



# Environmental Health & Safety and Sustainability

# **What is Sustainability?**

## Sustainability: the broad definition



...development that “meets the needs of the present without compromising the ability of future generations to meet their own needs.”

1987, World Commission on Environment and Development (a.k.a the Brundtland Commission)

**Sustainability**” - first used by the World Council of Churches in 1974 in response to environmental challenges presented by growth and related social implications, including poverty.

# Sustainability: the three pillars



## There are three Pillars of Sustainability:

- ✓ Economic
  - ✓ Environmental
  - ✓ Social
- Businesses would traditionally focus on just the economic (or financial) while neglecting Environmental and Social (E&S) issues
  - But E&S risks are always inherent in all business operations – ignoring them means exposing the business to internalities and externalities that could lead to failure
  - This is why governments, institutional investors and regulators are now very interested in the E&S risks that businesses carry

# The Business Case for Sustainability

## A. Our changing world

- Global regional and local environmental changes
- Pressure on natural resources
- Threatened threshold of ecological and social longevity
- Worsening human health
- Economic investments without real human development

## B. Institutional drivers

- Global/International
- National
- Corporate

## C. Sustained and Improved Financial Return

- Reduced costs of operations
- Risk mitigation
- Improved brand value
- New products

# Global environmental problems

Type of Problem	Effect of Concern
<b>Deforestation</b> <ul style="list-style-type: none"> <li>• Logging</li> <li>• Land for development</li> </ul>	Disappearing biodiversity Change in ecological balance Climate change
<b>Land and Water Pollution</b> <ul style="list-style-type: none"> <li>• Industrial Effluents</li> <li>• Storm water</li> </ul>	Reduction in biodiversity/fish catch Groundwater contamination Impact on juveniles Bioaccumulation/human health
<b>Altered Natural Processes</b> <ul style="list-style-type: none"> <li>• Dams</li> <li>• Canalization</li> <li>• Ports</li> <li>• Sand mining</li> </ul>	Coastal erosion Degraded ecosystems Increased flooding Loss of farmlands

# Global environmental problems

Type of Problem	Effect of Concern
<b>Air Emissions</b> <ul style="list-style-type: none"> <li>• Power Generation</li> <li>• Gas Flaring</li> <li>• Fossil fuels</li> </ul>	Global Warming Acid Rain Health (cancer) Migration Patterns Breeding Cycles/Periodism
<b>Urbanization</b> <ul style="list-style-type: none"> <li>• Land filling</li> <li>• Paving</li> <li>• Built up areas in general</li> </ul>	Disappearing wetlands Increased wastes Altered drainage and flooding Increased temperature
<b>Transportation</b> <ul style="list-style-type: none"> <li>• Air, Water, Road</li> </ul>	Fossil Fuels Alien species Canals
<ul style="list-style-type: none"> <li>• Others</li> </ul>	<ul style="list-style-type: none"> <li>• E-waste</li> <li>• Nuclear waste</li> </ul>

# Climate Change

- Global Sea Level Rise
- Global Temperature Rise
- Warming Oceans
- Acidification of Oceans
- Shrinking Arctic Ice and Glaciers
- Extreme Events – Stronger hurricanes, wildfires etc

## Social dimensions

- Poverty
- Conflict and Arms proliferation
- Inequality and marginalization
- Human rights
- Labour relations
- Governance
- Human Health
- Other social pathologies
- Overall human Development

# Environmental Problems in Pictures



## Institutional Drivers

- International Treaties e.g., on pollution, climate change and wildlife
- Increased and stricter National and regional laws and increased regulations
- Increased Environmental and Social Safeguard requirements of Development Finance Institutions
- Corporate policies

## National Laws

- National Environmental Policy (1989)
- EIA Act LFN 2004
- Establishment of:
  - FEPA and State EPAs
  - Federal and State Ministries of Environment
  - NESREA (2007)
  - NOSDRA
  - Ratification of various conventions and treaties
- Various Guidelines on wastes, effluents and emissions

