

# **Partnerships for Sustainable Development**

**Government-University-Industry  
Research Roundtable**

**October 10, 2007**

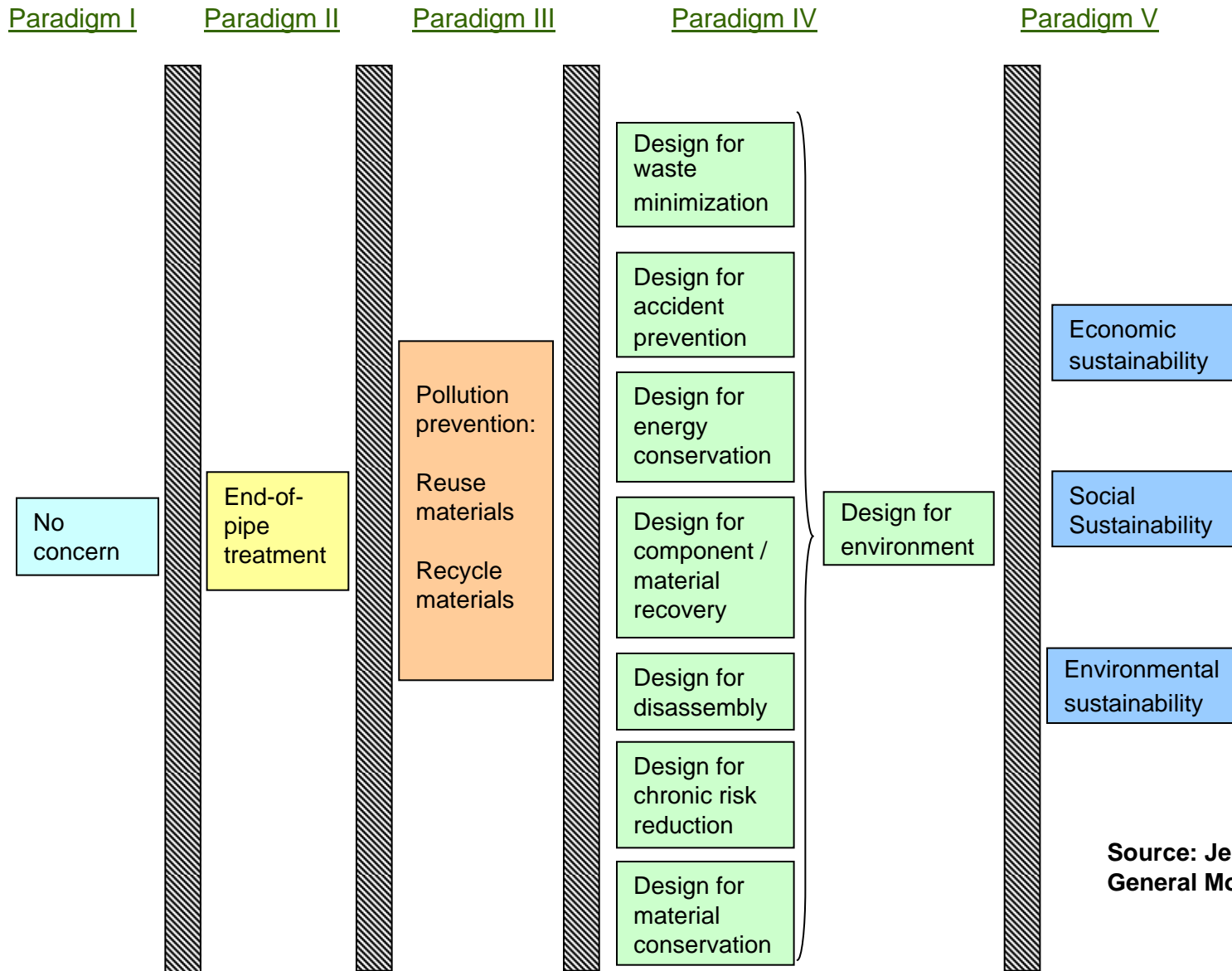
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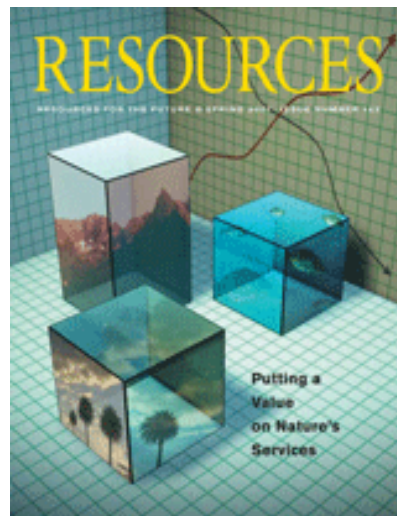
# Outline

