

Sustainability & Environmental Issues for Indian Industries

Mandar Parasnis

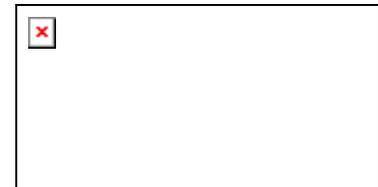
**Green Purchasing Network India /
E2KM Group**

Energy Environment Knowledge Management

mandar@e2kmgroup.com / mandar@gpnindia.org



www.e2kmgroup.com



www.gpnindia.org

Where is Your Dream Job?



SONY



Panasonic

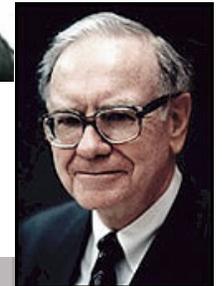


3M



League of Extraordinary CEOs

- Visionary / Pathfinder
- Profitability / Returns to shareholder
- Great turn-around capabilities
- Smooth employee relations
- Institution-builder - “*Built to Last*”

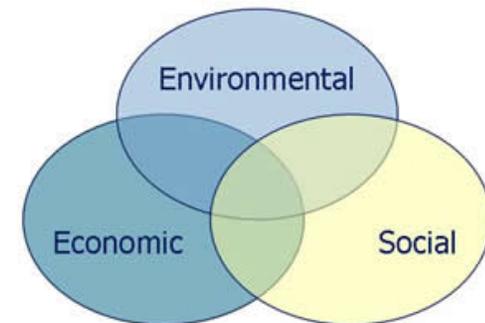


Is this all mutually exclusive in present context?

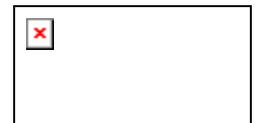


Present Context

- Globalization: *Surf the wave !*
- New Pressures
- New rules of the game
 - Profitability
 - Quality
 - Environmental issues
 - CSR, Corporate Governance



- Triple Bottom Line — *Economic, Environmental, Social*



Managing Business in Present Context means..

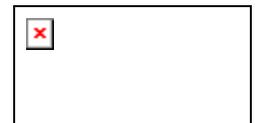
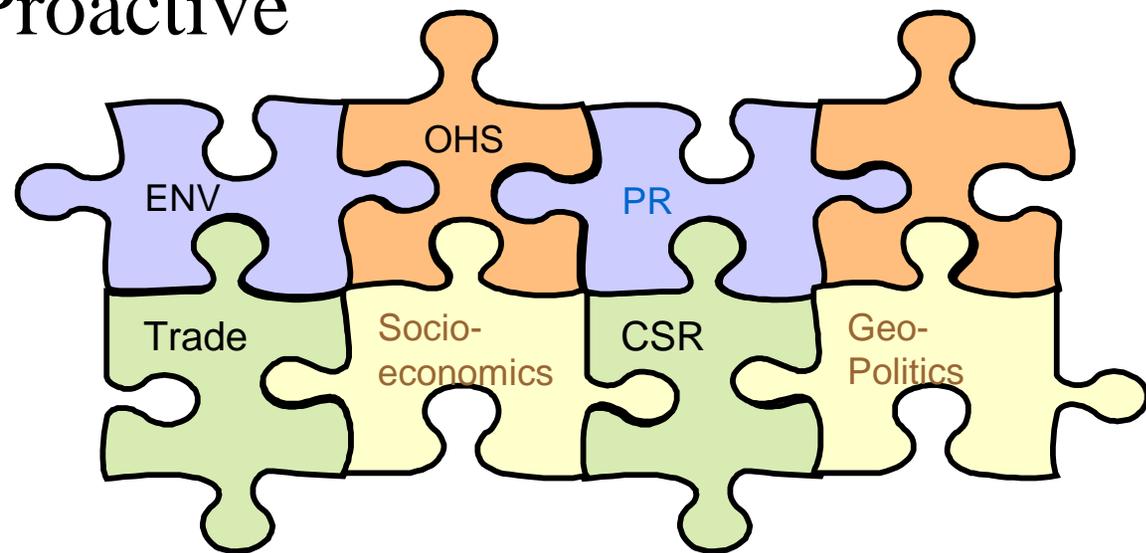
- Managing Profitability + Sustainability

