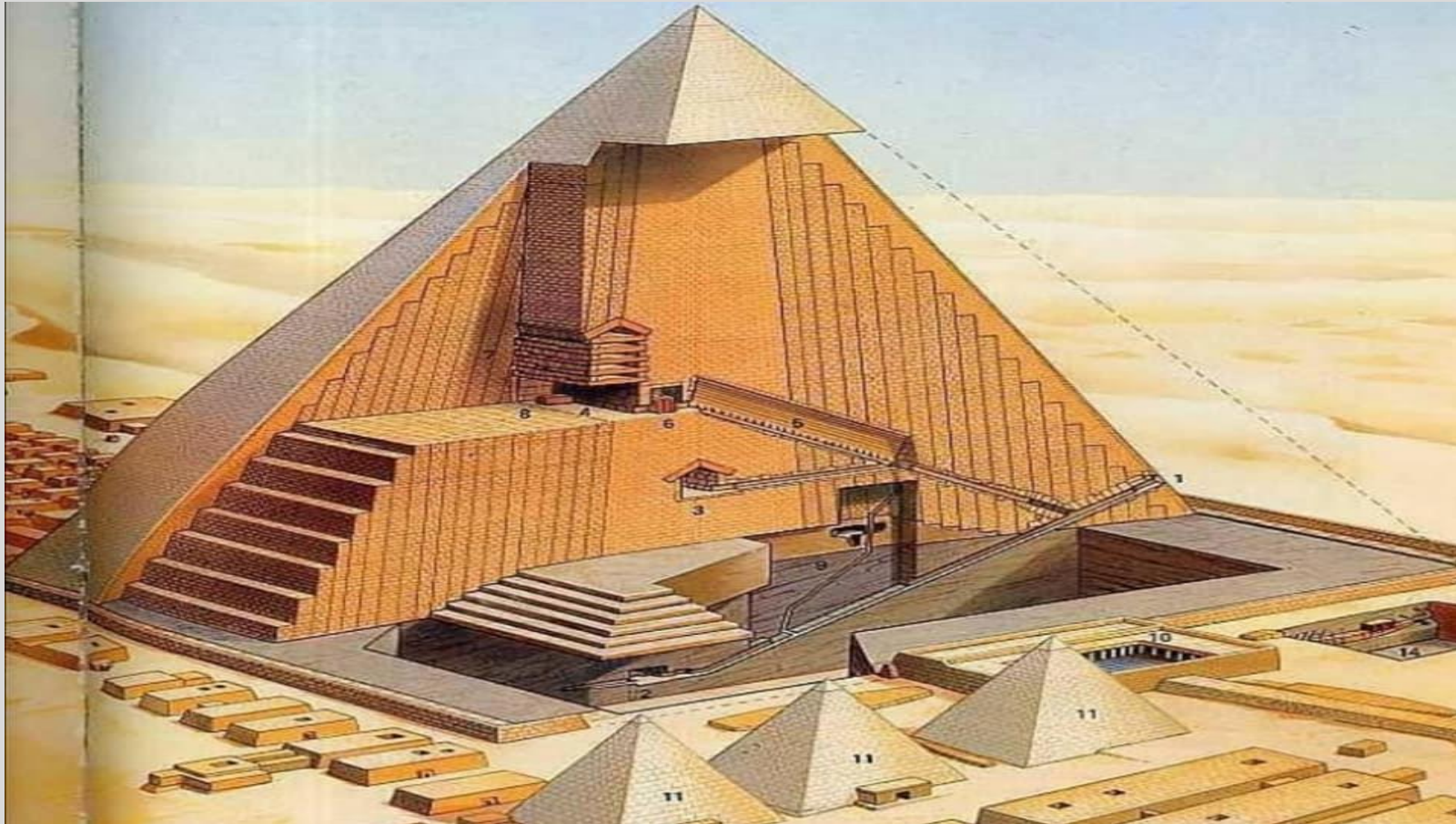


Subject:

**“Make the Earth Sustainable by making
Sustainable Corporations”**

A GENERAL CORPORATE STRUCTURE

Build a Management System



A GENERAL CORPORATE STRUCTURE

The “8 Dimensions of Quality”

In order to build a strong Management structure, keep in mind the “8 Dimensions of Quality” (D. Garvin , Harvard BS):

