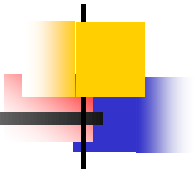




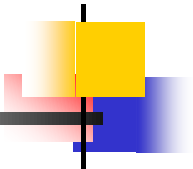
Highlight of Changes – ISO 14001:2015

Connie Sham
Head of Audit

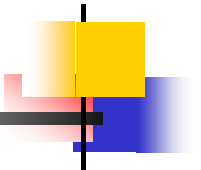


ISO 14001:2015

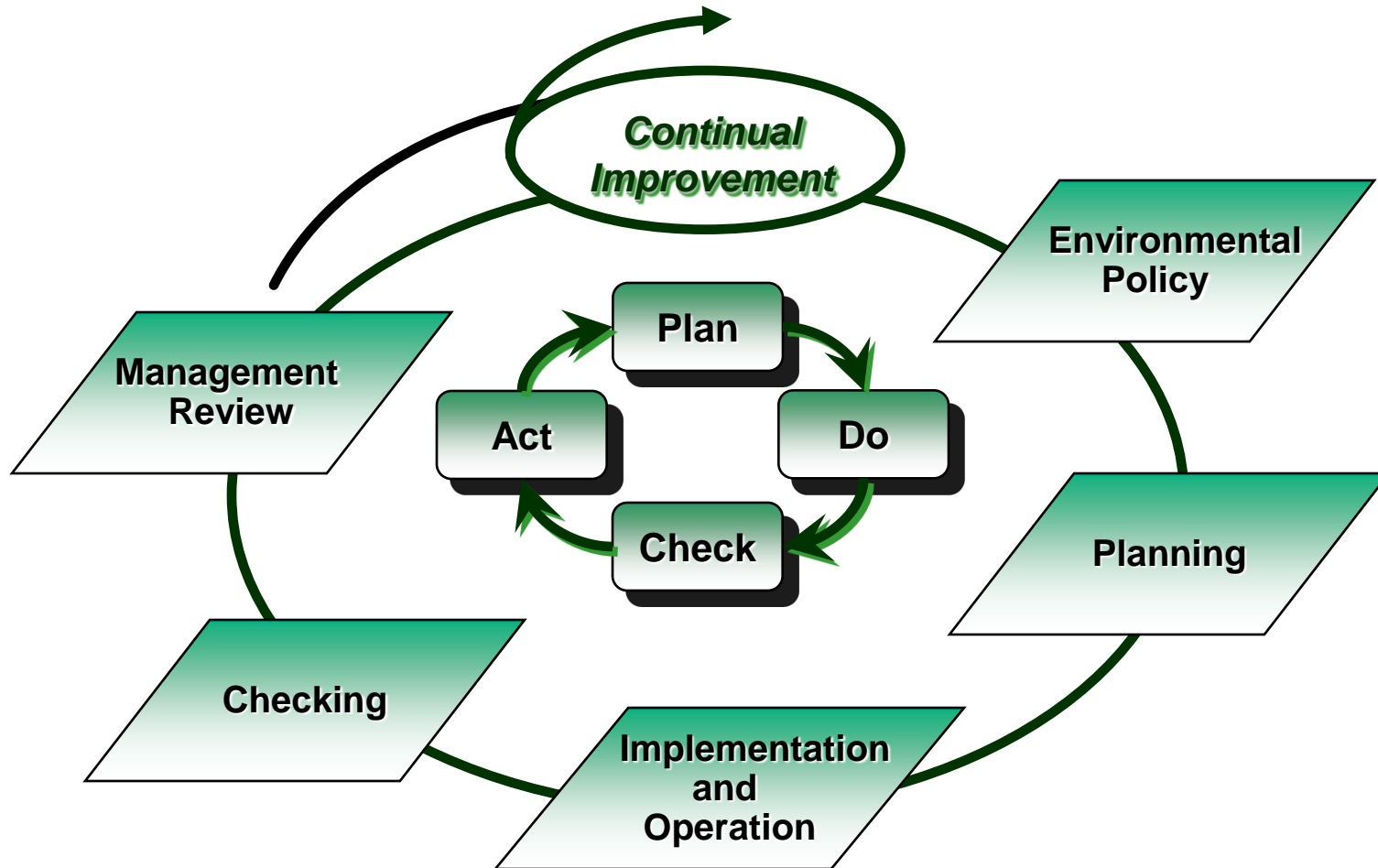
- ISO 14001:2015 was released on 15 September 2015 with 3 year transition period
- Critical Changes:
 1. New Management System Structure
 2. Understand Organizational Context
 3. Management Leadership and Commitments
 4. Environmental Commitments
 5. Life cycle consideration of environmental aspects
 6. Compliance obligation
 7. Risk and Opportunities
 8. Documented Information
 9. Supply Chain Management
 10. Process approach instead of procedure



