14001 certification of NEPA's Laboratory. | 1 2 3 4 5 |
| 1.2.6 | Make relevant changes to the NRCA Act. | 1 2 3 4 5 |
| 1.2.7 | Put in place an EMS Resource Centre and designate two officers as EMS Technical Information Officers. [See Action 1.3.1] | 1 2 3 4 5 |
| 1.2.8 | Identify courses and programmes for management and policy makers in all sectors. | 1 2 3 4 5 |
| 1.2.9 | Conduct five study tours on EMS focusing on EMS in public sector, private sector, and municipalities. | 1 2 3 4 5 |

***Strategy 1.3*: *Build the capacity of Jamaica's National Standards Body to foster and support the implementation of EMS in the private and public sectors.***

The Jamaica Bureau of Standards (JBS) has established an Environmental Management Systems Unit within the Standards Department to: ensure Jamaica's active participation in the development of the ISO 14000 standards; adopt/adapt these standards locally, and to lay the foundation for the establishment of a local accredited Registration/Certification Body.

Twelve (12) standards in the ISO 14000 series have been published by ISO, of these six (6) have been made readily available at affordable prices through their adoption as Jamaican as Jamaican National Standards. Among these are ISO 14001, the standard used for certification and its accompanying implementation guide ISO 14004; as well as three (3) standards (ISO 14010 – 14012) covering environmental auditing and one guide on environmental labelling. Five standards are also at different stages of adoption.

***Roles / Responsibilities:***

*The Bureau of Standards will be responsible for Actions 1.3.1 to 1.3.7.*

***Desired Policy/Strategy Outcomes:***

*There is a cadre of local certified auditors to adequately service the private sector and the Bureau of Standards, being fully accredited as a certifying body, has a large clientele of businesses being certified by it to various standards.*

***Outcome Indicators:***

*The extent to which the private sector is serviced by local certified auditors.*

*The number of businesses certified to the various standards by the Bureau of Standards.*

**ACTIONS:**

| | | Timeline (years) |
|---|---|---|
| 1.3.1 | Establish and maintain an EMS Technical Clearing House at the Bureau of Standards. [See Action 1.2.7] | 1 2 3 4 5 |
| 1.3.2 | Train and certify of auditors from JBS and the private sector to conduct 3rd party ISO 9000 and ISO 14000 certification audits. | 1 2 3 4 5 |
| 1.3.3 | Implement ISO 9000 and ISO 14000 at the JBS. | 1 2 3 4 5 |
| 1.3.4 | Training internal auditors from JBS and the private sector. | 1 2 3 4 5 |
| 1.3.5 | Establish and accredit a Registration/Certification Body at JBS. | 1 2 3 4 5 |
| 1.3.6 | Practically train and certify JBS personnel in HACCP. | 1 2 3 4 5 |
| 1.3.7 | Accredit JBS Laboratories. | 1 2 3 4 5 |

***Strategy 1.4: Build capacity to plan, implement, monitor and evaluate EMS in the Private Sector***

The Government will encourage companies to implement environmental safeguards, to maintain the standards and environmental performance to which they are committed, and to share their experiences with other local businesses. Some private sector companies have already begun to implement EMS and the GOJ through various projects e.g. GOJ/CIDA-ENACT, GOJ/USAID-CWIP and USAID-EAST will continue to work with trade associations and industry sectors to support this trend. Special emphasis will be placed on small and medium sized enterprises (SMEs). The Government will implement pilot projects, conduct training programmes and develop frameworks for information dissemination and exchange.

***Roles / Responsibilities:***

*NEPA will have overall responsibility for implementing all these actions except for Action 1.4.7 for which JBS will be responsible. NEPA and JBS will collaborate in implementing Action 1.4.3.*

***Desired Policy/Strategy Outcomes:***

*Most Jamaican businesses Implementing some form of EMS and are rated high in environmental performance.*

***Outcome Indicators:***

*The number of businesses implementing EMS.*

*The extent to which companies have improved their environmental performance.*

*The extent to which companies have improved their international competitiveness.*