**Why should we implement sustainability?**  
**Risks and Opportunities**

## Risks and Opportunities in sustainability

If not effectively managed, E&S issues arising from business operations could expose a business to the following risks:

- Regulatory infringements, punitive fines and penalties
- Law suits and liabilities for E&S damages
- Loss in market share and competitiveness
- Disruptions of operations
- Public health and safety risks
- Reputational damage
- Negative publicity and loss of public goodwill
- Inability to attract and retain best talents

# Risk

- Risks arise mostly from:
  - Major measurable or perceived environmental and social impacts
  - Pollution and habitat destruction.
  - Supply chain risks
- Direct Risks
  - Reduced project lifespan and revenue
  - Reduced number of operational days per annum
  - Increased time and cost for maintenance
  - Costly project design or operational changes
  - Costly remedial action (if indeed possible)
  - Legal action and fines – could be very expensive and protracted

# Risk

- Indirect Risks
  - Mostly Reputational Risk – Defined as the probability of being a target of a public campaign multiplied by the cost for the financiers of such a campaign
  - The more established the financier/sponsor, the higher the impact on reputation
    - Reputational risk can harm brand value, employee morale, ability to recruit and others
    - There is a strong link between reputation and branding. Over 85% of consumers have a more positive image of companies that are seen to be responsible

# Supply Chain Risk

- Important because of:
  - Effect in pricing of inputs
  - Effects on customer behavior
  - Risks could impact firm
  - Avenue to extend sustainable practices through leverage
  
- Supply chain sectors of concern
  - Processing
  - Packaging
  - Transportation
  - Natural resource providers
  
- Typical risks
  - Human rights, conflict, environment and climate change - could negatively impact sourcing activities and ultimately reputation and brand value
  - Increased demand for green products
    - Energy efficient, durable - often have low maintenance requirements.
    - Free of Ozone depleting chemicals, toxic compounds and don't produce toxic by-products.
    - Often made of recycled materials or content or from renewable and sustainable sources.
    - Natural resources from sustainable procedures
    - Biodegradable or easily reused either in part or as a whole

## Sustained and Improved Financial Returns

- Reduced cost of operations
- Improvements in resource efficiency - energy and water lead to significant cost savings and lower environmental impact
- Sustainability related operational procedures improve overall operational efficiency
- Improved access to Capital