- Changing nature of environmental problems
- Convergence of business strategies and public policy on sustainability
- Partnership models and lessons learned

# Changing Nature of Environmental Protection



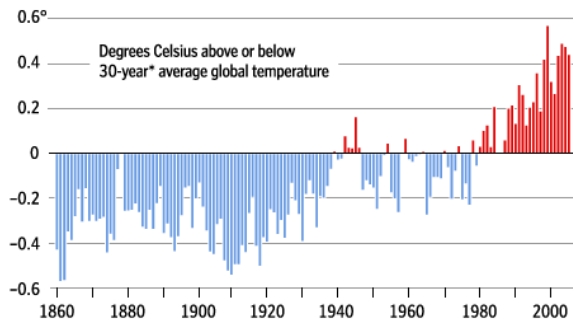
## ***EPA Administrator Stephen Johnson Calls for “Holistic Approach” to Environmental Challenges***



I believe America is moving into a new phase of environmental protection ... evolving from pollution control to pollution prevention to sustainability.

— Stephen L. Johnson 4

# Convergence of Business Strategies and Public Policies



Global Trends/  
Societal Pressure



Risk  
Management  
/Insurers

Regulations/  
Regulators

Finance/  
Investors

UN/Global  
Society

Business  
Strategy

Sustainable  
Development

Public  
Policy

# Risk and Sustainability

Unsustainable development increasingly needs to be understood as having the potential to substantially change the risk landscape.

—*Swiss Re Sustainability Report, 2004*

# Stimulating Sustainability Policy and Research

## EU Directives

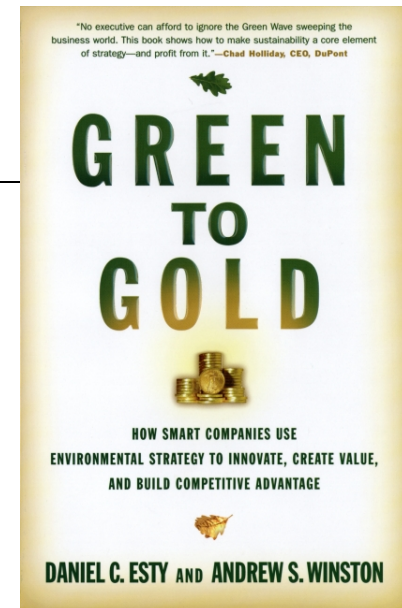
- Restriction of Hazardous Substances Directives (RoHS)
- Waste Electrical and Electronic Equipment (WEEE)
- Registration, Evaluation and Authorization of Chemicals (REACH)

## Implications

- Regulate products (input) not outputs
- Manage material not waste (RCRA 2020)
- Life-cycle assessment, cradle-to-grave management
- Apply green engineering and green chemistry
- Shift burden of proof to industry (stewardship)
- Measure future financial risk and liabilities

# Control Environmental Risks

- Anticipating environmental issues and addressing them
- Staying ahead of new regulatory requirements
- Managing government mandates to gain relative advantage in marketplace





# Partnership Models, Lessons Learned

- Avoid and/or anticipate regulatory issues
  - (EPA Sectors Programs, Computational Toxicology)
- Achieve cost-effective and innovative solutions
  - Wal-Mart-EPA
- Help decision makers make sustainable decisions
  - SEQL, CNS
- Enhance transparency and public support
  - IKEA - Rainforest Alliance
- Promote behavioral changes
  - Green Campuses
- Address global issues
  - UN Partnerships