| **ACTIONS:** | | Timeline (years) 1 2 3 4 5 |
|---|---|---|
| 1.4.1 | Develop Local EMS case studies | 1 2 3 4 5 |
| 1.4.2 | Assist local environmental consulting firms to acquire the skills to facilitate EMS implementation by their clients. | 1 2 3 4 5 |
| 1.4.3 | Develop and implement pilot projects in small & medium sized businesses (SMEs) including the use of a mentorship programme in private sector. | 1 2 3 4 5 |
| 1.4.4 | Develop and implement a Corporate Leadership Programme including environmental reporting concepts. | 1 2 3 4 5 |
| 1.4.5 | Implement EMS in Solid Waste Management Companies. | 1 2 3 4 5 |
| 1.4.6 | The training of auditors from the private sector to carry out 3rd party certification audits of EMS and Environmental Performance including certification of the auditors [See Action 1.3.4]. | 1 2 3 4 5 |
| 1.4.7 | Develop waste management strategies and cleaner technology approaches to move practices towards prevention of pollution and reduction in the use of natural resources. | 1 2 3 4 5 |
| 1.4.8 | Develop a Waste Exchange Network with UWICED. | 1 2 3 4 5 |
| 1.4.9 | Develop codes of practice with key private sector groups. | 1 2 3 4 5 |
| 1.4.10 | Develop and implement an EMS Information Network. | 1 2 3 4 5 |

***Strategy 1.5: Build capacity to plan, implement, monitor and evaluate sustainable communities using an EMS approach.***

Sustainable communities have a fundamental goal to achieve an improved quality of life and ultimately to pass on to future generations equal or increased natural, social and financial capital.

The EMS approach will be used as one of the methodologies to operationalize the Local Sustainable Development Planning Framework that is being developed. Using this strategy, NEPA will tap into the machinery of the Local Government Reform and the Social Development Commission to build the capacities of communities to use EMS to integrate economic, social and environmental issues in order to develop sustainable communities across Jamaica.

| | | Timeline (years) |
|---|---|---|
| ***Roles / Responsibilities:*** *NEPA will be responsible for implementing Actions 1.5.1,1.5.2, and 1.5.5. The Ministry of Local Government will be responsible for Action 1.5.3. NEPA will collaborate with the NWC which will be responsible for Action 1.5.4.* | **ACTIONS:** | **1 2 3 4 5** |
| | 1.5.1 Develop strategies and methodologies to incorporate the use of EMS in sustainable community development. | **1 2 3 4 5** |
| | 1.5.2 Implement pilots using the methodology in the "Greening of three communities that are of priority environmental and economic significance. | **1 2 3 4 5** |
| | 1.5.3 Implement EMS in a regional solid waste management authority and regional disposal site. | **1 2 3 4 5** |
| ***Desired Policy/Strategy Outcomes:*** *At least three communities designated "Green Destination" and serving as models for other communities.* | 1.5.4 Implement EMS in a regional waste-water division of the National Water Commission. | **1 2 3 4 5** |
| | 1.5.5 Evaluate and disseminate the result of the pilots to relevant communities and agencies. | **1 2 3 4 5** |
| ***Outcome Indicators:*** *Three communities designated "Green Destinations".* *The number of other communities working towards and achieving the designation.* | | |

## GOAL 2: To strengthen the legal and economic framework to facilitate the promotion and implementation of Environmental Management Systems.

### *Strategy 2.1: Strengthen the legal framework for environmental regulation and reporting.*

The Government will amend the NRCA Act to provide the court with the option of sentencing an offender to implementing an EMS. Ways will be found to make the fines sufficiently high to serve as a deterrent but sufficiently low as to be affordable. Efforts will be made to effectively and efficiently measure and monitor emission quantities and qualities and to establish reasonable charges for breaches. NEPA will formulate joint agreements with specific industries to reduce negative discharges, rather than try to develop an all-inclusive policy for every conceivable form of pollution.

The Ministry of Land & Environment will consider using the services of the Auditor General or some other new public officer to report to Parliament and/or the Public Accounts Committee on the environmental performance of the various Ministries, Agencies and Departments of Government.

***Roles / Responsibilities:***
*NEPA will be responsible for Actions 2.1.1 to 2.1.8. NEPA and the Ministry of Land & Environment will collaborate with the Auditor General's Department, the Chief Parliamentary Counsel and the Ministry of Finance in implementing Action 2.1.8.*

***Desired Policy/Strategy Outcomes:***
*NEPA operating with a regulatory flexibility approach on the one hand and with increased capacity to monitor and enforce environmental legislation.*

*Public institutions report annually to Parliament and/or the Public Accounts Committee on their environmental performance.*