# Mitigation and Administration of E and S Risks

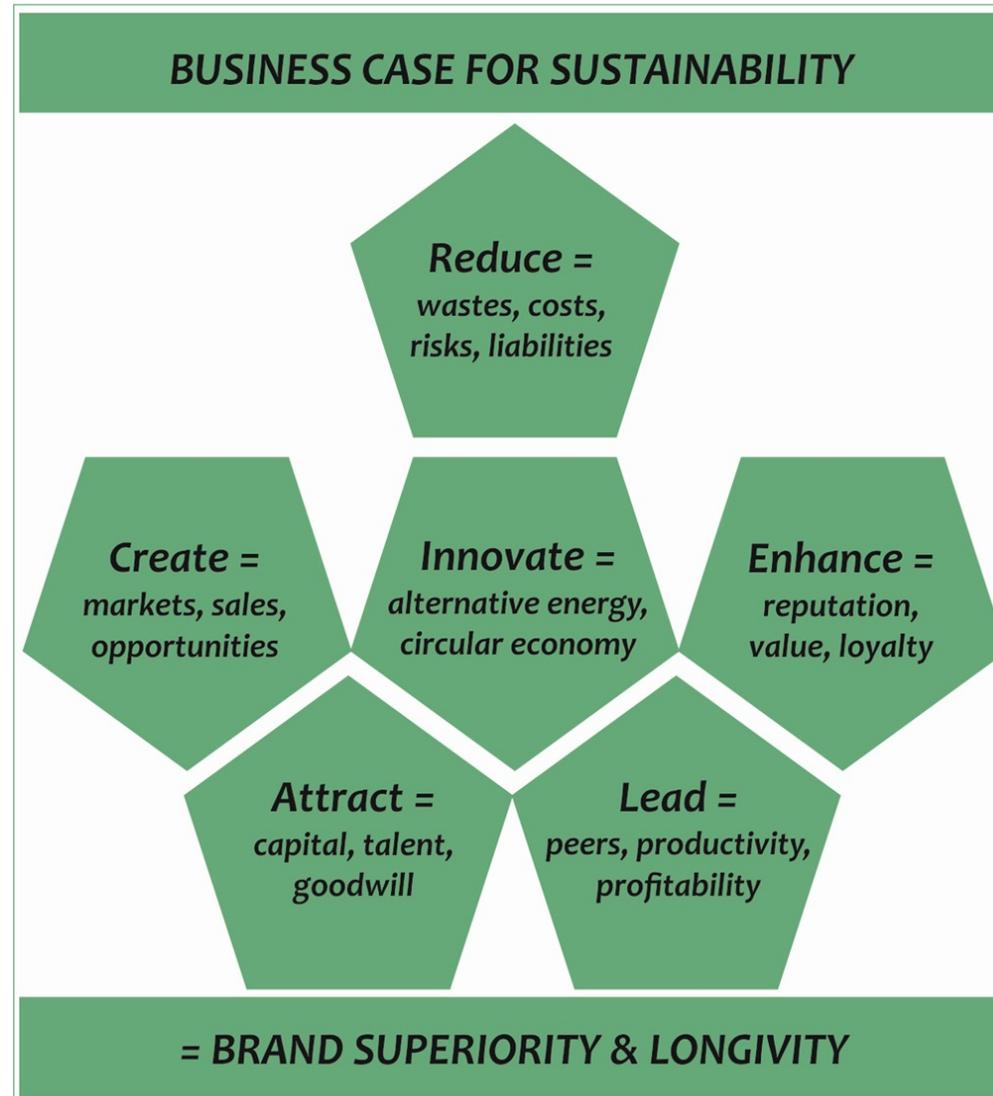
- Tools
  - Internal E&S Assessment
  - Env and Social Due Diligence
  - Periodic Monitoring
  - Covenants in Loan Agreements
- Key Documents/Requirements
  - Health Safety and Env Management Systems (HSEMS)
  - Other Management Systems
  - E&S permits applicable to operations
  - Approved ESIA – Federal Authorities
  - Emergency Response Plans and Facilities
  - HSE Personnel
  - Incident Register
  - Certification

## Constraints to Sustainability in Nigeria

- Poverty
- Population growth
- Poor governance, culture of impunity
- Institutional weaknesses and poor enforcement
- Low awareness
- Over centralization of authority and resources
- Lack of strategic assessments and planning
- Corporate Entities Should be Change Agents!!!

# OPPORTUNITIES

There are big wins that sustainability acculturation brings to the business:



## Opportunities: New Green Products

- Organic foods
- Certified raw materials
- Green buildings
- Renewable energy
- Energy efficient/rated products
- Carbon trading
- Recycling

## Sustainability Drive - Priority, Fad or Value?

- A Priority - an established right to precedence
- A Fad - Something (e.g., practice) that is taken up with great enthusiasm for a brief period
- A Value – An essential and enduring belief, measurable worth

**Sustainability is a Priority and Value !!!**

## To a Corporate Entity...

- Sustainability is about:
  - Recognizing how you impact society (*positive and negatively*)
  - Maintaining economic success and achieving commercial advantage by:
    - Minimising risk
    - Building reputation and trust among people that work with or live around the company.

## Summary Benefits of pursuing sustainability

- Assures longevity – environmental, social and economic
- Reduces risks
- Attracts investors
- Achieves License to Operate
- Direct Cost Savings
- Increased Customer Loyalty and Attraction
- Increased Employee Attraction and Retention
- Ability to Grow
- Innovation and Development of New Technologies
- Increased Profit and Shareholder value
- Protects Global Brand
- Investment in human well being – could be your family member!!!

**THANK YOU**