# EPA Partnership Programs

[www.epa.gov/partners/index.htm](http://www.epa.gov/partners/index.htm)



**WEST COAST COLLABORATIVE**  
Public-private partnership to reduce diesel emissions

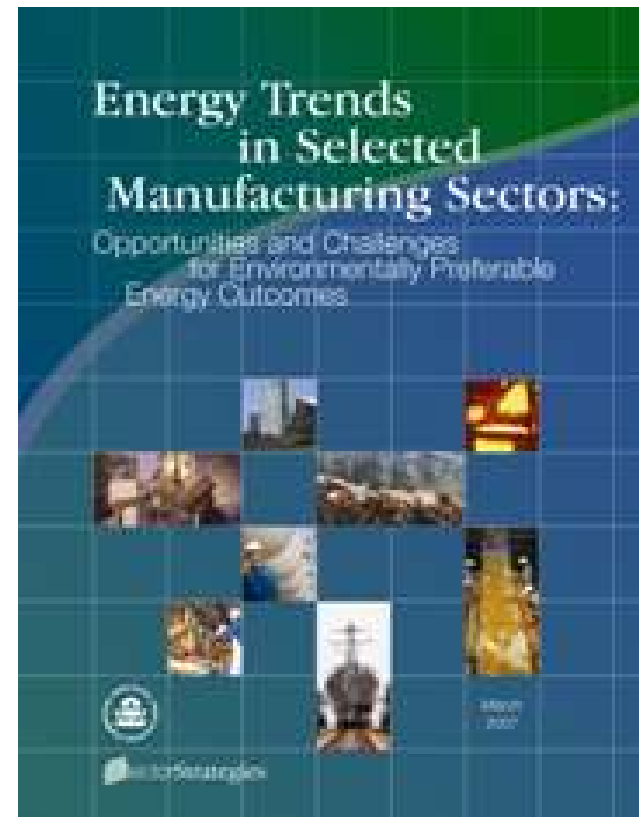
A stronger economy.  
A healthier environment.



SmartWay Transport Partners **DELIVER.**



- **Agribusiness**
- **Cement Mfg**
- **Chemical Mfg**
- **Colleges and Universities**
- **Construction**
- **Forest Products**
- **Iron and Steel**
- **Metal Casting and Finishing**
- **Oil and Gas**
- **Shipbuilding and Ship Repair**
- **Paint and Coatings**
- **Ports**



# CNS: Selected Projects

*(Collaborative S&T Network for Sustainability)*

Integrating Water  
Supply Management  
and Ecological  
Flow Requirements

Efficient Materials  
and Energy Use:  
Understanding  
Economic Benefits

Bringing Global  
Thinking to Local  
Sustainability  
Efforts for the  
Boston Region

P2 and the  
NY/ NJ Harbor

Ecological Sustainability  
in Rapidly Developing  
Watersheds

Sustainable Sandhills:  
A Plan for Regional  
Sustainability

Cuyahoga  
Sustainability  
Network

Decision Model  
for Urban  
Water Reuse

Sustaining Multiple  
Benefits in Large  
River Floodplains

Using Market  
Forces to  
Implement  
Sustainable  
Watershed  
Management

Transforming  
Office Parks  
into Transit  
Villages



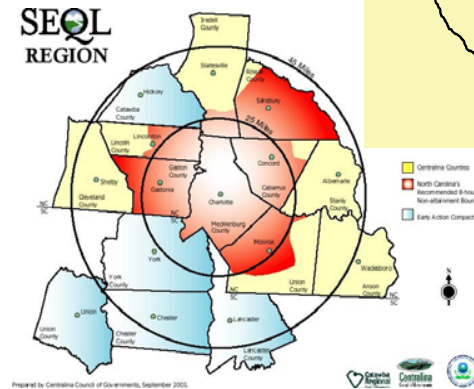
Sustainable  
Land Use in  
Puerto Rico

...other Region 2 sites

► Puerto Rico
► Virgin Islands

# What is SEQL?

SEQL  
REGION



- Sustainable Environment for Quality of Life
- Promotes integrated planning to protect the environment and quality of life while promoting economic win-wins
- Landmark regional partnership for integrated planning
- One of the first programs of its kind in the nation