***Outcome Indicators:***
*The number of institutions reporting on environmental performance.*

**ACTIONS:**

| | | Timeline (years) 1 2 3 4 5 |
|---|---|---|
| 2.1.1 | Review existing legislation and identify required changes and/or additions. | 1 2 3 4 5 |
| 2.1.2 | Amend where appropriate the NRCA Act and Regulations. [ See Action 1.2.6] | 1 2 3 4 5 |
| 2.1.3 | Develop a regulatory flexibility alternative regulatory pathway within NEPA. | 1 2 3 4 5 |
| 2.1.4 | Increase fines for pollution. | 1 2 3 4 5 |
| 2.1.5 | Review and implement pollution fees. | 1 2 3 4 5 |
| 2.1.6 | Strengthen enforcement mechanisms. | 1 2 3 4 5 |
| 2.1.7 | Strengthen the legislative basis for accountability for environmental stewardship/performance in Government Institutions by amending the Auditor General Act. | 1 2 3 4 5 |
| 2.1.8 | Develop and put in place the framework for reporting on environmental performance. | 1 2 3 4 5 |

***Strategy 2.2: Develop/Strengthen the legal framework for the promotion of EMS in the business sector.***

The Government will review the Companies Act, the Jamaica Stock Exchange Act, Fair Competition Act, Trade Act, Factories Act, and the Food and Drug Regulations with a view to facilitating increased competitiveness and sustainable business practices by promoting the use of EMS.

***Roles / Responsibilities:***
*NEPA will collaborate with the Ministry of Finance and Planning to carry out these actions.*

***Desired Policy/Strategy Outcomes:***
*Companies routinely report to the Registrar of Companies and the Stock Exchange where relevant on their environmental performance.*
*Suppliers of commodities to the Government and to the market in general carry environmentally friendly products.*

***Outcome Indicators:***
*The extent to which companies report on their environmental performance.*
*The extent to which there is an increase of environmentally friendly goods on the market.*

| ACTIONS | | Timeline (years) 1 2 3 4 5 |
|---|---|---|
| 2.2.1 | Review existing legislation and identify required changes and/or additions. | 1 |
| 2.2.2 | Amend the appropriate legislation. | 2 3 |
| 2.2.3 | Review and modify Government's Procurement Regulations and develop a 'green' Procurement Plan [See Action 1.1.7]. | 1 2 3 |

***Strategy 2.3: Develop and apply appropriate market based instruments.***

The PIOJ has carried out an analysis of the feasibility of applying Environmental Economic Policy Instruments (EEPI) to drive the National Industrial Policy. This will be further examined and Environment Incentives Legislation will be developed in respect of environment-friendly commodities or activities.

Government will also consider applying levies on enterprises for resource use and product charges based on harmfulness of substances in the product. A long-term programme of gradual introduction of tipping fees and formal fees for the collection of garbage will be instituted.

In an attempt to reduce waste by eliminating excessive consumption Government will institute an Environmental charge on utility companies.

| ***Roles / Responsibilities:*** | **ACTIONS:** | | **Timeline (years)** |
|---|---|---|---|
| | | | **1 2 3 4 5** |
| *PIOJ will be responsible for Actions 2.3.1 and 2.3.2.* | 2.3.1 | Conduct cost: benefit analyses on economic incentives options. | **1** 2 3 4 5 |
| *NEPA will collaborate with the Ministry of Local Government who has responsibility for Action 2.3.3 and with the Office of Utilities Regulation with respect to 2.3.4.* | 2.3.2 | Develop and apply Incentives for retrofitting with environmentally friendly plant and equipment. | **1** 2 3 4 5 |
| | 2.3.3 | Develop and apply appropriate solid waste management economic instruments e.g. tipping fees, deposit/refund schemes. | **1** 2 3 4 5 |
| ***Desired Policy/Strategy Outcomes:*** | 2.3.4 | Develop and apply a environmental charge for the utilities sector to encourage more efficient use of resources. | **1** 2 3 4 5 |
| ***Outcome Indicators:*** | | | |

**GOAL 3: To ensure an informed public who will support and advocate for responsible Environmental Stewardship.**

***Strategy 3.1: Carry out a continuous Communications Campaign on EMS and have an "open house" policy regarding information.***

Successful EMS uptake requires that the country be informed about the role and functions of EMS and its relationship to environmental performance and operating efficiencies of institutions. This will only be achieved with continuous access to information. Government will put in place a EMS Resource Centre and Technical Clearing House on EMS and will provide information through the various media. In addition, institutions will be given public recognition for good environmental performance.