1. Performance,
2. Reliability,
3. Conformance to,
4. Aesthetics,
5. Service,
6. Durability,
7. Secondary Characteristics
8. Perceived Quality

A GENERAL CORPORATE STRUCTURE

The “8 Dimensions of Quality”



A GENERAL CORPORATE STRUCTURE

Organizational Structure Elements

The Management System should structure by the following:

- Objectives → Depending upon the:
 - ✓ Legal system of a country,
 - ✓ Ownership structure of the corporation. Which means, culture (ethics, values, policy),
 - ✓ Brands of the corporation
- Processes,
- Procedures,
- Work instructions,
- Risks on objectives,
- Awareness & Engagement people,
- Interaction

A GENERAL CORPORATE STRUCTURE

Organizational Structure Elements

What is a process?

What is a procedure?

What is a work instruction?

What is Risk on objectives?

- **Process** → Flow of inputs and outputs information, that answers questions as follows:

-What we want to do?

-Why?

-Who are involved?

-How? (mentioning the resources, methods, etc., not an analytical state)

-When it starts? – when it ends?

-How much it costs?

The result (output) is the input for another Process.. It can be called :

“Net of the Corporation”

- **Procedure** → Gives an analytical state, how the process needs to be done
- **Work instruction** → Explains how to carry out the procedure
- **Control objectives with risk register** → $R(\text{Risk}) = P(\text{Probability}) \times I(\text{Impact})$

A GENERAL CORPORATE STRUCTURE

Corporation core-Context of the Corporation

Context of the Corporation → Leadership / Ownership

1. Objectives
2. Internal factors of the corporation:
 - Culture,
 - Knowledge,
 - Resources,
 - Processes,
 - Shareholders
3. External factors:
 - Economic,
 - Political,
 - Technological,
 - Geographical,
 - Applicable requirements / Stakeholders (legislative, contractual, regulatory - including customers, competitors, suppliers and neighbors)
4. Risks on objectives

A GENERAL CORPORATE STRUCTURE

Employees-Corporation column

- Right skills (soft, technical) and competencies per position,
- Leadership needs firstly to incorporate the organizational principles,
- Leadership needs to assure that directors are bound to take their tasks seriously,
- Right teams,
- Training and supporting employees, depending on their duties,
- Empowerment and recognition, increase employees' motivation,
- Engagement

A GENERAL CORPORATE STRUCTURE

Design & Development - "Plan"

- Processes,
- Procedures (if necessary),
- Work instructions (if necessary)

A GENERAL CORPORATE STRUCTURE

Operations-“Do”

- Processes,
- Procedures,
- Work instructions,
- Verifications (confirming that design output meets the design output requirements for each design element and design package, individually),
- Validations (making final product or service officially approved by meeting the trial requirements),
- Reviews,
- Evidences

A GENERAL CORPORATE STRUCTURE

Controls-"Check"

- Internal auditing (1st party audit),
- Daily reports and observations,
- External auditing performed on suppliers by the corporation (2nd party audit – contracted relationship),
- External auditing performed on the corporation by customers (2nd party audit – contracted relationship),
- Customers' feedback,
- Leadership practices for the internal control system