# EPA and Wal-Mart



***To be supplied 100%  
by renewable energy***

- Existing stores 25% more efficient in 7 years; new stores 30% more efficient in 4 years
- Trucks 25% more efficient in 3 years; 50% in 10 years



***To create zero waste***

- 25% reduction in solid waste in 3 years
- All private brand packaging improved in 2 years



***To sell products that  
sustain our resources  
& environment***

- Align supply chain around sustainable product innovations

**21<sup>st</sup> Century Leadership**



**WAL★MART**  
Business Sustainability

# Wal-Mart EPA Contacts

- Climate, Energy, Global Logistics – OAR
  - SmartWay shipping partner
- Packaging and Waste – OSWER
  - EPA Waste Reduction Model (WARM)
- Chemical Products – OPPTS
  - Preferred Chemical Principles
- Electronics OSWER – OPPTS
  - Recycling used electronics





*Citizen groups*

*Growth of  
the Internet  
and other  
technologies*



*New partnerships between businesses  
and environmental groups*

[Text Only](#)

[Languages](#)



**Global Forest Watch**

*Linking forests & people*

**What's  
new?**

**GFW Countries**

Cameroon  
Canada  
Gabon

Brazil  
Chile  
Indonesia  
Russia  
Venezuela

**Interactive Maps**

Cameroon  
Canada  
Gabon

**About Global Forest Watch:**

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**Your Comments**

Global Forest Watch is an international data and mapping network that combines on-the-ground knowledge with digital technology to provide accurate information about the world's forests.

**Forests of the World**





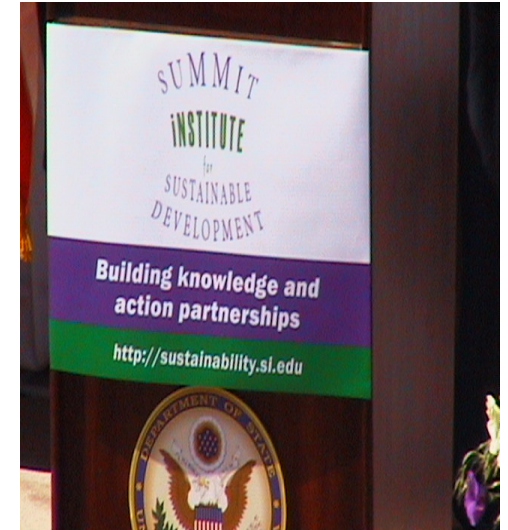
## *Newsweek, August 27, 2007*

As more schools get serious about going green, college presidents say sustainability is no longer an elective.



# UN Partnerships Addressing Global Issues

- Launched at WSSD
- Resistance at first—evolved to new way of doing business
- Business—NGO—Government partners
- Shift UN focus from negotiation to concrete outcomes
- New culture of transparency/  
public accountability
- Web-based monitoring of results



# The Need for Sustainable Development



- 2.8 billion people live on less than \$2/day.



- 42 million people live with HIV/AIDS;  
8.8% of Sub-Saharan African adults are HIV-positive.



- 1.1 billion people lack safe drinking water;  
2.3 billion people lack access to sanitation.

