



# Environmental Management Systems

**Basic concepts of ISO 14001**

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# Contents

- **Purpose and benefits of an EMS**
- **Basic concepts of ISO 14001**
- **ISO 14001: EMS requirements**
- **Policy exercise**
- **The initial environmental review**
- **Case study**



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# Topics in the Section: Basic concepts of ISO 14001

- **Scope of ISO 14001**
- **Environmental aspects and impacts**
- **The Deming Cycle**
- **The ISO 14001 elements**
- **Environmental Policy and 4 commitments**

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# Topics in the Section: Scope of ISO 14001

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# Scope of ISO 14001

- **Applicable for all types and sizes of organisations in diverse geographical, cultural and social conditions**
- **Only requirements that may be objectively audited**
- **No absolute performance requirements**
- **Compatible with ISO 9001**



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# Contents of the ISO 14001 document

- **Specification (requirements)**
- **Annex with guidance for use**
- **Annex with links between ISO 14001 and ISO 9001 elements**



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# ISO 14004

- Document with guidance (recommendations) on principles, systems and supporting techniques
- In the Netherlands: NPR-ISO 14004
- Further description of the ISO 14001
- Non mandatory reading material



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# Topics in the Section: Environmental aspects and impacts

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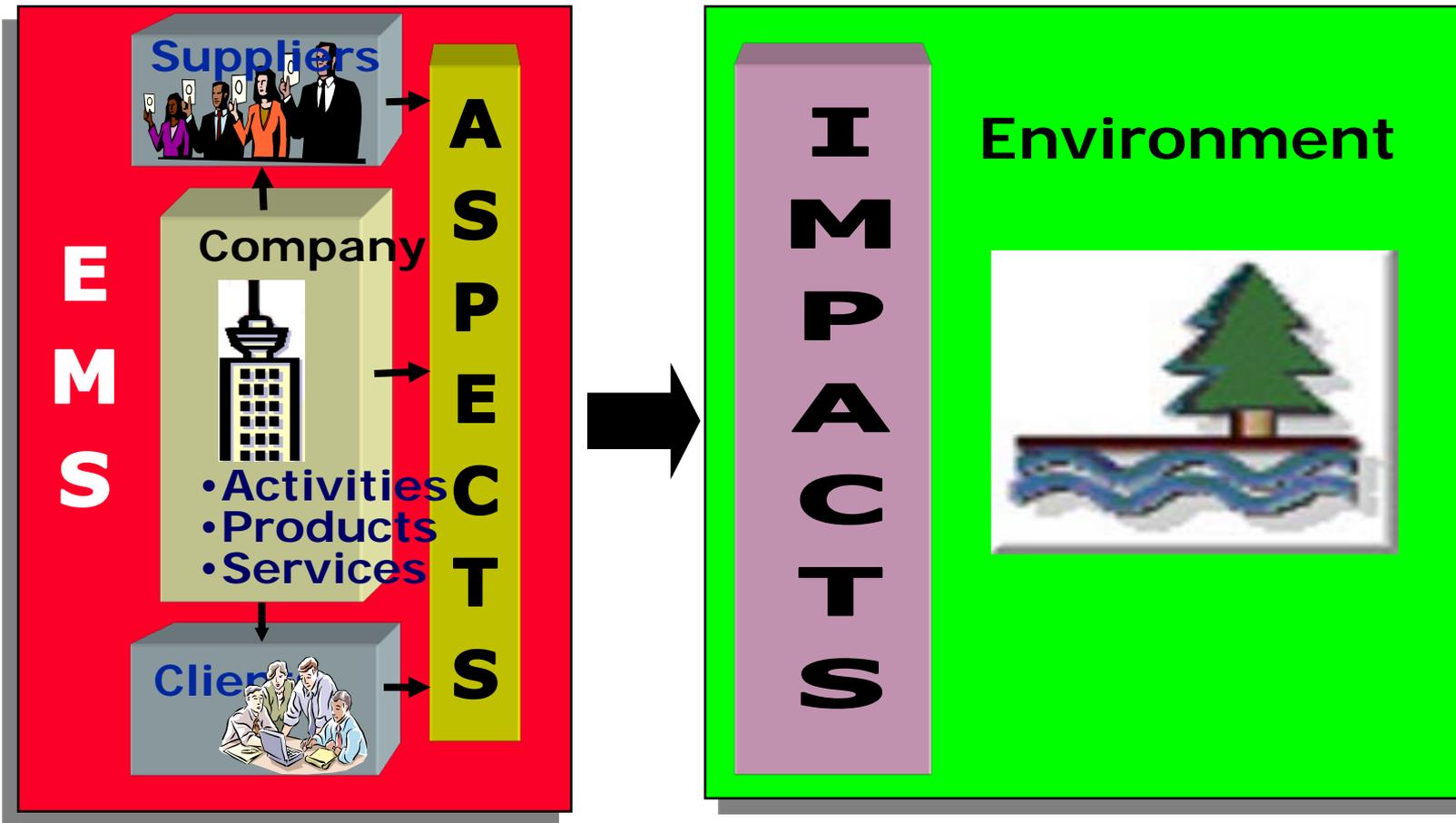
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# Aspects and impacts