- Triple bottom line

- Stakeholders

- Pragmatic, Proactive

- Holistic



Changing Lifestyle

Growing Affluent Middle-class

Increase in demand for more and newer products by consumers

Increase in production by manufacturers to cope with the increasing demand from consumers

- Water shortage
- Energy shortage
- GHG Emissions / Climate change

- Waste generated by consumers
- Shortage of waste handling & management capacities
- Increase in e-waste

- Disparity :North-South/Rich-Poor
- Child Labor
- Exploitation of unskilled women labor



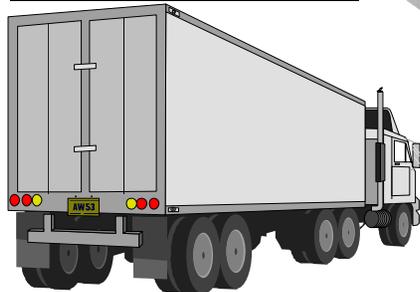
Industry and Environmental Degradation



Resource extraction of raw materials through mining, logging, water extraction, energy generation.



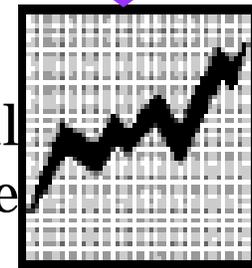
Resource utilization during manufacture leading to emissions, wastewater and solid waste generation.



Resource demand during distribution, use and disposal of goods and services.