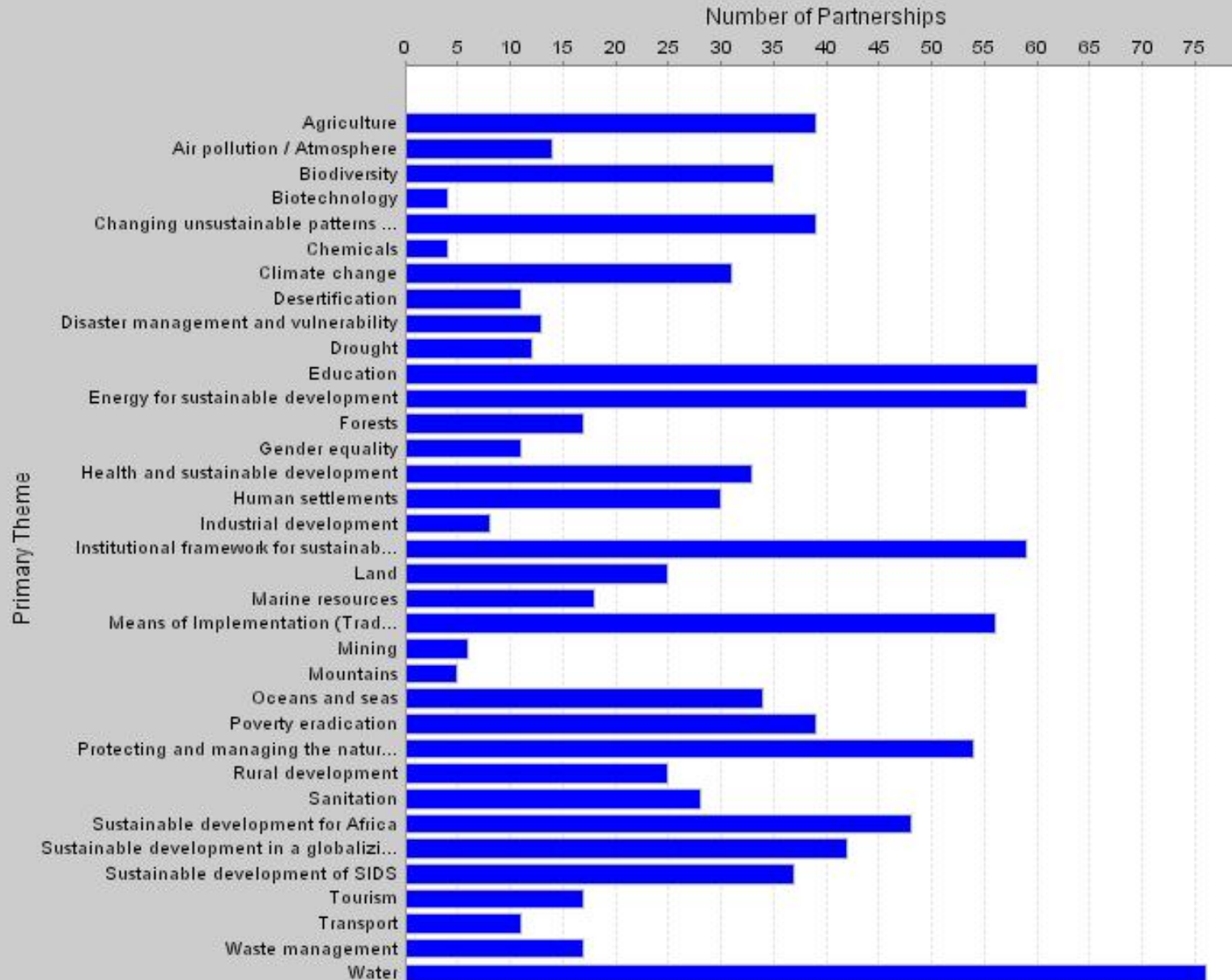


- 2 billion people lack access to modern energy supplies.