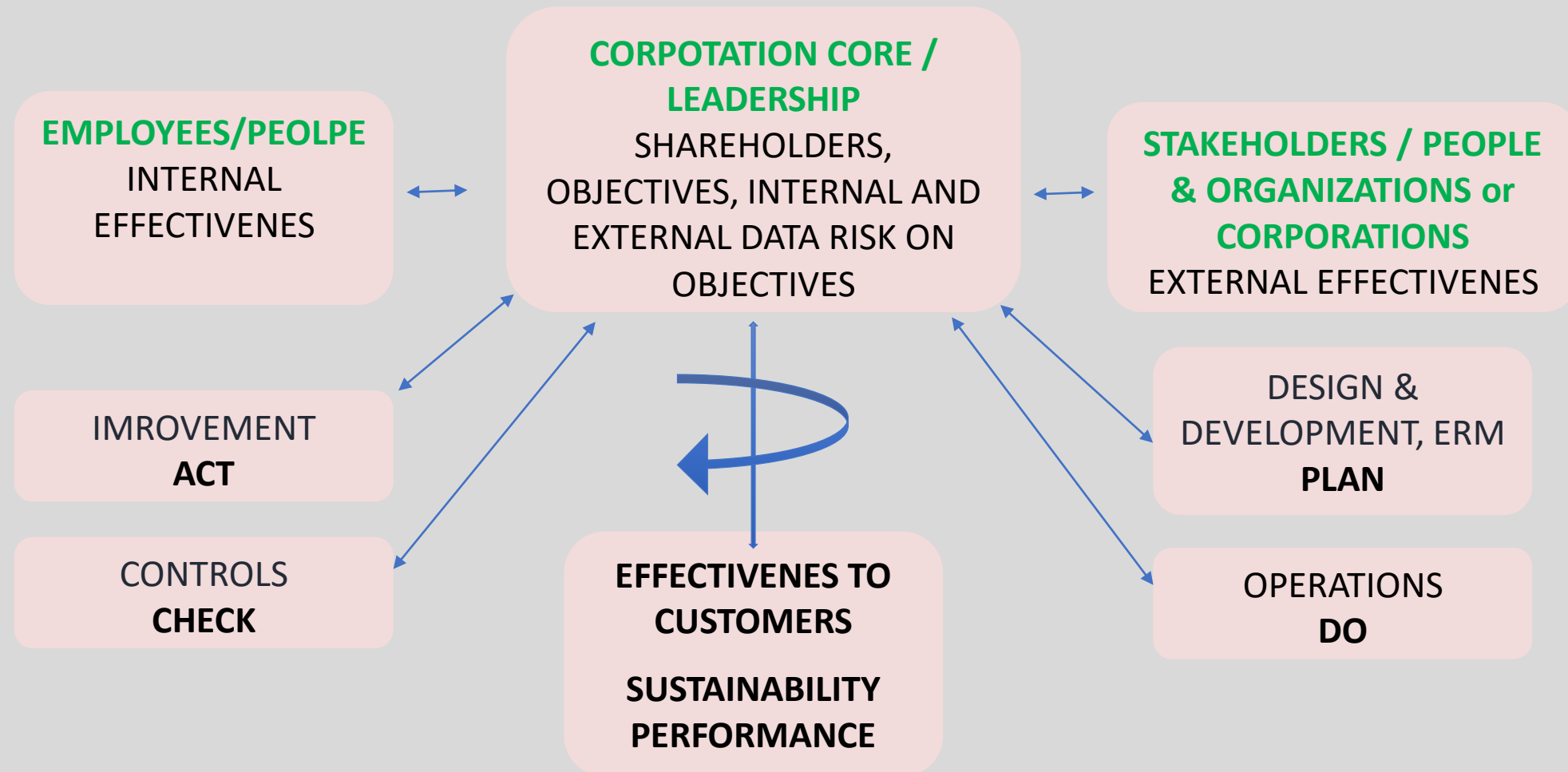
A GENERAL CORPORATE STRUCTURE

Continuous Improvement-"Act"



A GENERAL CORPORATE STRUCTURE

Corporation Diagram for Quality Performance



CONCLUSION

Begin with...

Understanding what the Natural World needs.

We need to focus at least on four goals:

- Energy revolution,
- Food revolution,
- Manage the Oceans,
- Rewild the world (i.e. Rewilding the Earth-A global charter for the ecosystems restoration, approved by the “True Nature Foundation” on April 16, 2020, supported by the UN in the approach to meet the Sustainable Development Goals SDGs)

B AWARENESS OF ISO 14001 (2015) ENVIRONMENTAL MANAGEMENT SYSTEM

What?

Why?