| | | | Timeline (years) | | | | |
|---|---|---|---|---|---|---|---|
| | **ACTIONS:** | | 1 | 2 | 3 | 4 | 5 |
| ***Roles / Responsibilities:*** *NEPA will be responsible for these actions.* | 3.1.1 | Set up an EMS Resource Centre and an EMS Technical Clearing House. [See Actions 1.2.7 and 1.3.1] | 1 | 2 | 3 | 4 | 5 |
| ***Desired Policy/Strategy Outcomes:*** | 3.1.2 | Publish reports on environmental performance. | 1 | 2 | 3 | 4 | 5 |
| | 3.1.3 | Design and Implement a Rewards and Recognition Scheme for good environmental citizens/corporations. [See Actions 1.4.6 and 1.4.12] | 1 | 2 | 3 | 4 | 5 |
| ***Outcome Indicators:*** | 3.1.4 | Develop partnerships with media agencies in communicating the EMS message over a one-year period in the first instance. | 1 | 2 | 3 | 4 | 5 |
| | 3.1.5 | Collaborate with NEEC and other relevant agencies in public education campaign. | 1 | 2 | 3 | 4 | 5 |

### *Strategy 3.2: Identify and seize opportunities for cultural change with respect to people's attitude towards environmental issues as they relate to EMS.*

Successful uptake of EMS will rely to a great extent on cultural changes not only in the way people practise business but also in their way of life. The Government recognizes this and will put in place measures to foster the necessary attitudinal changes.

The Government will also encourage consumers to demand environmentally friendly goods and services.

| ***Roles / Responsibilities:*** | **ACTIONS:** | | **Timeline (years)** |
|---|---|---|---|
| *NEPA will be responsible for implementing Actions 3.2.1 to 3.2.3.* | | | **1 2 3 4 5** |
| *The Bureau of Standards will be responsible for Action 3.2.4.* | 3.2.1 | Conduct analysis of the desired ethical and cultural changes necessary in implementing EMS and develop change management training and strategies. | **1 2 3 4 5** |
| *NEPA will collaborate with the Ministry of Mining & Energy and Ministry of Water which have responsibility for Actions 3.2.5* | 3.2.2 | Carry out a Gender Impact Analysis to ascertain if there is potential for any gender bias in adopting EMS and implement recommendations. | **1 2 3 4 5** |
| *NEPA will collaborate with the Ministry of Industry, Commerce and Technology which has responsibility for 3.2.6.* | 3.2.3 | Collaborate with the JTURDC to promote the change in work ethics and attitude that is required for successful uptake of EMS implementation. | **1 2 3 4 5** |
| ***Desired Policy/Strategy Outcomes:*** | 3.2.4 | Develop a labelling programme for green product and services. | **1 2 3 4 5** |
| *Workers in Jamaica have a very positive attitude towards EMS implementation.* | 3.2.5 | Promote energy and water conservation programmes by developing demand side management programmes. | **1 2 3 4 5** |
| *Consumer demand for environmentally friendly goods and services increases.* | 3.2.6 | Promote "Green Consumerism" by establishing a "Buy Green Jamaica" Campaign. | **1 2 3 4 5** |
| ***Outcome Indicators:*** | | | |
| *The extent to which workers at targeted institutions display a more positive attitude towards EMS.* | | | |
| *The extent to which consumer demand for environmentally friendly goods and services increases.* | | | |

## *Strategy 3.3: Provide training and information in EMS implementation*

The National Environmental Education Committee through the NEEAPSD has already started to build the capacity of the Ministry of Education, the Faculty of Education, UWI, the University of Technology, the Northern Caribbean University and the teachers colleges to develop and deliver courses on environmental education. In addition, the Management Institute for National Development (MIND) is being assisted through the CIDA -ENACT Programme.

This strategy will build on these efforts with a focus on EMS concepts. In addition, specific projects will be implemented to provide training in EMS for change agents across all sectors.

The government will spearhead a regional initiative to promote the dissemination of information on EMS throughout the Caribbean. This will be done through the setting up of a regional network to track technological, sociological and economical developments related to EMS and also the holding of regional conferences to promote information sharing. In addition, the country will be kept informed about EMS developments locally and internationally by the staging of annual conferences/workshops on EMS.

