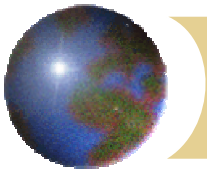


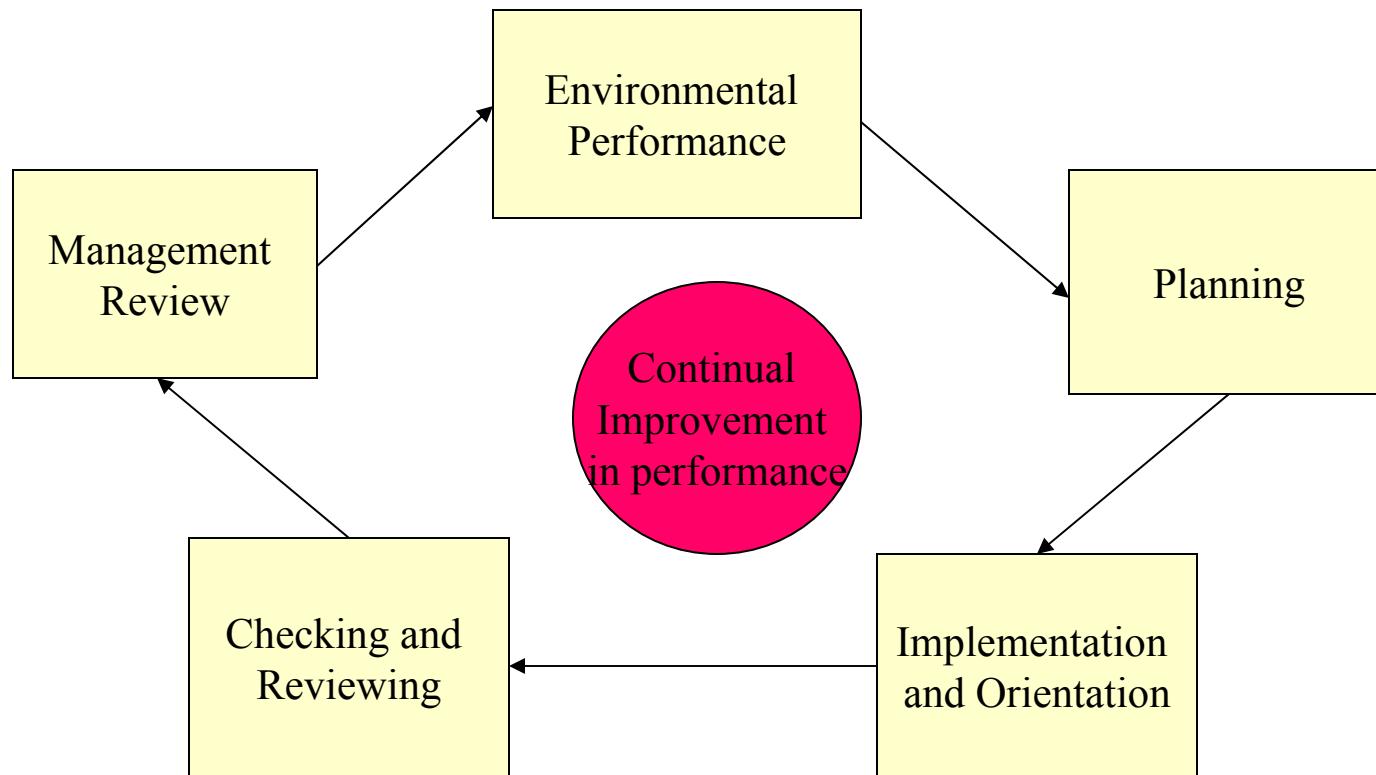
Voluntary Environmental Performance Mechanisms in the Caribbean

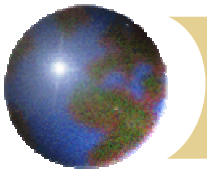
Kalim Shah



ISO14001 Environmental Management Systems

• The ISO 14001 Model

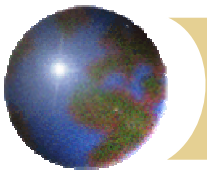




ISO14001 Certifications in the Caribbean

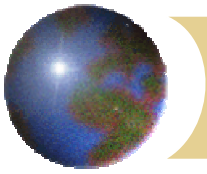
Name of Country	Number of Firm Level Certificates
Barbados	3
Belize	3
Dominican Republic	3
Guyana	3
Jamaica	5
St. Lucia	2
Trinidad & Tobago	12
TOTAL	31
<i>Comparison to Mexico</i>	<i>~400</i>