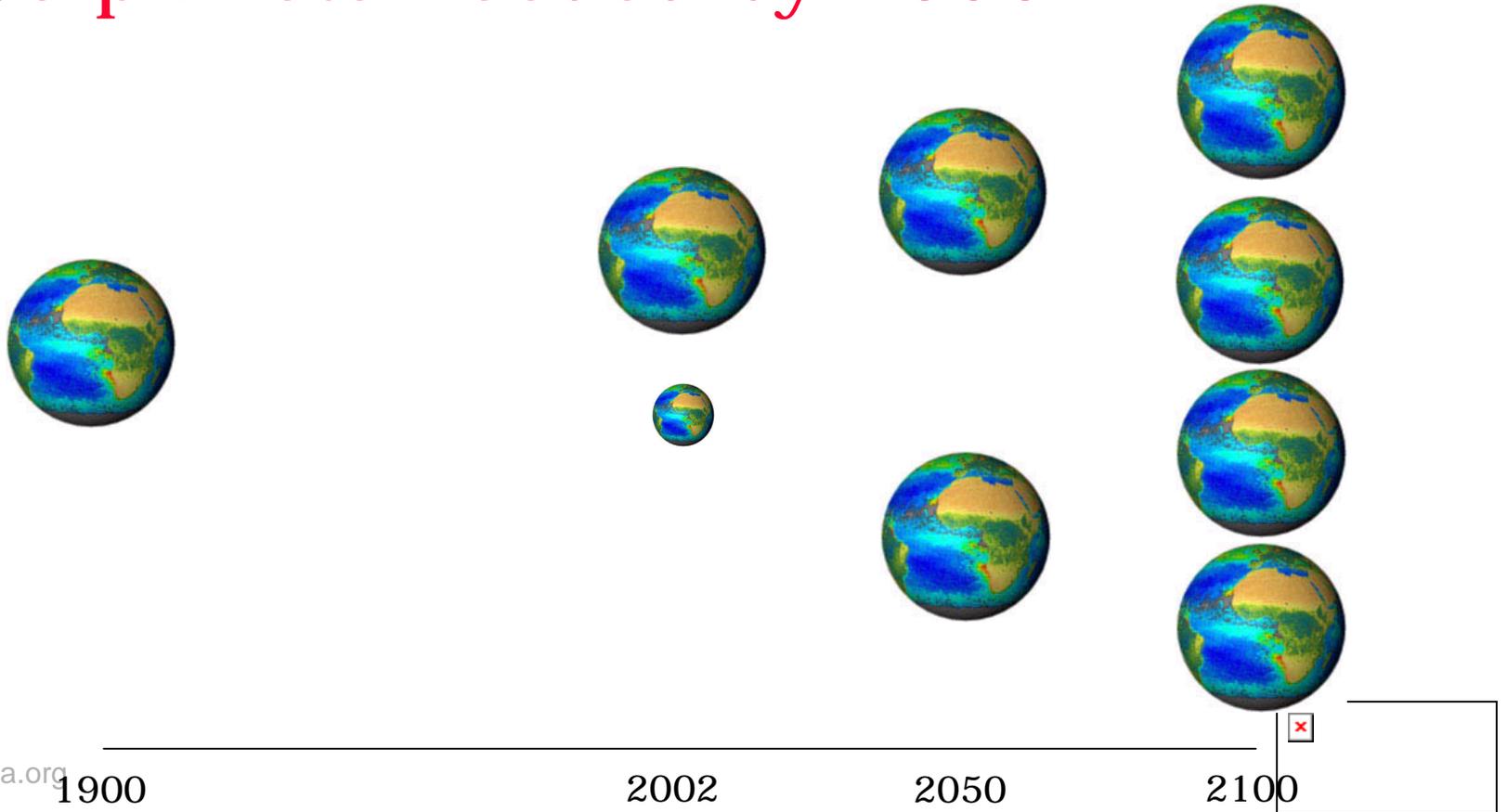
Costs of environmental damage



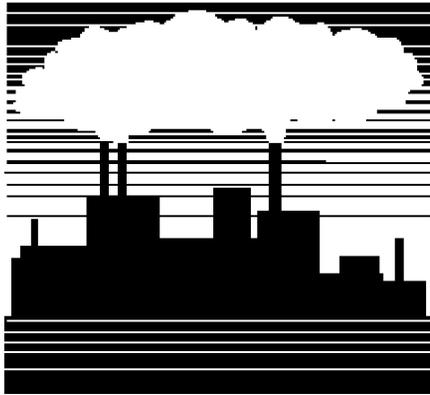
Ecological Footprint

If we go on with current production and consumption patterns,

Two planets needed by 2050



COST OF ENVIRONMENTAL DAMAGE



ASIAN REGION - 5% OF ANNUAL GDP

CHINA--- 10% OF ANNUAL GDP

INDIA --- >5% OF GDP

**JAPAN -- 1% OF GDP
in 1995.**

Estimated worldwide expenditure for purchasing and maintaining end-of-pipe technologies is over US\$ 3 BILLION.

World Bank estimates in 1992 -

East Asian countries would spend up to \$ 20 billion a year during the 1990s to clean up environmental damage brought about by rapid industrialization and population growth.



Public Concern

Societal demand for a cleaner environment and a better “quality of life” is increasing.

Public concern is being expressed as:

- protests/law suits
- consumer boycotts of products
- willingness to pay a premium for eco-friendly products



Incidences	Cause	Result
Love Canal Episode, USA	Toxic Waste Poisoning	PUBLIC PROTEST
Minamata	Mercury Poisoning	
Bhopal gas Tragedy	MIC Gas release	
Bangladesh Wells	Arsenic Poisoning of the Ground water	
Rivers like Ganges, Yamuna, Yangtze, Irrawady etc.	Industrial wastewater & domestic sewage discharge	



International Environmental Treaties and Conventions

International treaties and conventions to address global issues

IMPACT

- Basel Convention
- Montreal Protocol
- Climate Change Convention
- Convention on Biodiversity
- Convention to Combat Desertification

Phase out of:

- *hazardous materials*
- *lead in petrol*
- *CFCs in refrigeration*
- *GHG emitting processes*

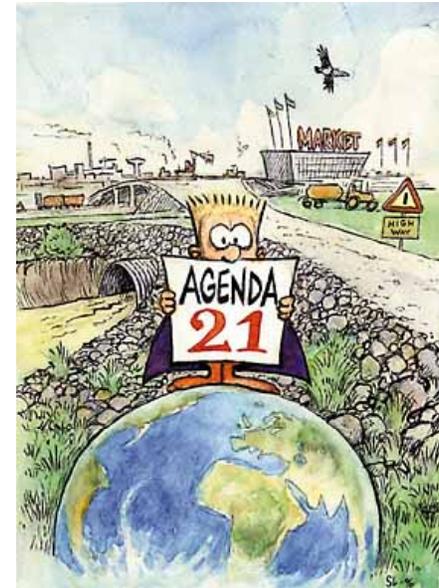
Biodiversity conservation promotion



Sustainable Development and Agenda 21

Sustainable Development

“development that meets the needs of the present generation without compromising the ability of the future generations to meet their needs.”Our Common Future, 1987.