***Roles / Responsibilities:***
*NEPA will be responsible for these actions.*

***Desired Policy/Strategy Outcomes:***
*Knowledge and skills in EMS implementation becomes a component of relevant courses at targeted post-secondary educational institutions.*

*There is a cadre of trained personnel in EMS in the island to adequately serve the needs of businesses.*

*Jamaica is a regional focal point for EMS information.*

***Outcome Indicators:***
*The extent to which knowledge and skills base in EMS implementation is increased.*

*The extent to which the network is used by the region.*

*The level of attendance / participation at the workshops/conferences.*

**ACTIONS:**

| | | Timeline (years) 1 2 3 4 5 |
|---|---|---|
| 3.3.1 | Identify and/or develop courses and programmes for all levels of staff including managers and policy makers. | 1 2 3 4 5 |
| 3.3.2 | Collaborate with and support the work of the National Environmental Education Committee (NEEC) in its implementation of the National Environmental Education Action Plan for Sustainable Development (NEEAPSD) in order to infuse EMS into the curriculum of targeted post-secondary institutions. | 1 2 3 4 5 |
| 3.3.3 | Identify and train change agents in the public and private sectors and in civil society. | 1 2 3 4 5 |
| 3.3.4 | Keep abreast of global trends, innovations etc. in EMS by setting up a regional network on EMS. | |
| 3.3.5 | Hold annual workshops on EMS including two regional conferences. | |

# 4.0 Funding Strategy

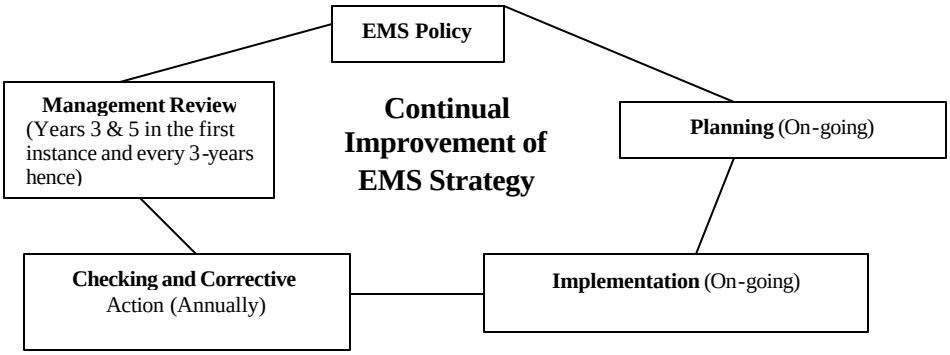
***GOJ will fund the execution of the EMS Policy and Strategy in the first instance by use of its many bi-lateral and multi-lateral project funds. This type of funding will increase over the first five years and then will be gradually reduced as EMS becomes more entrenched and the Government's Capital A budget can adequately cover 'maintenance' activities for the continued promotion of EMS.***

In addition, in many cases there are existing programmes which, are already established within government departments for which budgetary allocations for the most part are in place. Additionally, support will come through bi-lateral projects. Already ongoing are the eight-year GOJ/CIDA-Environmental action (ENACT) Programme, started in 1996 and the six-year GOJ/USAID – Coastal Water Quality Improvement Project (CWIP) which started in 1998. Both these projects which are being implemented by NEPA/NRCA, have a major focus on promoting EMS and will support the implementation of the EMS Policy and Strategy. In the pipeline are the USAID Environmental Audits for Sustainable Tourism (EAST) Project [Phase 3] and the GOJ/USAID – Ridge-to-Reef Project, both of which will be vehicles to help in the promotion of the EMS Policy & Strategy.

The above initiatives will be bolstered and new activities implemented through grant financing from the IDB/Multilateral Investment Fund and other project funding.

# 5.0 Monitoring and Evaluation

A "**Plan, Do, Check and Act"** management system approach (as shown in the diagram below) will be used to monitor, evaluate and review the EMS Policy and Strategy. This review process will be guided by the Ministry responsible for the environment in collaboration with the executing government institutions. In addition, the Minister responsible for the environment will give annual reports to Parliament.




# 6.0 Supporting Documents

1. EMS Policy & Strategy - ***The Major Countries Report*** (March 2000). Natural Resources Conservation Authority, Kingston, Jamaica.
2. EMS Policy & Strategy - ***The Benchmark Countries Report*** (March 2000). Natural Resources Conservation Authority, Kingston, Jamaica.
3. EMS Policy & Strategy - ***Key Economic Sectors Report*** (March 2000). Natural Resources Conservation Authority, Kingston, Jamaica.
4. EMS Policy & Strategy - ***Legislative Instruments Report*** (March 2000). Natural Resources Conservation Authority, Kingston, Jamaica.
5. EMS Policy & Strategy - ***Economic Incentives Report*** (March 2000). Natural Resources Conservation Authority, Kingston, Jamaica.

# APPENDIX

## Overview of trends in EMS implementation globally and locally

A following gives a brief overview as to the trends in EMS implementation globally. It also outlines the Jamaica context focusing on the drivers for EMS and its implementation in key economic sectors.