1 - EMS Structure



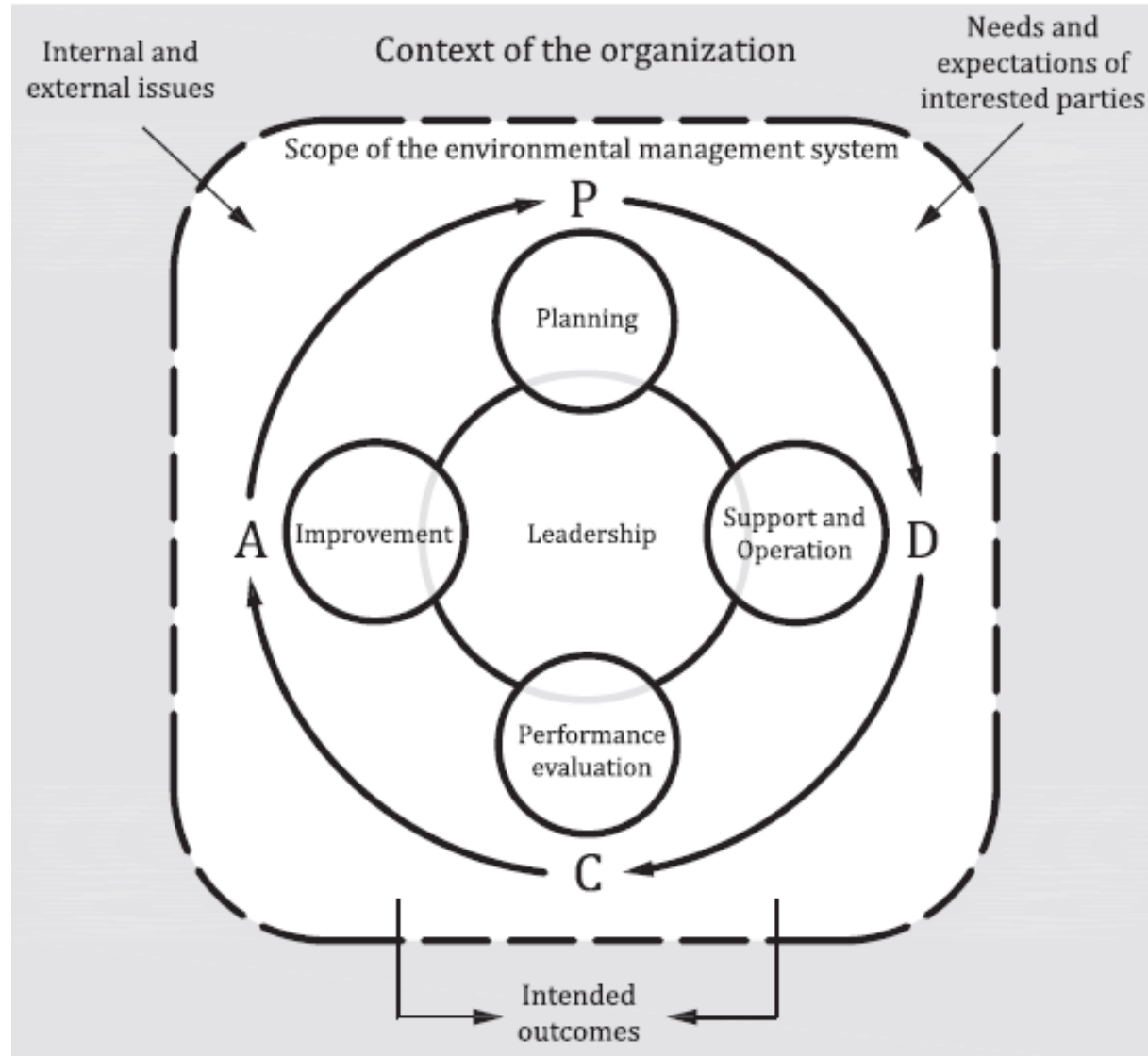
ISO14001:2004 Process Model



ISO Annex SL High Level Structure

1. **Scope**
2. **Normative references**
3. **Terms and definitions**
4. **Context of the organization**
 - *Understanding the organization and its context*
 - *Needs and expectations of interested parties*
 - Determining the scope
 - Management System
5. **Leadership**
 - *Leadership and commitment*
 - Policy
 - Roles, responsibility and authority
6. **Planning**
 - *Actions to address risks & opportunities*
 - Objectives and plans to achieve them
7. **Support**
 - Resources
 - Competence
 - Awareness
 - Communication
 - Documented information
8. **Operation**
 - Operational planning and control
9. **Performance evaluation**
 - Monitoring, measurement, analysis & evaluation
 - Internal audit
 - Management review
10. **Improvement**
 - Non conformity and corrective action
 - Continual Improvement

P-D-C-A Approach – ISO 14001:2015



2 - Understand Organizational Context



To understand the context means to define the external and internal factors that the organizations must consider when managing risks



Internal and External Issues

Environmental Conditions

(that can either affecting the organization purpose or are affected by the organization's environmental aspects)

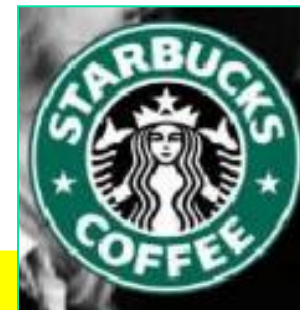
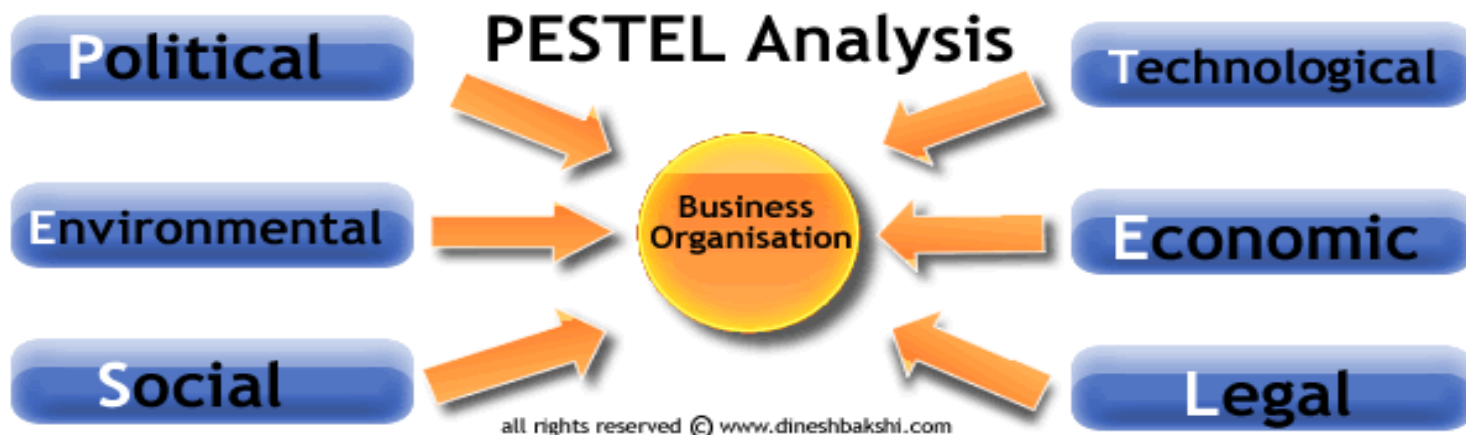
- Climate
- Air quality
- Water quality
- Land use
- Contamination
- Natural resources availability
- Biodiversity

External Issues

- Cultural
- Social
- Political
- Legal & regulatory
- Financial
- Technological
- Economic
- Natural and competitive circumstances