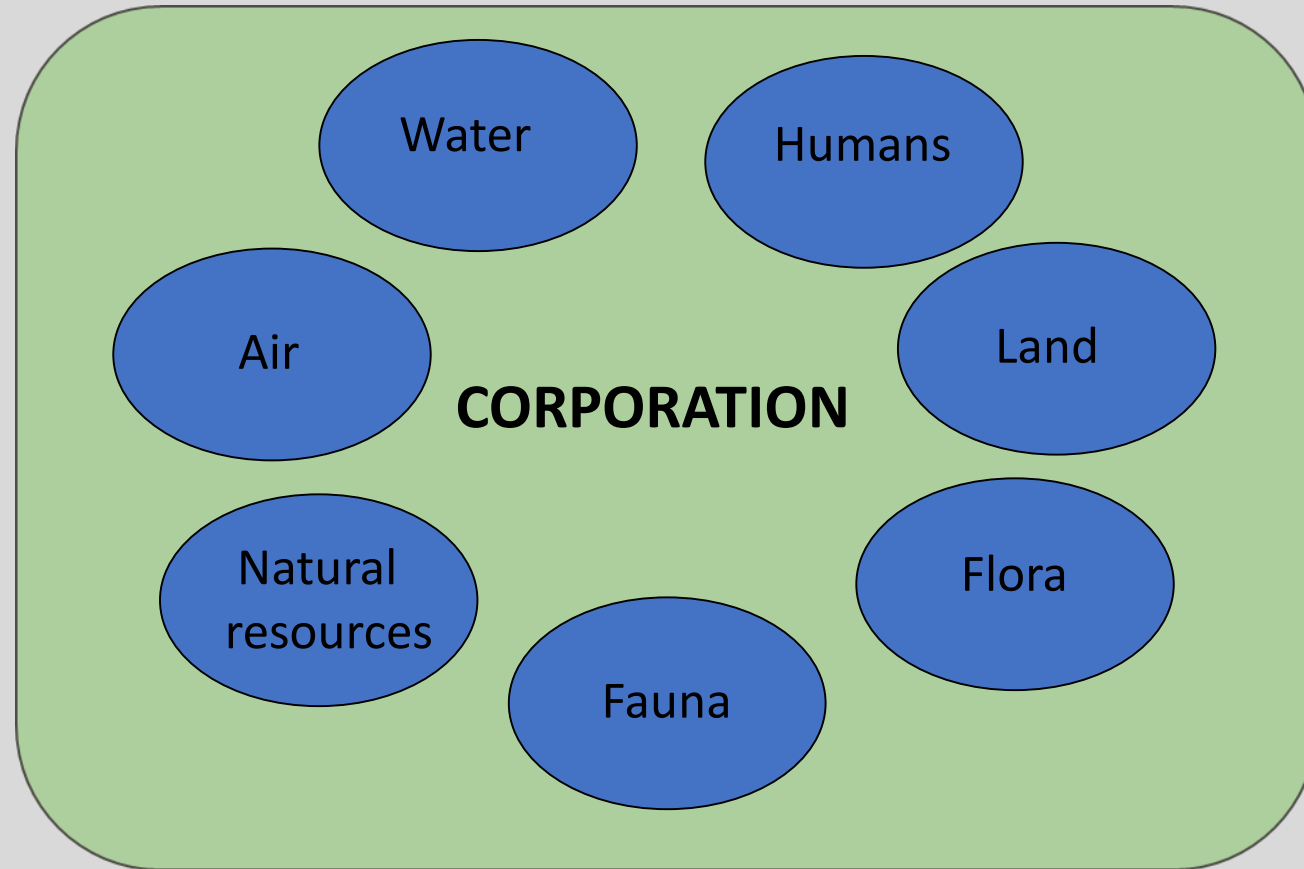
- An International Standard,
- Developed by leading environmental experts,
- Published by ISO (International Organization for Standardization)
- The Standard sets out the fundamental requirements & processes for an effective Environmental Management System

The implementation in a Corporation & the conformity with these requirements and processes:

- Set a framework for environment protection,
- Assures the improvement of the environmental performance,
- Assures that the legislation, regulations and specifications concerning its environment are followed,
- Enhances the competitive advantage and the Stakeholders' trust

B AWARENESS OF ISO 14001 (2015) ENVIRONMENTAL MANAGEMENT SYSTEM

What is the environment?



B AWARENESS OF ISO 14001 (2015) ENVIRONMENTAL MANAGEMENT SYSTEM

Environmental aspects (Cause)

Environmental impacts (Effect)

Environmental Aspects:

any potential interaction that the Corporation processes have with the environment

Environmental impacts:

When these interactions happen, they will have an impact on the environment, either positive or negative.