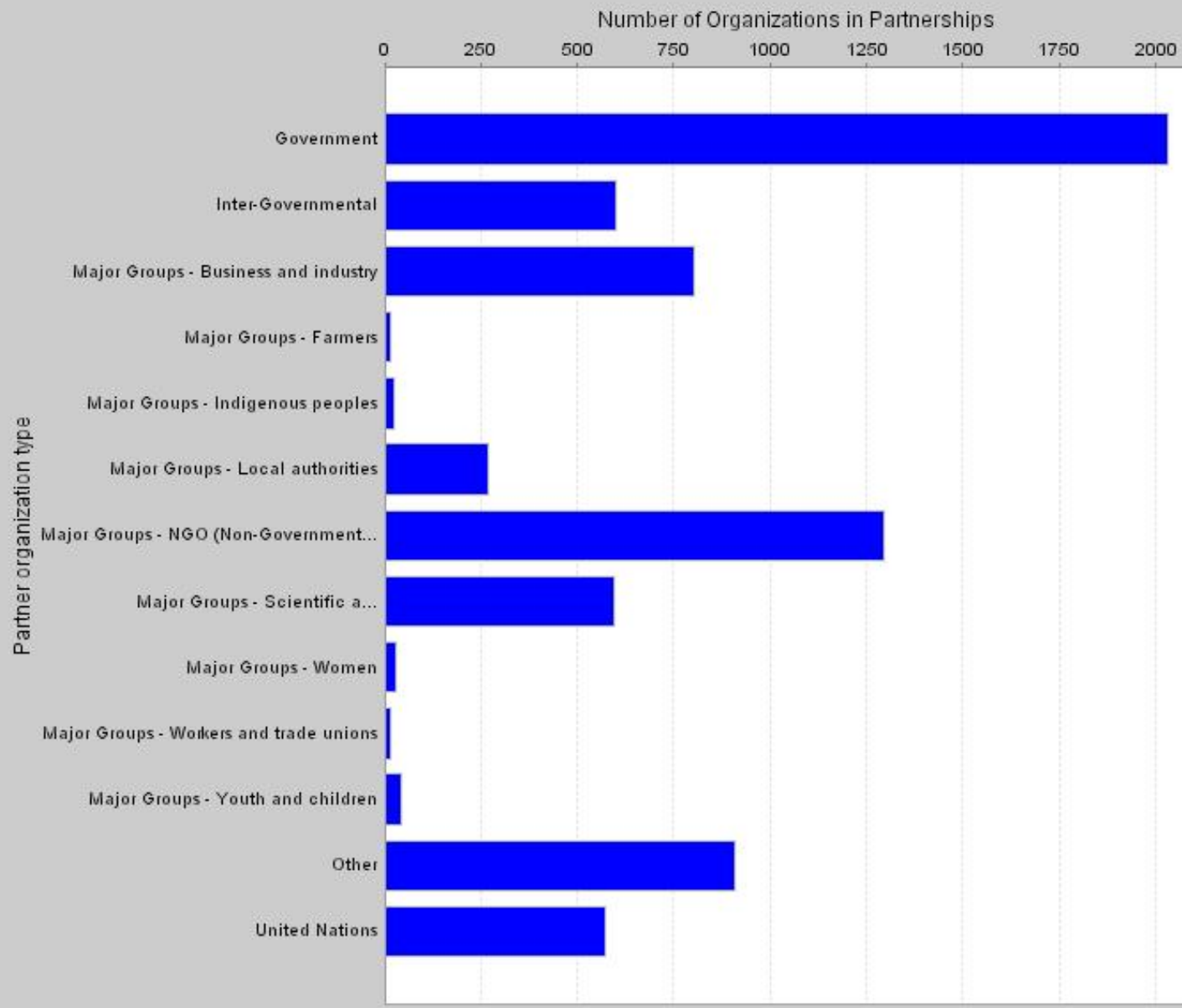


- 75% of the world's fisheries are fully or over-exploited;  
an area the size of Virginia is deforested each year.

## Primary Themes (10-09-2007)



## Partners (Organization type) (10-09-2007)



***Looking Ahead:***  
**The Next Level of  
Environmental Protection**

# Roles of Regulators in Promoting Sustainability

- **Mandate:** Regulations, directives, standards, Executive Orders (*“Leading by Example”*)
- **Facilitate:** Policy, education, measure, and inform (*EPA Draft Report on the Environment*)
- **Partner:** Joint ventures, collaborative problem-solving (*EPA Performance Track, Design for the Environment, Climate Partnerships, Cooperative Conservation*)
- **Endorse:** Rewards and recognition (*President’s Green Chemistry Award, Malcolm Baldrige Award*)



# ***Evolving EPA Governance***

<b>More Flexible Command-&amp;-Control Low Level of Collaboration</b>	<b>More Flexible Command-&amp;-Control High Level of Collaboration</b>
<b>Less Flexible Command-&amp;-Control Low Level of Collaboration</b>	<b>Less Flexible Command-&amp;-Control High Level of Collaboration</b>