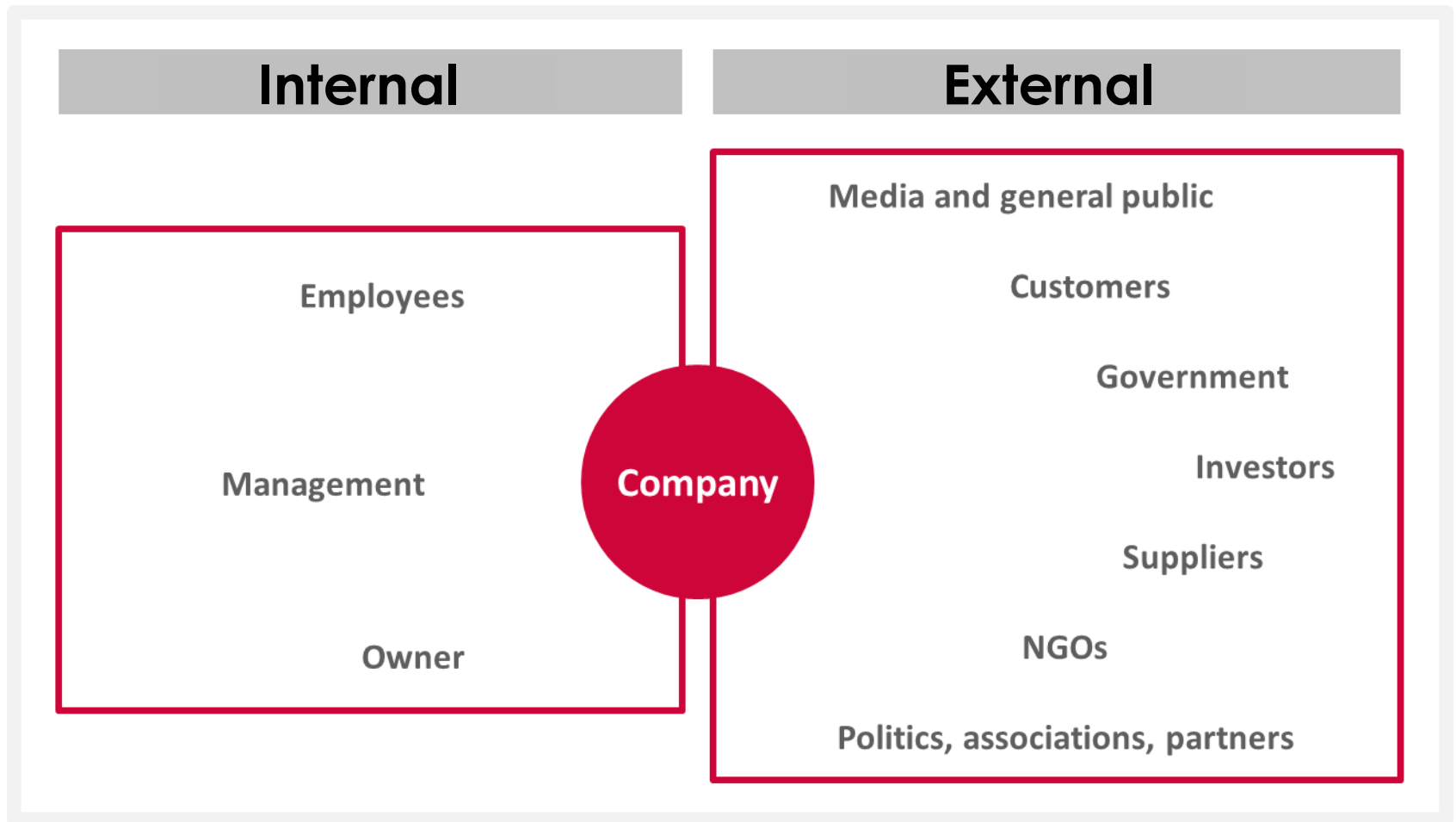
Internal Characteristics

- Activities, products and services, strategic direction
- Culture
- Capability (People, Knowledge, Processes, Systems)



Political	Economical	Social
<ul style="list-style-type: none"> •Attention from politicians of sourcing raw materials •Activism and increased political awareness in developing countries - fair trade practices •Monitor political stability within the country Starbucks operates 	<ul style="list-style-type: none"> •Ongoing global economic recession is the prime external economic driver for Starbucks •Rising labor and operational costs •Inflationary environment and falling profitability •Local currency exchange rates •Taxation level 	<ul style="list-style-type: none"> •Consumer preferences - "green" and "ethical " consumers •Changing family patterns in USA and Europe -baby boomer generation is retiring. Spending by older consumers will decrease •Changing work patterns •Changes in lifestyles of population •The level of education of the population in local markets •Changing values among population - expand consumer base to include lower and middle-income tiers
Technological	Environmental	Legal
<ul style="list-style-type: none"> •app based discount coupons •introduced Wi-Fi capabilities in its outlets •Emergence of innovative technology •Biotechnological developments •Developments in agriculture 	<ul style="list-style-type: none"> •Environmental rules and regulations •Environmental disasters in countries which produce coffee beans •Global warming and other environmental issues in a global level 	<ul style="list-style-type: none"> •introduction of caffeine production and consumption related policies and regulations by health authorities •Introduction of stricter customs and trade regulations •Licensing regulations related to the industry

Understanding Needs and Expectations

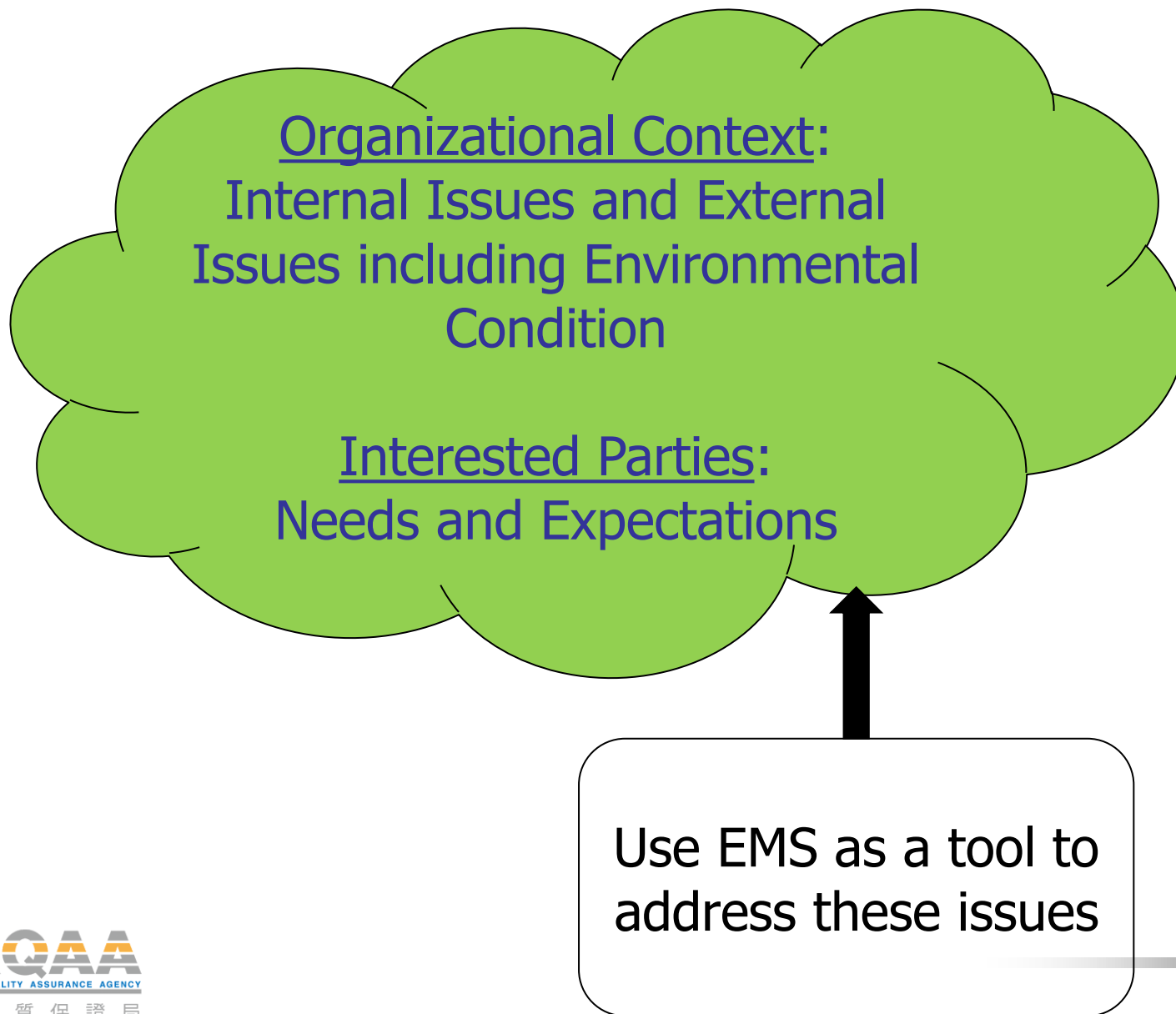


Example of Context & Expectations

Context	Issues	Impacts
External - Environmental condition	Water Scarcity	The lack of water in the region is an operational constraint - reducing output
	Use of water	Intensive use of water resulting damage of sensitive habitats and deprive local communities of water use
	Climate change	Climate change will result in greater water scarcity, with increased pressure on the organization to take action
Internal	Culture	The company has the technological expertise to minimize water consumption in production, but does not have the business culture to appreciate that this is an effective solution
Needs and expectations of interested parties)		NGOs are campaigning against the company due to the environmental impacts of its operations, investors are highly concerned and the reduced revenue resulting from production lost



Understanding of Issues





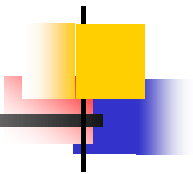
3 - Management Leadership and Commitments