### 1. A Global Perspective

The EMS Policy & Strategy – Major Countries Report gives a global perspective on the use of EMS. In the United Kingdom a number of initiatives have emerged since the early 1990s linking governmental policy to EMS, for example, the UK government has committed that all government departments should adopt EMS in at least one major site per department by 2001. In the Netherlands the Dutch Green Plan has paved the way for the rapid uptake of EMS. Germany is also far advanced in the use of EMS-based approaches for policy, regulatory and management purposes and Japan was one of the first countries to fully embrace EMS. This occurred even beyond Japan's own borders, with its major companies seeking ISO 14001 certification in overseas facilities in the United States, Asia and Europe. The policy dialogue in the United States views EMS as an important emerging tool that holds potential for linking business logic with environmental goals. The Government issued an executive order in late 1999 requiring all federal agencies to begin environmental management system pilot projects by March 31, 2002, and to establish an effective EMS at all federal facilities by 2005. The use of a certifiable EMS has become a key element in most voluntary programs and initiatives developed by the Government and as a result, EMS implementation has increased significantly. In Canada, the public sector has made the commitment to show the way forward on sustainability and EMS is becoming recognized as a tool for moving towards sustainability. One of the most significant developments is the requirement that each Federal Ministry prepare a sustainability plan ***as*** the vehicle for EMS implementation in a number of government and private sector initiatives. The new Canadian Environmental Protection Act has an interesting provision, basically adopting as law the notion that court sentences may include the requirement of implementing an EMS. Many companies use ISO 14001 as a benchmark to review their existing systems or to provide uniformity across several facilities within a company.

### 2. A Regional Perspective

EMS Policy & Strategy - Benchmark Countries Report gives a brief snapshot of the use of EMS at the regional level. The main drivers to implementing EMS within the region include global competition, international non-tariff barriers, cost control, marketing advantages, anticipated government policy, and public recognition, as well as the increased awareness of environmental issues in general. The major obstacle to implementation is the general unawareness of the benefits of EMS. In addition poor institutional capacity to support EMS implementation, a lack of technical skills and appropriate clean technology add to the challenge. The capacity for implementation of EMS varies in the Caribbean. In some countries such as Costa Rica substantial advances have been made, especially in agro-industry such as sugar, coffee, bananas and citrus in implementing EMSs. Environmental Management Systems have taken root in Cuba, particularly in agriculture, food production and medicine although the classical EMS' such as ISO 14000 and Green Globe is not

being used. Barbados, Guyana and Trinidad have only recently begun to embark on an EMS journey with a few industries making attempts to implement EMS. The Barbados National Standard Specification for Environmental Management Systems was issued in 1998. The Guyana Environmental Protection Agency (EPA) October 1999 Strategic Plan calls for the use of EMS as an integral component of its Natural resources Management Strategy while the Trinidad & Tobago Bureau of Standards (TTBS) provides training in EMS and expects to commence certifying under ISO 14000. In Jamaica, the Bureau of Standards provides training in EMS implementation and auditing with their five JS 1SO local standards adopted for national use. Also, there have been several bi-lateral projects promoting the use of EMS.

# 3. The Jamaica Context

## 3.1 Government's Role

There are many areas of government programmes and policies that impinge on each other and require a framework to effectively promote the use of the EMS approach. With respect to the GOJ's sustainable development agenda this is articulated through a number of policy/programme instruments for example, NIP, JaNEAP and the Sustainable Tourism Development Master Plan. Through these initiatives the government continues to play an important role in charting the country's future direction. The EMS Policy and Strategy is yet another mechanism by which the Government seeks to ensure integration of the policy directions for Jamaica's social, economic and environmental development.

**National Industrial Policy (NIP)**

The National Industrial Policy, in seeking to address the weaknesses of the existing incentive schemes, committed the government to "reorient fiscal incentives in the direction of making them:

- more transparent, simple, and automatic;
- based on quantifiable and easily monitored performance standards;
- more flexible so that a broader cross-section of firms can benefit from the provisions, and,
- orientated equally to services, agriculture, and manufacturing activity." [**NIP,** 1996, P. 58]

In the section on Environmental Policy, the NIP addresses the issue of incentives for enhancing the environmental practices of firms. "A system of environmental standards, regulations, and effective mechanisms for monitoring enforcement will be established and maintained. **This system will be complemented by incentives to support environmentally friendly practices, processes, technologies, and products.**" [**NIP**, 1996, P.105]

This represents an opportunity to insert provisions for the adoption and implementation of clean technologies across all sectors and the granting incentives that are tied to EMS implementation.