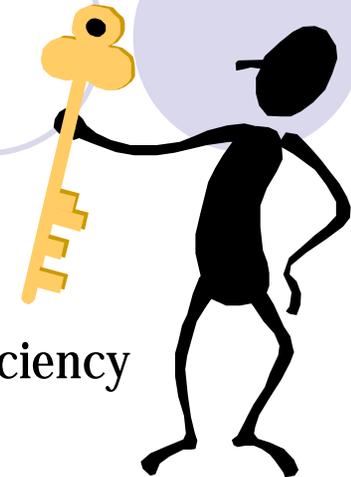
Agenda 21, is a 300 page plan for achieving sustainable development in the 21st century. It was adopted in the first international Earth Summit, at the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil, on 14 June 1992

Resource Efficiency and Sustainability

Sustainable
Development



Resource efficiency is one of the key issues in sustainable development.



Resource Efficiency

- Sustainability thus emerges as a crucial component of any successful paradigm to guide development in the new Millennium.
- Requires a new emphasis on the nature and size of inputs to development, especially energy, resource, chemical and other material input.

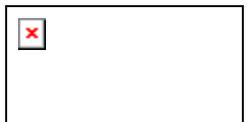
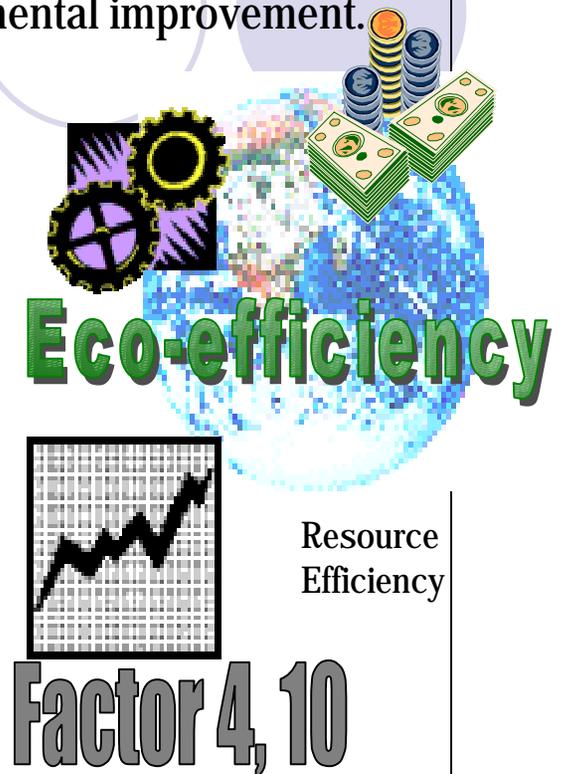
Related terms and concepts that are emerging include:

- Eco-efficiency
- Eco-sustainability
- Eco-design
- Product Life-Cycle
- Green Productivity



Eco-efficiency, Factor 4 and 10

- Eco-efficiency emphasizes economics, in addition to environmental improvement.
- It is concerned with resource productivity, that is, maximizing the value added per unit of resource input.
- The Wuppertal Institute in Germany coined the term Factor 4 to show that it is possible to quadruple resource productivity given the present state of technology.
- Rising levels of consumption and a doubling of the world's population over the next 40-50 years would require a factor 4 increase in food production, a factor 6 increase in energy use and at least a factor 8 growth in income.
- The Factor 10 Club, an international body of senior government, non-government, industry, and academic leaders believes that within one generation, nations can achieve a ten-fold increase in the efficiency with which they use resources.

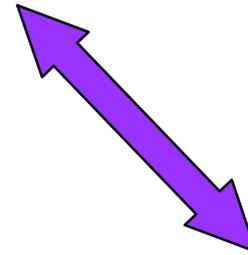
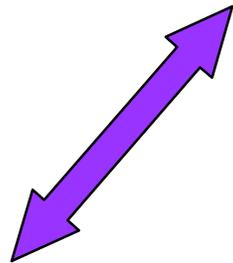




The Triple Bottom Line

Economic

(financial capital)



Environmental

(natural capital)



Social

(human capital)



Increasing Focus on Products

- Product life cycle environmental impacts
- Changing legislation: EU, Japan
 - Recycling Law
 - WEEE, RoHS
- “Sustainability requirements” from buyers
 - Environmental Issues
 - Social Issues
 - Management Systems



Two popular approaches adopted around the world

Green Purchasing Greening Supply Chain

MANUFACTURERS

can not produce
“*green products*”
unless they work
together with
suppliers.