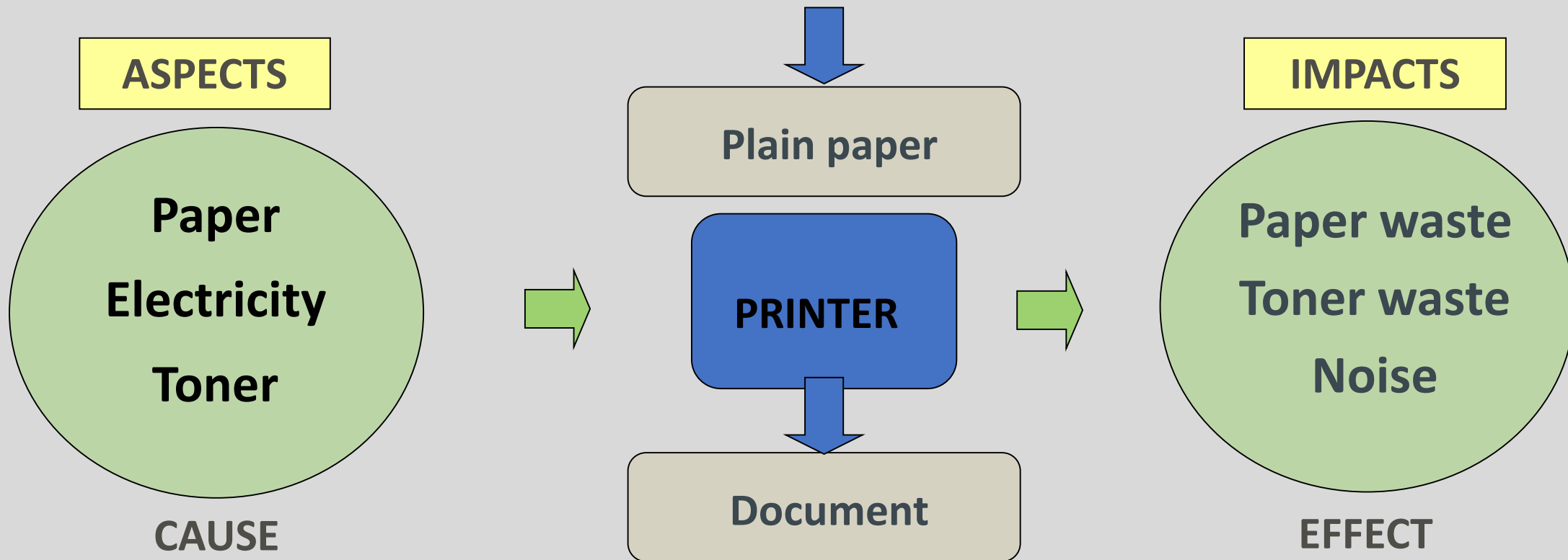
So we could say the relationship between Environmental Aspects and Environmental Impacts can be best described as
“CAUSE” and “EFFECT”

B AWARENESS OF ISO 14001 (2015) ENVIRONMENTAL MANAGEMENT SYSTEM

Environmental aspects (Cause)

Environmental impacts (Effect)

Environmental aspects vs. impacts






B AWARENESS OF ISO 14001 (2015) ENVIRONMENTAL MANAGEMENT SYSTEM

Environmental aspects (Cause)

Environmental impacts (Effect)

Environmental aspects vs. impacts (i.e.)

- Transport, Heating  Emissions – Air Pollution ,
- Electricity use, Natural Gas use  Natural Resources use,
- Used Oil, General Trash  Waste,
- Discharge of Polluted Water, Sanitary Waste  Water Pollution,
- Leakage from Pipe  Contamination of soil and groundwater

B. AWARENESS OF ISO 14001 (2015) ENVIRONMENTAL MANAGEMENT SYSTEM

Implementation and Conformity

Integrate the ISO 14001 Environmental Management System (EMS) in the General Corporate Management System

The EMS is fully implemented in all stages of the Corporation Diagram for Quality Performance (page 13)

C. Defining Sustainability via EMS

What is Sustainability?

Sustainability is the ability to provide for human needs—food, clothing and shelter while having a minimum impact on the Environment.

Sustainability involves the restoration of our habitat*!

Another definition of Sustainability:

"Meeting the needs of the present without compromising the ability of future generations to meet their own needs."

World Commission on Environment and Development (Brundtland Commission Report 1987)

-Example 1: Rewilding the Earth Strategy,

-Example 2: A project to reduce and/or

limitation fluorocarbons to prevent ozone depletion

*Habitat:

A habitat is a home environment for plants and animals or other organisms

A habitat meets all the environmental conditions an organism needs to survive.

For an animal, that means everything it needs to find and gather food, select a mate and successfully reproduce.



C. Defining Sustainability via EMS

Need “Proactiveness”

Sustainability requires a proactive strategic response.

Loss of natural resources and habitat is difficult to reverse.