Source: World Resources Institute – Earth Trends Publication 2002



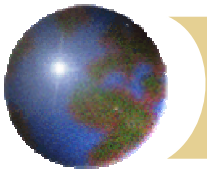
Comparative Assessment of Present Status

	Country		
	Trinidad & Tobago	Jamaica	Barbados
Status of Implementation	First Firm certified in 1998. In 2002 the TTBS became the official registration and certification body. TTBS has a national mandate.	First Firm certified in 1999. The NRCA and Bureau of Standards jointly mandated by Government to drive certifications.	First Firm certified in 2000. No national certification focal point. Government position paper and strategy being drafted.
Drivers	Educated population, environmental advocacy, growing manufacturing sector, MNC presence, trade competition.	Educated population, environmental advocacy, growing manufacturing sector, MNC presence, trade competition.	Educated population, environmental advocacy, trade competition.



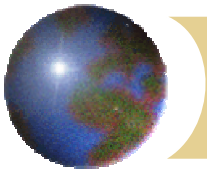
Comparative Assessment

	Country		
	Trinidad & Tobago	Jamaica	Barbados
Government Policy	EMS mentioned in National Environmental Policy. No implementation or incentive plans.	National Implementation Plan approved in 2003. Pilot projects jointly funded by CIDA and USAID.	No specific mention of EMS in National Policy. National Business and Environ. Committee set up to draft plan.
Obstacles	Poor national coordination, lack of cost/benefit awareness	Little benefit perceived by small and medium businesses	Lack of awareness, lack of capacity and capability.



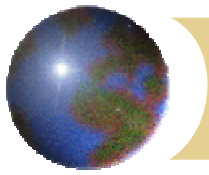
Comparative Assessment

	Country		
	Trinidad & Tobago	Jamaica	Barbados
Capacity to Implement	High capacity. MNC expertise. Many certified auditors and training consultants.	Adequate capacity for now. Professional capacity can be trained. International funding.	Little local capacity at present.
Sectors Implementing	Petrochemical, Manufacturing, Food and Beverage production.	Aluminum, Mining, Food and Beverage manufacturing and production.	Beverage and Alcohol, spirits production.



Case Study Methodology – The Business and Sustainability Matrix (IFC, 2003)

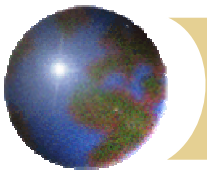
- ✦ **Sustainability Factors:** Governance and Management, Stakeholder Engagement, Environ. Process Improvement, Environ. Products and Services, Local Economic Growth, Community and Human Resource Development.
- ✦ **Business Success Factors:** Revenue Growth and Market Access, Cost Savings and Productivity, Access to Capital, Risk Management and License to Operate, Human Capital, Brand Value and Reputation.



Case Study 1: British Gas (Trinidad & Tobago)

	Governance and Engagement		Environmental Focus		Socio Economic Development
	Governance and Management	Stakeholder Engagement	Environmental Process Improvement	Environmental Products and Services	Local econ. Gth, community dvpt, human resources.
Revenue Growth and Market Access	4	4	4	4	2
Cost Savings and Productivity	9	9	9	9	3
Access to Capital	6	6	6	6	2
Risk Management and License to Operate	9	9	9	9	3
Brand Value and Reputation	6	6	4	6	2

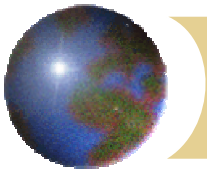
- Certified 4 years running
- Natural gas exploration and LNG production
- Production >800mmscfd/day
- Export to U.S. and Europe
- 5 facilities certified (3 Platforms)
- Reduce vented methane from platforms using BAT.
- Nitrogen Generator to reduce GHGs, vented gas reduced 52% and being implemented worldwide.
- CNG training program for auto mechanics



CASE Study 2: Atlantic LNG Consortium (T&T)