**Jamaica National Environmental Action Plan (JaNEAP)**

The Jamaica National Environmental Action Plan [JANEAP, 1994, P.6] committed the Government to:

1. applying the polluters pay principle to increase sewage fees, "introduce household refuse disposal fees and tipping fees", special fees for the proper disposal and fines for the improper disposal of hazardous waste;
2. tax incentives to encourage recycling and the use of environmentally friendly technologies
3. promote deposit refund schemes to encourage the collection of litter and other recyclable waste
4. special taxes for environmentally damaging products, such as fertilizers, pesticides, ozone depleting substances, batteries, fuels and hazardous substances such as dry cleaning fluids
5. applying the users pay principle to natural resources in a similar fashion to royalties mandated under the Mining Act (1947). Targeted areas include fees for the extraction of underground water, for harvesting forest and fisheries resources, for visits by tourists to natural attractions, and for public use of national parks and protected areas.

In addition, JaNEAP 1999-2002 [P.18] commits the Government to utilization EMS to shift the mode of operation from being mainly reactive to becoming proactive and providing a systematic method of moving up the Environmental Management Hierarchy, achieving environmental objectives, and improved business competitiveness.

**The Orane Report and KPMG Peat Marwick Report**

GOJ has taken on board the recommendations of the Orane and Peat Marwick Reports to reduce government spending and to increase efficiency. – ***[Purpose of these reports to be included.]***

**Master Plan for Sustainable Tourism Development**

One of the goals of the Master Plan for Sustainable Tourism Development is to improve the long-term competitive position of the industry and achieve self-sustained growth. The preservation of the natural environment is seen as one of the ways through which sustainability of the tourism industry can be achieved particularly as the industry is intricately linked to the quality of the environment. The Master Plan advocates the implementation of environmental management systems through voluntary self-regulated action by tourism stakeholders as one of the ways of ensuring the tourism industry's commitment to environmental protection.

**Bi-lateral Projects**

The Canadian Government through the Canadian International Development Agency (CIDA) and the Government of Jamaica through NEPA/NRCA are funding an eight-year Environmental Action Programme (ENACT: 1994 -2004). The project seeks to increase the use of EMS in public, private, local communities and educational organisations. The programmes includes EMS training and institutional resources for:

- Government corporate plans and policy development
- Environmental stewardship through 'greening of government' operations.
- Capacity development of NEPA/NRCA
- EMS implementation in the public and private sector
- Clean Technology/Waste Management Systems
- Industrial and professional codes of practice/ethics
- Local Sustainable Development Planning

Additionally, GOJ/USAID projects through Environmental Audits for Sustainable Tourism (EAST) Project and the Coastal Water Quality Improvement Project (CWIP) are using the EMS model within the tourism sector to improve the environmental performance of hotels and commercial enterprises and to 'green' attractions and destinations.
In accordance with the above commitments, Government's role is to continue to put in place a system of environmental standards, regulations, and the imposition of fines and other forms of sanctions for polluters as well as effective mechanisms for monitoring and enforcement. Government will lead by example to reduce spending and increase accountability in its own operations by use of EMS mechanisms. In addition, it is the Government's undertaking to develop an incentive scheme for environmental performance in order to promote the use of EMS. Government also has a role in the implementation of projects targeted at assisting polluters to clean up their activities and to implement EMS.

## 3.2 EMS in Key Economic Sectors

Both the EMS Policy & Strategy - Benchmark Countries Report and the EMS Policy & Strategy - Key Economic Sectors Report give insight as to the status of EMS in key economic sectors. Generally there is agreement in the private sector in Jamaica that EMS is a key strategy in improving environmental management while improving internal efficiencies. There is also the recognition that the approach to take is one of promotion, training, capacity building and encouragement for the use of EMS rather than using a command and control approach with excessive legislation. Those companies that have implemented EMS have found it rewarding to the their business operations.

### 3.2.1 *Tourism*

The construction of many hotels and their beach/shoreline works have disturbed the natural currents in the sea and ***contributed*** to erosion of the beaches. The waste from hotels and other tourist facilities, including cruise ships, has been causing the deterioration of the quality of the beaches, the reefs and the water. With facilities outgrowing limited infrastructure for waste disposal and weak regulations, the strong demand for Jamaica's tourism has eventually begun to undercut itself as the tourists are now expressing preference for healthier environments.