Along with developed nations, increasingly third world countries are developed local habitats.

EMS provides a systematic approach to address environmental concerns

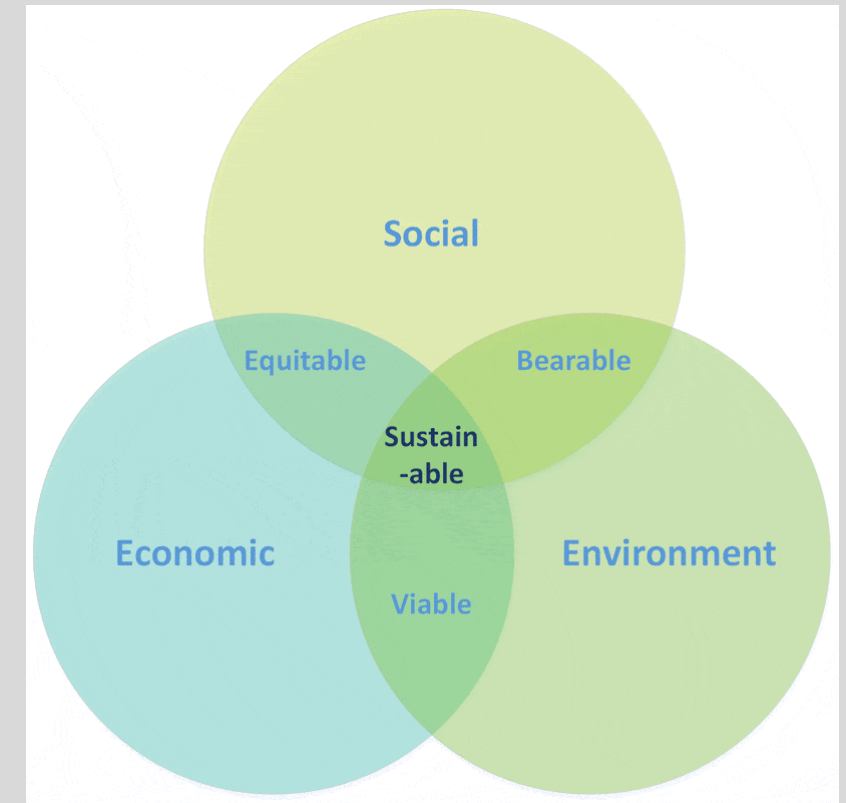


C. Defining Sustainability via EMS

EMS, Sustainability & Other Circumstances

EMS is a structured process for the achievement of continual improvement, the rate and extent of which is determined by the Corporation in light of economic and Social circumstances

EMS cannot completely solve global sustainability issues, however, it can help any organization use resources more prudently and prevent pollution. The structure of EMS provides the opportunities for incorporating strategic sustainable concepts into the managerial decision making process.



C. Defining Sustainability via EMS

EMS Sustainable Practices

EMS can support and incorporate the following (6) sustainable practices:

1. AMVA approach,
2. 3E/3P,
3. Life Cycle Assessment,
4. Waste Management,
5. Proactiveness through Environmental Risk Management,
6. Eco Efficiency Indicators (EEI)-Green growth

C. Defining Sustainability via EMS

Sustainability-Planning Process (AMMA approach)

➤ Awareness

What do you know about sustainability and why it matters?

➤ Mapping

What does your organization look like today?

➤ Vision

What does your organization look like in a sustainable society?

➤ Action

How will you manage and prioritize steps to sustainability?

C. Defining Sustainability via EMS

Sustainability-3E/ 3P

A balance of:

- ✓ Environmental
- ✓ Economic
- ✓ Equity (social factors)

Or as well:

- ✓ People,
- ✓ Planet,
- ✓ Profit

How this balance can be achieved THROUGH your Corporation?

C. Defining Sustainability via EMS

Sustainability-Life Cycle Assessment

This approach includes:

- The design and development of a Product should be considered as a Continuum
- The environmental impact of Raw Materials should be analyzed in all phases:
 - Extraction,
 - Refinement,
 - Incorporation into the product
- Raw materials should be reused or recycled
- A “Life Cycle Energy Analysis”

A method of analyzing the way energy is used in the manufacture of a product and throughout its useful lifetime.

Through this knowledge, it is possible to find ways of reducing energy consumption and environmental damage.