SUPPLIERS

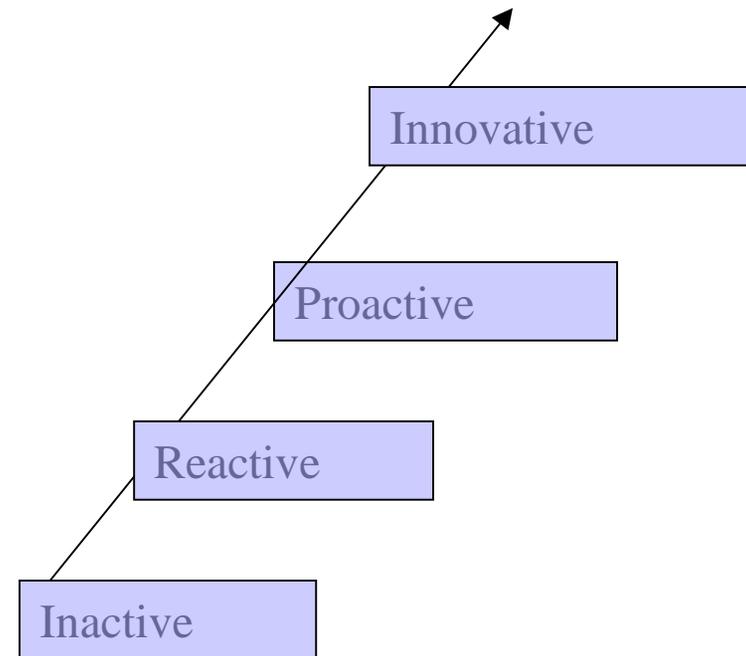
need to meet
requirements of
buyers to maintain
business relationship.

The beauty here is that it results in win-win situation for all!



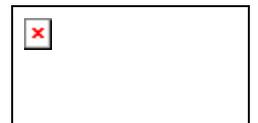
What is in it for Indian Industries ?

- Responding to the demands from (overseas) buyers
- Makes their standards of higher quality than others.
- Saves not only cost but also valuable resources
- Eliminates waste through the production process.
- Promotes innovative design and thus new market opportunities
- Reduces liabilities, creates new business opportunities



Adopting Green Purchasing concepts

- Procurement of goods and services that have less impact on the environment
- Incorporate environmental considerations as part of the normal purchasing process
- Incorporate pollution prevention principles early in purchasing process
- Work with suppliers



About this seminar

- To understand the new international trends
- First hand information from Japanese speakers
 - Japanese Recycling Law
 - Green Purchasing / Procurement Law
- Very new concepts in India
- Try to understand how they are doing it and how it will affect us



Green Purchasing Network India

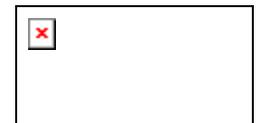
- An evolving network of professionals interested in Green Purchasing and Green Supply Chain issues
- Objectives
 - To create awareness amongst Indian industry and other stakeholders about Green Purchasing and Procurement (GPP)
 - To develop a pool of experts on GPP and facilitate networking amongst them
 - To encourage and facilitate implementation of GPP and Greening Supply Chains (GSC) projects to enhance the competitiveness of the Indian industries

www.gpnindia.org



GPNI Activities

- Email discussion forum
- Awareness seminars, workshops, exhibitions
- Technical information dissemination
 - *Toolkit*
 - *Newsletters*
 - *Website*
- Technical assistance
- Collaboration with IGPN



www.gpnindia.org / info@gpnindia.org



[About GPNI](#) • [About GPP](#) • [Toolkit](#) • [Events](#) • [Egroup](#) • [Contact Us](#)

contact us

[HOME](#) > contact us

Green Purchasing Network India
C/o E2KM Group (Attn: Mr. Mandar Parasnis)
'Gangotri' 23, Alankar Society
Karvenagar, Pune 411052, INDIA
Telefax: (91) 20-25454573
Email: mandar@gpnindia.org

GPN India © 2006

www.gpnindia.org