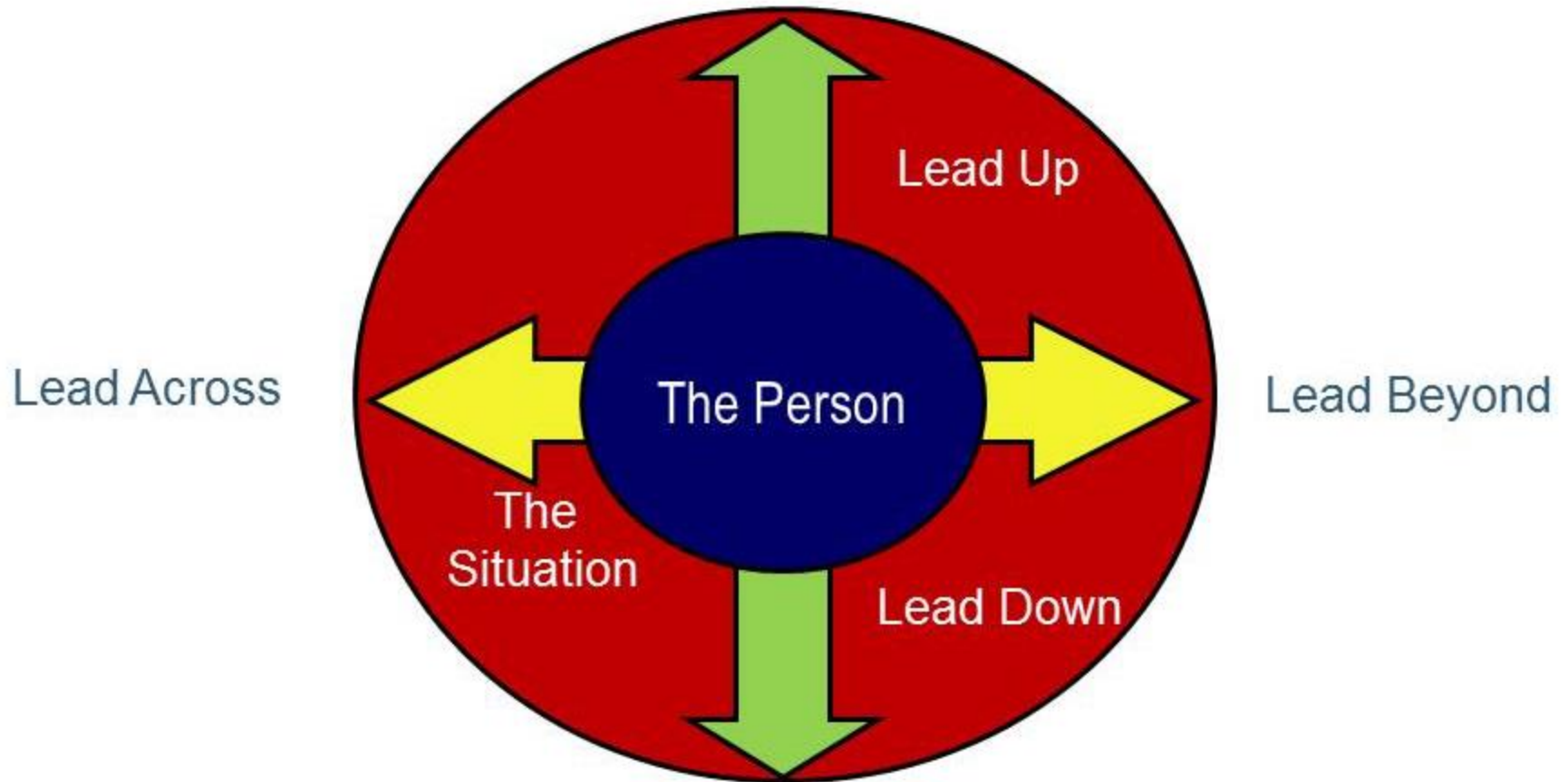
LEADERSHIP

Leadership is action,
not position

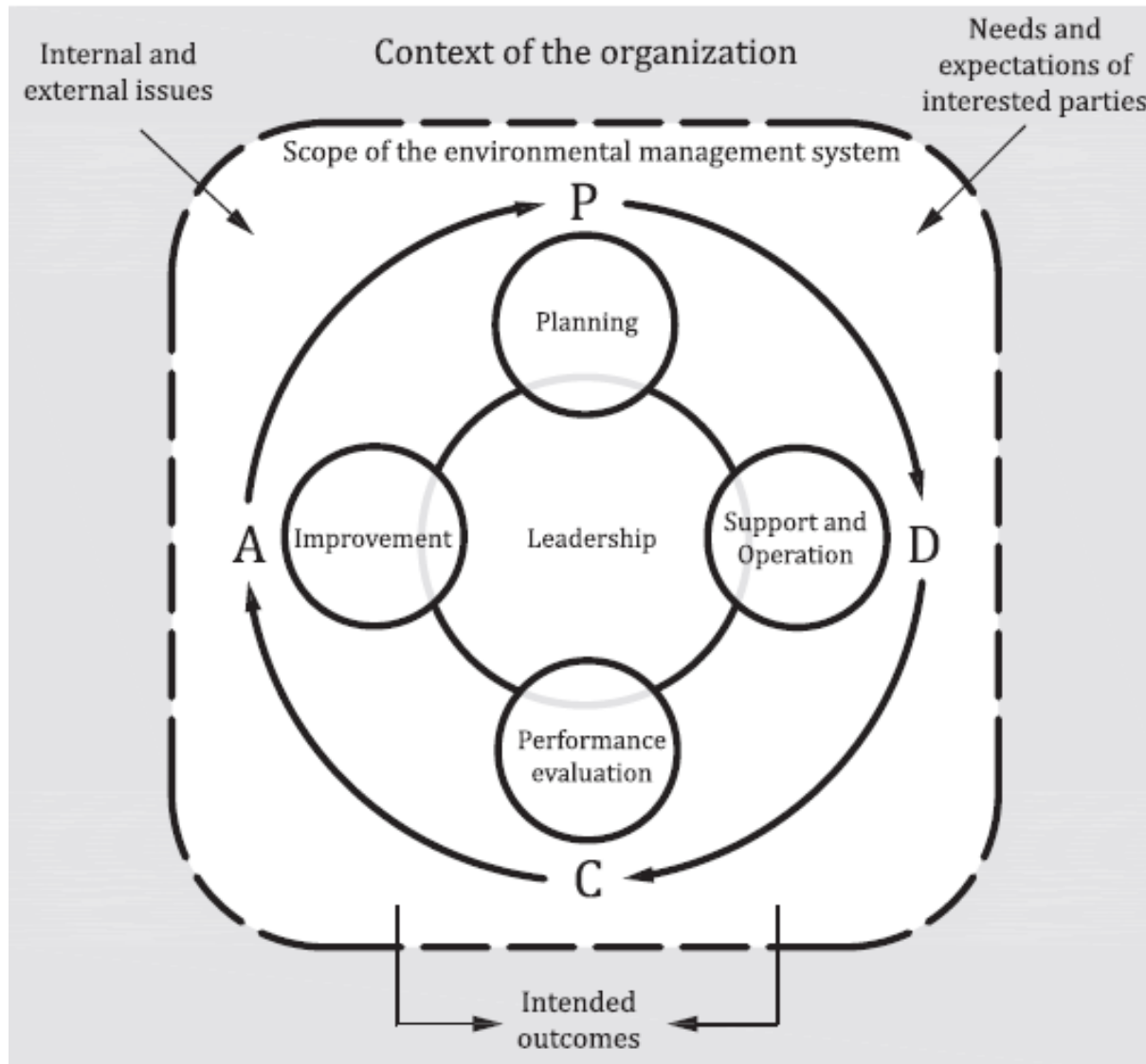
-Donald H. McGannon



The Dimensions of Leadership

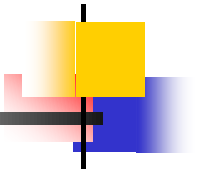


ISO 14001:2015 and Leadership



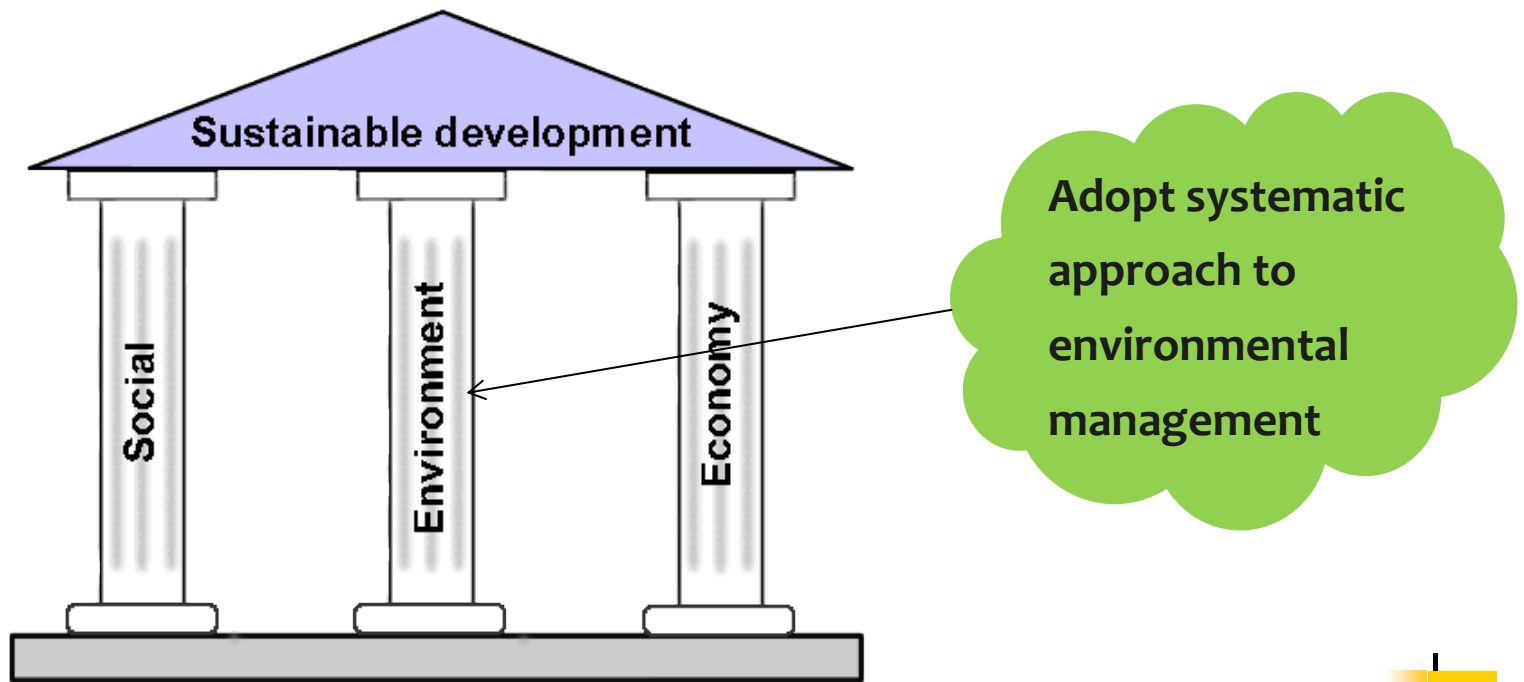


4 - Environmental Commitments



Concept of Sustainable Development

- Implementing environmental management systems with an aim to contribute to the 'environmental pillar' of sustainable development



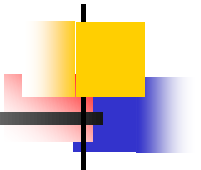
Environmental Commitments