C. Defining Sustainability via EMS

Sustainability-Waste management

- What is waste management

Waste management refers to the way in which waste is been managed by a Corporation

- How important it is

Waste management reduces the Environmental impact

- A sustainable waste management can be achieved by:
 - ✓ Following government legislations and waste management laws,
 - ✓ Taking preventive measures,
 - ✓ Reducing the amount of waste that the Corporation produces,
 - ✓ Using Raw Materials that are easily and widely recycled

C. Defining Sustainability via EMS

Sustainability-Proactiveness through Environmental Risk Management

- What is the Environmental Risk Management:
 - ✓ Identifies environmental risks,
 - ✓ Assesses their probability (likelihood) and consequences,
 - ✓ Identifies acceptable levels of risk
 - ✓ Creates scenarios,
 - ✓ Determines and communicates what actions should be taken to remove or reduce the risks
- Environment risk analysis attempts to reduce and manage environmental risks associated with an activity or situation
- Risks can either be qualitative or quantitative

C. Defining Sustainability via EMS

Sustainability-Eco Efficiency Indicators (E)-Green growth

The concept of Eco-Efficiency is traced back to 1970s as the concept of “Environmental Efficiency”

In the 1990s, Schaltegger and Sturm introduced Eco-Efficiency as a “business link to sustainable development”

Later, in 1992, it was popularized by the World Business Council for Sustainable Development (WBCSD) for the Corporations in the course of the United Nations Conference on Environment and Development (UNCED)

It was intended to be a practical approach for the Corporations to contribute to sustainable development through the pursuit of long-term profits by incorporating activities that respect the carrying capacity of the earth

Since then, the concept of Eco-Efficiency has been embraced by hundreds of Corporations and proven as a practical tool for enhancing both economic and environmental benefits

C. Defining Sustainability via EMS

Sustainability-Eco Efficiency Indicators (EEI)-Green growth

Originally developed for the Corporations, the Eco-Efficiency concept focuses on creating more goods and services using fewer resources and generating less waste and pollution

The application of eco-efficiency indicators in the Corporations is usually based on the ratio of product or service value to environmental impact

Most indicators focus on the consumption of energy, materials and water and the emission of greenhouse gases, wastewater and pollution emission

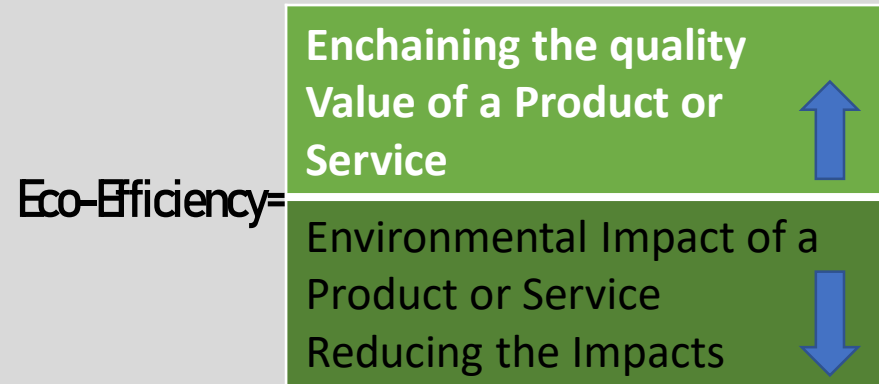
Several Corporations integrate Eco-Efficiency into their business strategy, including their operational, product innovation and marketing strategies

Corporations from the heavy industrial sector have implemented Eco-Efficiency in their production and operations to assess the product's environmental performance relative to their business and production operation performance and communicate the results openly to the public

Eco-Efficiency is also being promoted to influence consumer buying behavior with regard to a wide area of products available on the market

C. Defining Sustainability via EMS

Sustainability-Eco Efficiency Indicators (E)-Green growth



Elements for eco-efficiency in the Corporations:

- Reducing material requirements for Products and Services,
- Reducing energy intensity of Products and Services,
- Reducing toxic dispersion,
- Enhancing material recyclability,
- Maximizing the sustainable use of renewable resources,
- Extending product durability,
- Increasing the service intensity of Products and Services

sustainabledevelopment.un.org

Sustainability & Quality...

Κτίριο Συναυλιών της Βέννης



Sustainability & Quality...

Greek People's Vision & Mission!



Sustainability & Quality...

Passion for Nature!



Thank you!!