	Governance and Engagement		Environmental Focus		Socio Economic Development
	Governance and Management	Stakeholder Engagement	Environmental Process Improvement	Environmental Products and Services	Local econ. Gth, community dvpt, human resources.
Revenue Growth and Market Access	2	1	3	2	2
Cost Savings and Productivity	2	1	3	2	2
Access to Capital	4	2	6	4	4
Risk Management and License to Operate	4	2	6	4	4
Brand Value and Reputation	2	1	3	2	2

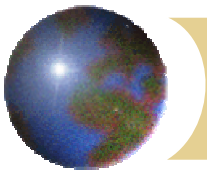
- Certified 4th year running
- Formed 1995, partners BP, BG, Repsol, Cabot, NGCTT.
- 3 trains, 4th planned 2005, \$1.2 B.
- First Firm to use TTBS
- Strong employee culture, integrated in strategy, corporate image.
- New Plants, already designed with clean technology in mind.
- Incremental benefits from upgrades.
- Clean production was pre req. to building and operating.



Case Study 3: Mount Gay Rum Distillery (Barbados)

	Governance and Engagement		Environmental Focus		Socio Economic Development
	Governance and Management	Stakeholder Engagement	Environmental Process Improvement	Environmental Products and Services	Local econ. Gth, community dvpt, human resources.
Revenue Growth and Market Access	6	4	6	4	4
Cost Savings and Productivity	6	4	6	4	4
Access to Capital	2	0	0	0	0
Risk Management and License to Operate	3	2	3	2	2
Brand Value and Reputation	9	6	9	6	6

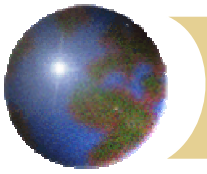
- Internationally famous brand with >300 years history.
- 1st Barbadian Firm to be certified.
- Lead on Government, Trade Assoc. and other Boards for Business and Environment.
- Adherence to Environmental Policy
- Significant lower production and material costs.
- Claims of significant increase in Brand Value and reputation difficult to attribute singularly to ISO14001.



Case Study 4: West Indian Aluminium Company (WINDALCO) Jamaica

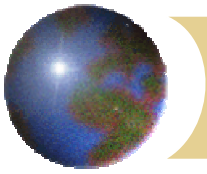
	Governance and Engagement		Environmental Focus		Socio Economic Development
	Governance and Management	Stakeholder Engagement	Environmental Process Improvement	Environmental Products and Services	Local econ. Gth, community dvpt, human resources.
Revenue Growth and Market Access	6	6	9	9	4
Cost Savings and Productivity	6	6	9	9	4
Access to Capital	4	4	6	6	4
Risk Management and License to Operate	4	4	6	6	4
Brand Value and Reputation	2	2	3	3	3

- Previously ALCAN Jamaica
- 2 Alumina refineries >1.2 mil. Tons/yr capacity.
- Strong R&D emphasis has increased innovation derived benefits.
- Site rehabilitation
- Innovative re vegetation technique now used worldwide.
- Island wide re forestation program
- Investment in community, now largest producer of milk and beef in Jamaica.



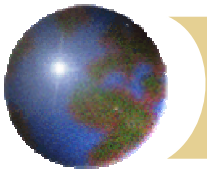
Lessons learnt from Case Studies

- ✦ ISO14001 implementation leads to strong improvements in Environmental Focus and Governance, but contributes to weakly to socio economic responsibility factors.
- ✦ Flexibility allows Firms to pursue strategic improvements.
- ✦ Improvements are not readily linked to access to capital, risk management or license to operate, as business success factors.
- ✦ Singular linkages difficult to attribute but managers strongly perceive such linkages.
- ✦ Basis of all improvements is INNOVATIVE CAPACITY built by ISO14001.
- ✦ Response to MNC pressures or incentives rather than institutional or regulatory pressures.



Green Globe Certification for the Tourism Industry

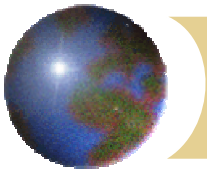
- ✦ The Green Globe certification is the premier internationally recognized certification for the tourism and travel industry regarding environmental management and practices.
- ✦ Established in 1994 by the World Travel and Tourism Council (WTTC)
- ✦ It is an Environmental Management System designed along the lines of the EMAS and ISO systems but specifically for the Tourism Industry, intended to implement Agenda 21 principles.
- ✦ Pathway: Awareness – Benchmarking – Certification.
- ✦ Auditing and certification done by an accredited third party auditor.