- From “pollution prevention” to “environmental protection”
 - Environmental protection includes:
 - pollution prevention,
 - sustainable use of resources,
 - climate change mitigation and adaptation
 - conservation of ecosystem
- Emphasize EMS intended outcome:
 - Enhancement of environmental performance
 - Fulfillment of compliance obligation
 - Achievement of environmental objectives

5 - Life Cycle Consideration of Environmental Aspects



Environmental aspects are the building blocks of the EMS!!



Aspects Identification Process

input & output

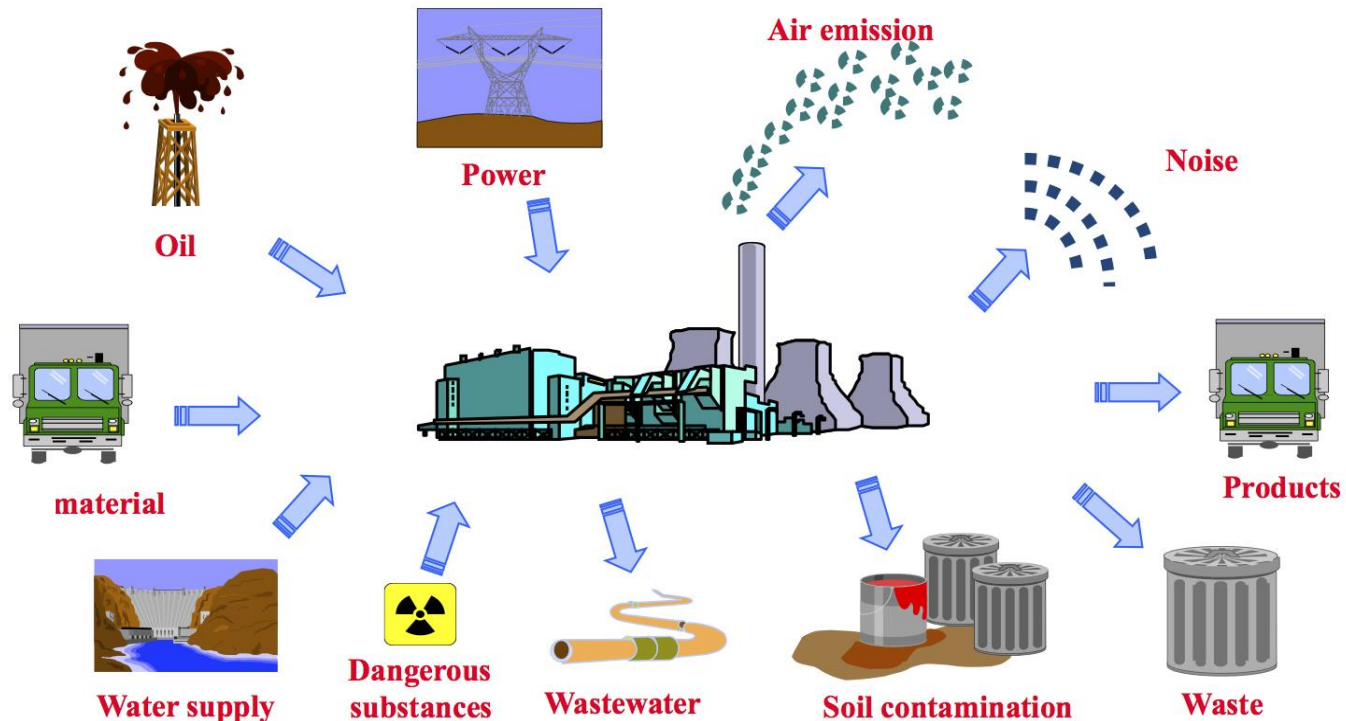
Inputs:

- Raw materials
- Packaging materials
- Fuels and electricity
- Water



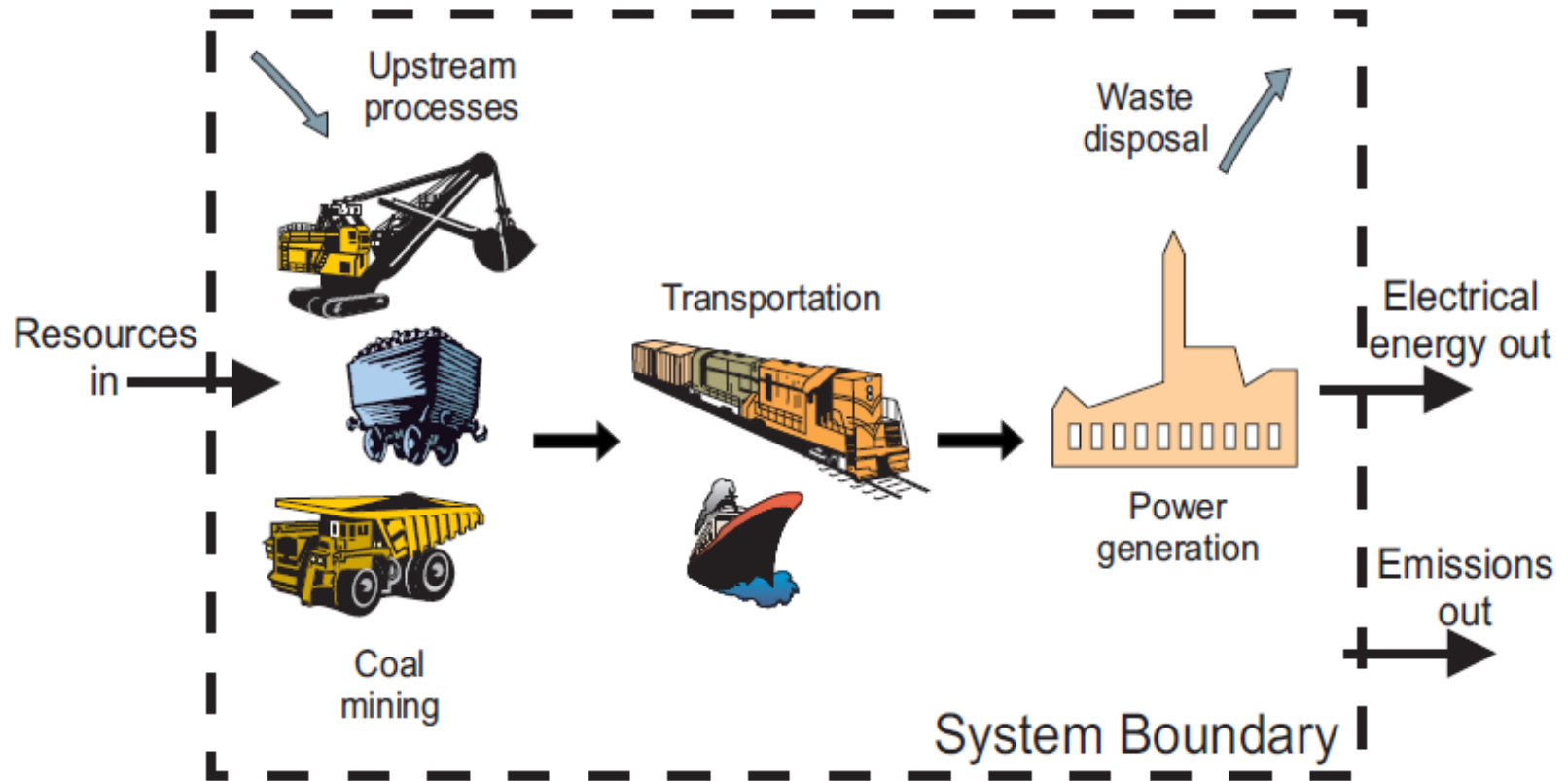
Outputs:

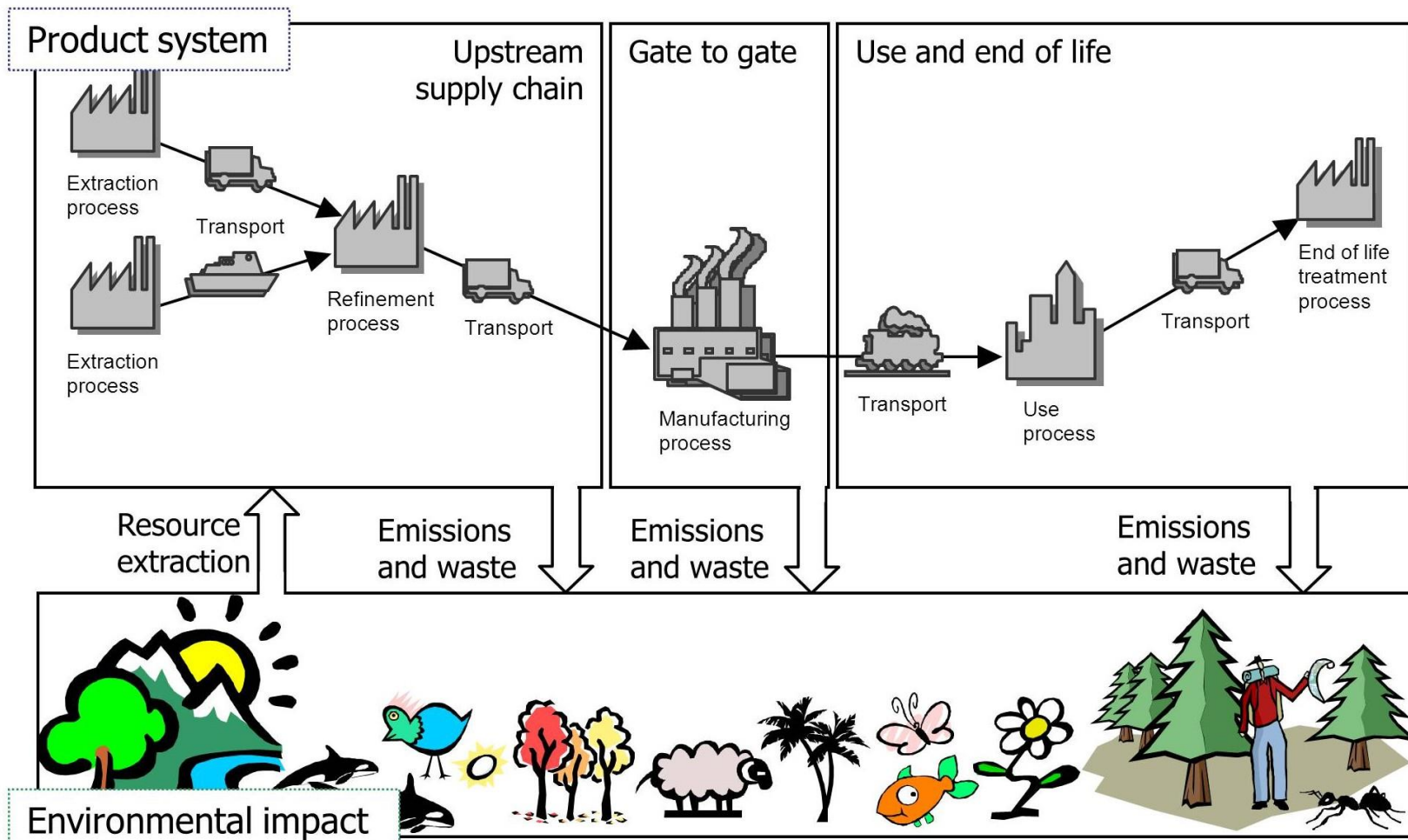
- Product
- Emissions to air
- Emissions to water
- Waste