The demand for a healthy environment by tourists is driving the industry to higher and higher standards. The GOJ/USAID Environmental Audits for Sustainable Tourism (EAST) project audited twenty (20) hotels for "energy use, water use, waste water generation, solid waste generation, use of chemicals and management and staff practices. The audits conducted by the project successfully identified savings in each hotel. It also found that there was a relatively low level of awareness of environmental issues among the management and that most managers were unwilling to invest in the solutions that would make them realize the potential savings from an EMS. Nevertheless, 4 q 3hotels of those received the Green Globe certification with others expressing interest. The benefits to implementation has been increased awareness, use of the certification as a marketing tool and greater operational efficiencies resulting in increased financial benefits.

There are other examples of eco-tourism facilities and services initiating changes to reduce the negative impacts of their activities on the environment. These vary from attractions with "no litter" policy to communities launching community eco-tourism initiatives such as Bluefields in Westmoreland.

However, environmental considerations are non-existent in the majority of tourism entities in Jamaica. While the drivers include customer requests, global competition and marketing identity, the main obstacle is the unwillingness of the private sector to adopt the program. Another obstacle has been the difficulty in training staff and funding recycling and other partners.

### *3.2.2 Alumina/Bauxite*

The bauxite companies in general recognise the value of EMS. The driving forces behind the implementation of EMS have been customer request, global competition, public recognition, government policy, marketing identity and standards. The multinational corporations that operate the Jamaican bauxite/alurnina industry have already begun implementing EMS in line with the commitments of their international Head Offices. In 1992, ALCAN's board of directors formally "incorporated environmental management into the Company's highest level of decision-making". Plants, such as those in Jamaica, are required to have specific plans to deal with their impact on the local environment, and the implementation of this plan is "directly linked to the personal performance objectives of managers and employees". Similarly, ALCOA and Kaiser have committed themselves to achieving ISO 14001 certification in their worldwide operations. CAP (Alcoa, Jamaica) has implemented Alcoa's version of an EMS very similar to ISO 14001, but has no intention to become certified, as they see no marginal benefit from certification. Alumina Partners of Jamaica (Alpart) has implemented all the elements of ISO 14001 but will not be seeking EMS certification from any certifying organization because it believes that its own efforts are satisfactory.

The main obstacles encountered in implementing have been document control and getting the workforce to adhere to the dictates of the system as well as following the documented procedures.

### *3.2.3 Agriculture*

The agricultural export sector has become more chemical intensive. It is estimated that about a third of the pollution of the Kingston Harbour results from waste brought in by the Rio Cobre. Much of this is waste from agri-processing and the run off from the farms that flow into the river. It is also well documented that the rapid expansion of coffee in the 1980s led to the denuding of large areas of forest in the hills of St. Andrew and Portland, and that the highly toxic chemicals used by the industry run off into the rivers and eventually into the sea accounting for periodic fish kills.

*Coffee*

The main driving force is global competition with international pressure building on the coffee industry for an environmentally friendly product. In the coffee industry in Jamaica, the process towards EMS implementation has just commenced with an attempt by the Coffee Industry Board to develop an EMS policy for the industry. The main obstacle to implementation is convincing the decision-makers in the industry on the cost-benefits of EMS.

*Banana*

The banana industry in Jamaica is facing the loss of its markets with the imminent removal of its preferential access to the EU market. One potential adjustment is to target a high-income niche with environmentally friendly bananas such as the "Smart banana" programme in Costa Rica where

environmentalists have developed products that are produced under environmentally friendly conditions.

### *3.2.4 Agro-Processing*

*Rum*

The distilleries in Jamaica understand the role of good environmental management. However, emphasis is placed on the wastewater problem rather than comprehensive EMS programs for the entire operation. The Spirits Pool Association has been working with the Scientific Research Council (SRC), the Natural Resources Conservation Authority (NRCA) and the Water Resources Authority (WRA) towards improving the productivity of member organizations by improving waste water disposal at first and to be followed by EMS implementation.

*Sugar*

For some time now, pressure has been building on the industry to address the improper disposal of wastewater. There has been very little emphasis on EMS in the sugar industry. The Sugar Industry Research Institute (SIRI) has taken the lead role in wastewater treatment research in Jamaica. SIRI has prepared an eight (8) year "Action Plan for Environmental Management and Monitoring at Sugar Factories". The Plan identifies seven (7) steps ending with the commissioning and operation of wastewater treatment systems. While the Plan is behind in its implementation schedule, it is at least a clear indication of where the industry thinks it has to go to address the negative impacts of wastewater discharge from the factories.

While the agro-business sector is cognizant of the need to achieve international quality standards e.g. HACCP, very little work has been done to promote systems in the sector especially among processors. As the sector moves towards HACCP readiness, special attention should also be paid to implementing an EMS within these firms.