Green Globe Certification for the Tourism Industry

✦ Benefits include:

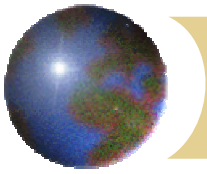
- Increased competitiveness
- Targets the “green” market (fastest growing market segment)
- Protection of natural areas
- Cost savings through eco efficient practices
- Assists with regulatory compliance



Green Globe: Caribbean Participation

Country	Number of Certificates
Antigua and Barbuda	1
Aruba	6
Bahamas	1
Barbados	7
Dominican Republic	5
Dominica	1
Jamaica	40
Netherlands Antilles	8
St. Lucia	4
Turks and Caicos	2
Suriname	1
TOTAL	74

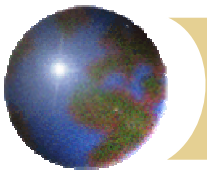
Source : Green Globe 21 Website <http://www.greenglobe21.com>



Case Study 1: Bucati Beach Resort (Aruba)

FACTOR	ASSESSMENT HIGHLIGHTS
Governance and Management	Environmental Policy and Vision Statement
Stakeholder Engagement	Supplier Policy requires high environmental performance standards.
Environmental Process Improvement	Linen reuse (\$30 000 savings), solar panels, grey water reuse in gardens.
Environmental Products/ Services	Assist in training suppliers. Advertises certification on website.
Local Economic Growth	>50% local community staff, soap production.
Community Development	Community training, Art from Trash, Turtle nesting.
Human Resource Management	Staff training
Revenue Growth and Market Access	Savings from less waste, improved market access/ new markets. Not quantifiable.
Cost Savings and Productivity	YES but not quantifiable.
Access to Capital	No. No information.
Risk Management and License to Operate	No Information
Brand Value and Reputation	Better customer ratings. Not quantifiable.

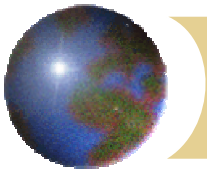
- 14 acres of sandy beach.
- 80 rooms



Case Study 2: Casuarina Island Hotel (Barbados)

FACTOR	ASSESSMENT HIGHLIGHTS
Governance and Management	Environmental Mission Statement. Partners with several local and international NGOs.
Stakeholder Engagement	Customer service satisfaction 75%
Environmental Process Improvement	Emphasis on preventative maintenance and replacement of old equipment. Architecture.
Environmental Products/ Services	Turtle protection, noise reduction.
Local Economic Growth	Local employment and suppliers.
Community Development	Employment of disabled program.
Human Resource Management	Staff training
Revenue Growth and Market Access	Yes. Not quantifiable.
Cost Savings and Productivity	Yes.
Access to Capital	Yes, but not directly based on GG.
Risk Management and License to Operate	No information
Brand Value and Reputation	Increased brand recognition and value.

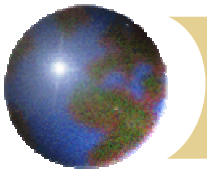
- 8 acres of tropical gardens and woods
- 170 rooms
- 1800 foot stretch of sandy beach



Case Study 3: Almond Beach Resort (Barbados)

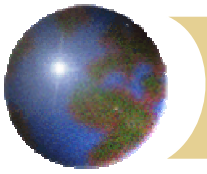
FACTOR	ASSESSMENT HIGHLIGHTS
Governance and Management	Policy in place; Environment and Conservation Manager, team.
Stakeholder Engagement	Strong Ties with Government Committees.
Environmental Process Improvement	Target setting focus, large effort on golf courses, coast.
Environmental Products/ Services	Weak in this area.
Local Economic Growth	Several sponsorships, Environment Day celebrations.
Community Development	Donations of linens to orphanages and health centers.
Human Resource Management	Strong communication system, open door policy.
Revenue Growth and Market Access	Yes. No information
Cost Savings and Productivity	Yes. Not quantified.
Access to Capital	No information.
Risk Management and License to Operate	No information
Brand Value and Reputation	Yes. Not quantified.