Life Cycle Perspective

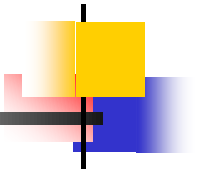
- Incorporate life-cycle consideration



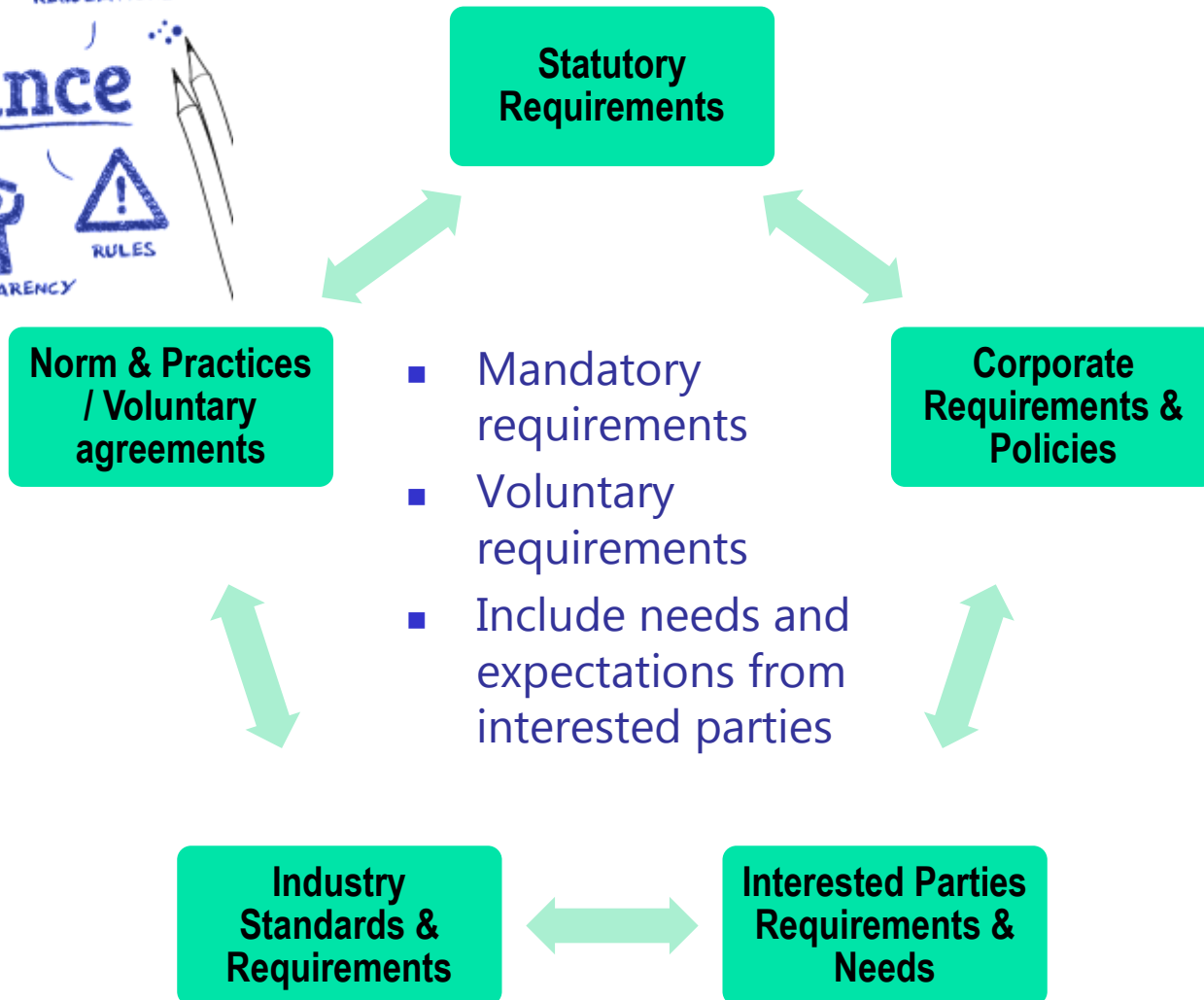


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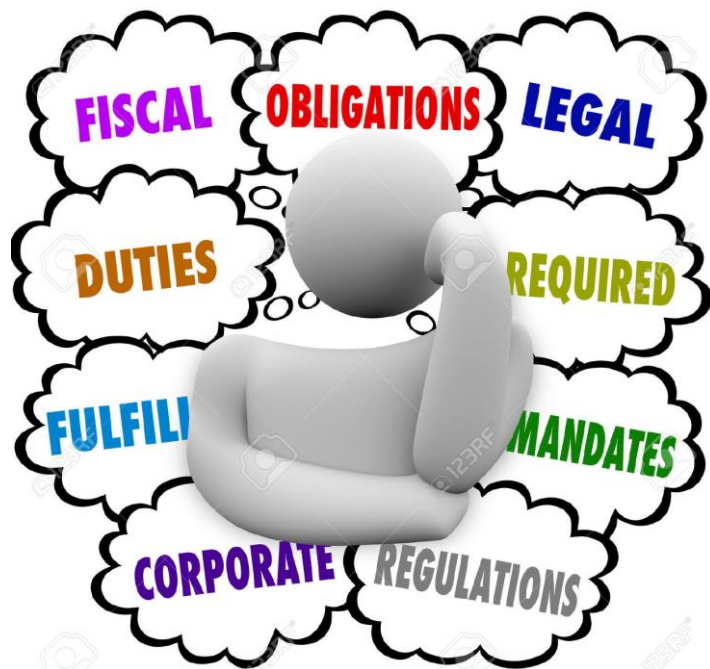
6 - Compliance Obligation