- Established in 1991
- Two Properties
- Total of 35 acres, 500 rooms
- 2 Golf courses



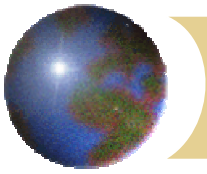
Case Studies Summary

Hotel	Env. Gov. & Mgmt.	Stakeholder Engagement	Enviro. Process Improv.	Env. Pdts. And Services	Socio Econ. Dvpt.	Rev. Gth. And Mkt. Access	Cost Savings and Pdvity	Access to Capital	Brand Value and Rep.	Risk Mgmt. And License to operate
	Governance & Engagement		Environmental Focus		Socio-Econ.	Business Success Factors				
Bucati Beach Resort	2	3	3	2	3	3	3	0	1	0
Almond Bay Resort	2	3	3	2	3	2	3	0	1	0
Casuarina Hotel	3	3	3	3	3	3	3	2	1	1
Sandals Negril	3	3	3	2	3	2	3	2	1	0
Couples Ochos Rios	2	3	3	2	3	2	3	2	1	0
Negrils Cabins	2	3	3	2	3	3	3	0	1	0
Swept Away Resort	3	3	3	2	3	3	3	0	1	1
Sea Splash Hotel	2	3	3	2	3	3	3	2	1	0
Sandals St. Lucia	3	3	3	2	3	2	3	2	1	0
Fort Young Hotel Dominica	2	2	3	2	2	1	2	2	1	0
	24	29	30	21	29	24 (80%)	29 (97%)	12 (40%)	10 (33%)	2 (6%)
	53/60 (88%)		51/60 (85%)		29/30 (97%)	77/150 (51%)				



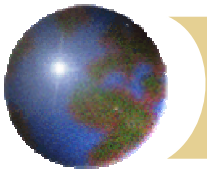
Sustainability- Business Matrix for Green Globe Participants Sample

	Governance and Engagement		Environmental Focus		Socio Economic Development
	Governance and Management	Stakeholder Engagement	Environmental Process Improvement	Environmental Products and Services	Local econ. Gth, community dvpt, human resources.
Revenue Growth and Market Access	High	High	High	High	High
Cost Savings and Productivity	High	High	High	High	High
Access to Capital	Medium	Medium	Medium	Medium	Medium
Risk Management and License to Operate	Low	Low	Low	Low	Low
Brand Value and Reputation	Medium	Medium	Medium	Low	Medium



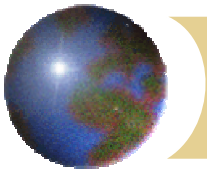
Lessons learnt from Case studies

- ❖ Businesses are very reluctant to divulge cost-benefit information making data on business factors difficult to obtain.
- ❖ Some cost savings readily identifiable e.g. water, electricity.
- ❖ Difficult for managers to quantify revenue growth or increased market access although they strongly believe it has.
- ❖ Certification has little or no impact on gaining access to capital.
- ❖ Certification not being linked with risk management aspects of business.
- ❖ Brand value is an outcome of several factors.
- ❖ “Low hanging fruit” e.g. water conservation and reduced waste more readily achieved than more complex goals such as habitat preservation/ restoration.



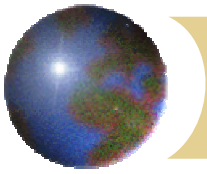
General Conclusions on VEPMs in the Caribbean

- ✿ A useful alternative/ complement to command and control regulations, more efficient for scarce resources. Improved policy mix.
- ✿ Provides a framework for firms/ businesses from which to proceed with environmental management in a way focused on economic goals.
- ✿ Small business involvement lacking.
- ✿ Financial and investment sectors not fully sensitized.
- ✿ Government should implement supportive policy for VPMs especially to promote the Innovative Capacity engendered.



Roles for the OAS - USDE

- ❖ Brokering partnerships between government regulatory agencies, certification bodies or groups and businesses.
- ❖ Aid in developing national VPM programs to add to and modernize the present policy mix in developing countries.
- ❖ Lead initiatives for VPMs through regional bodies, trade and business associations and MNCs.



OAS Intra Linkages

✚ Science and Technology Unit

Official link to ISO. Relationship with regional Standards and Industrial research organizations.

Tourism Unit

Collaboration on sustainability projects. Contact with regional tourism industry and hotel associations.