Compliance Obligations

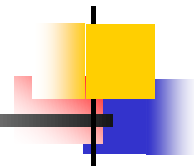


Compliance Obligation



KEY STEPS

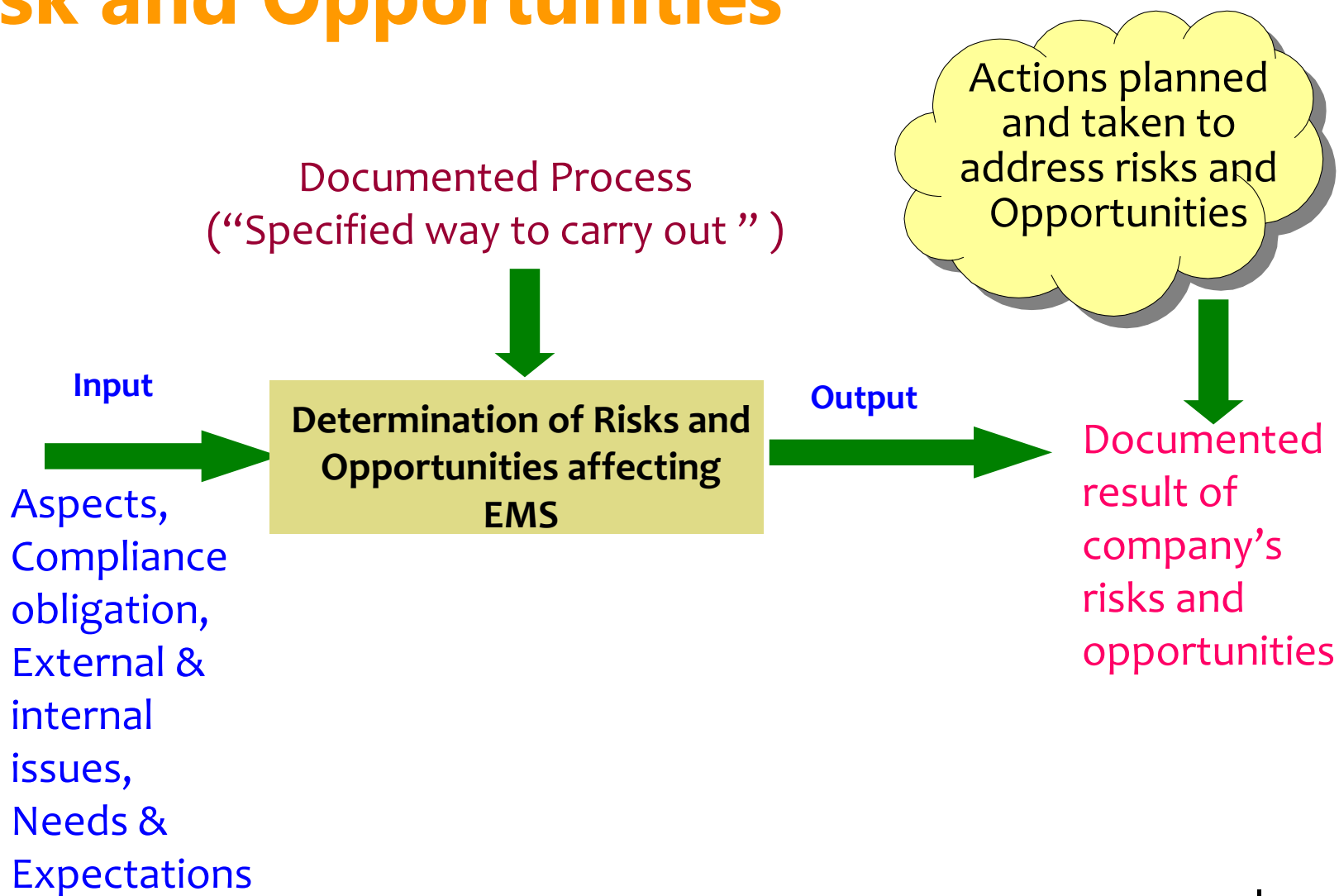
- ☒ Identify Requirements
- ☒ Analyze Impacts
- ☒ Communicate
- ☒ Act



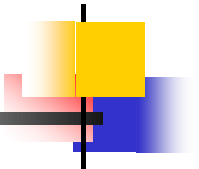
7- Risks and Opportunities



Risk and Opportunities



8 - Documented Information



Maintain Documented Information	Retain Documented Information as Evidence...
Scope of EMS	Competence
Environmental Policy	Communication
Actions to address risks and opportunities <ul style="list-style-type: none"> •Risk & Opportunities •Process 	Monitoring, measurement, analysis & evaluation
Environmental aspects <ul style="list-style-type: none"> •Aspects & impact •Criteria to determine significant environmental aspects •Significant environmental aspects 	Evaluation of compliance
Compliance obligations	Internal audit programme & results
Environmental objectives	Management Review
Operational planning & control	Non conformity & corrective action
Emergency preparedness and response	

9 - Supply Chain Management



Supply Chain Management

Related to the environmental aspects and risks and ops that can be controlled or influenced

Uses a life cycle perspective

Details continue to include:

supplier and contractor communications

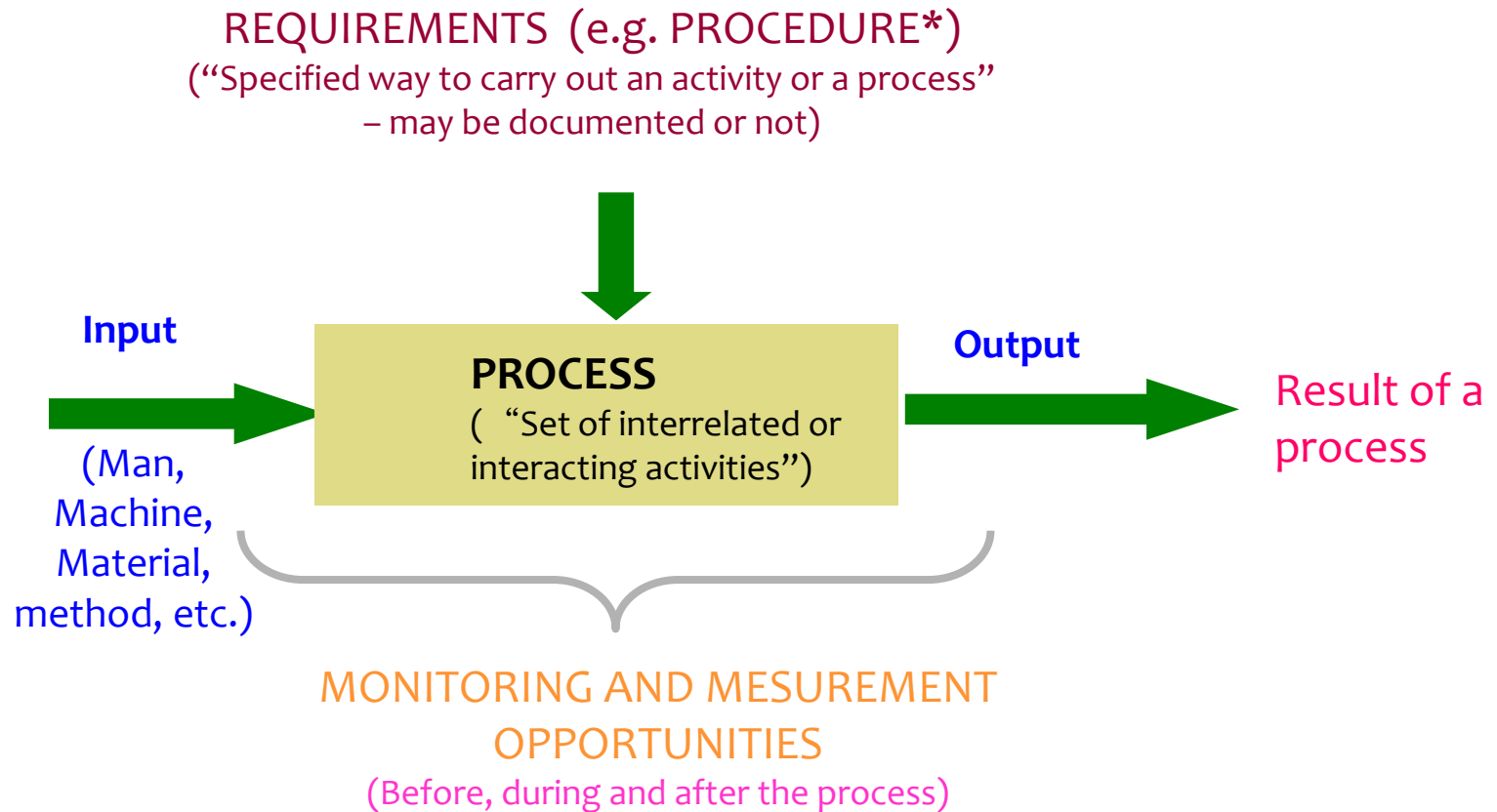
consideration in design of products and services

during use and end of life treatment.

10 – Process approach instead of Procedures



From Procedure to Process



The purpose of the process approach is to enhance organization's effectiveness and efficiency in achieving its defined objectives.

Process based & procedure detailed

End