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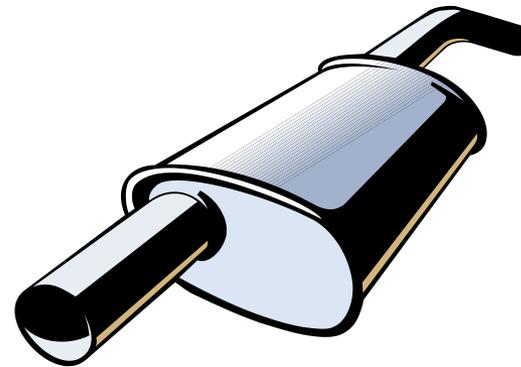
# Activity, aspect, impact

## Activity



**Driving a car**

## Aspect



**Exhaust Gases**

## Impact



**Global Warming**

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# Topics in the Section: Deming Cycle

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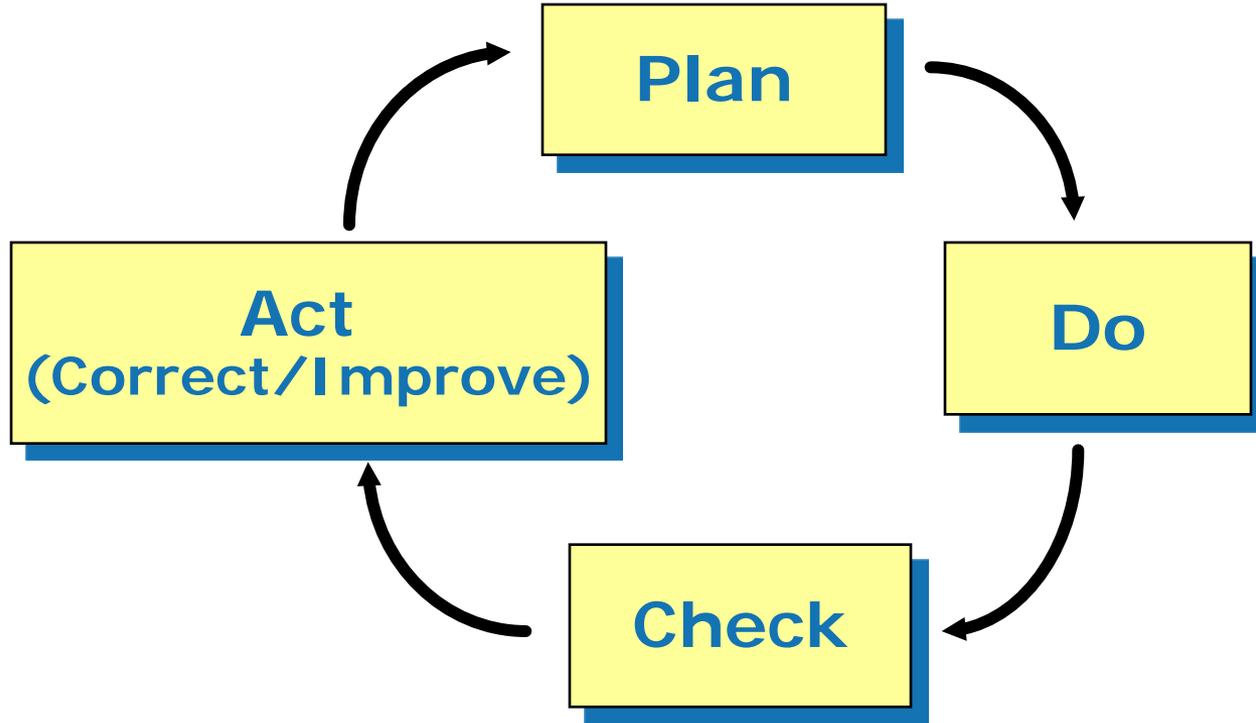
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# The Deming cycle

What is necessary for a well-controlled process?



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# Topics in the Section: ISO 14001 elements

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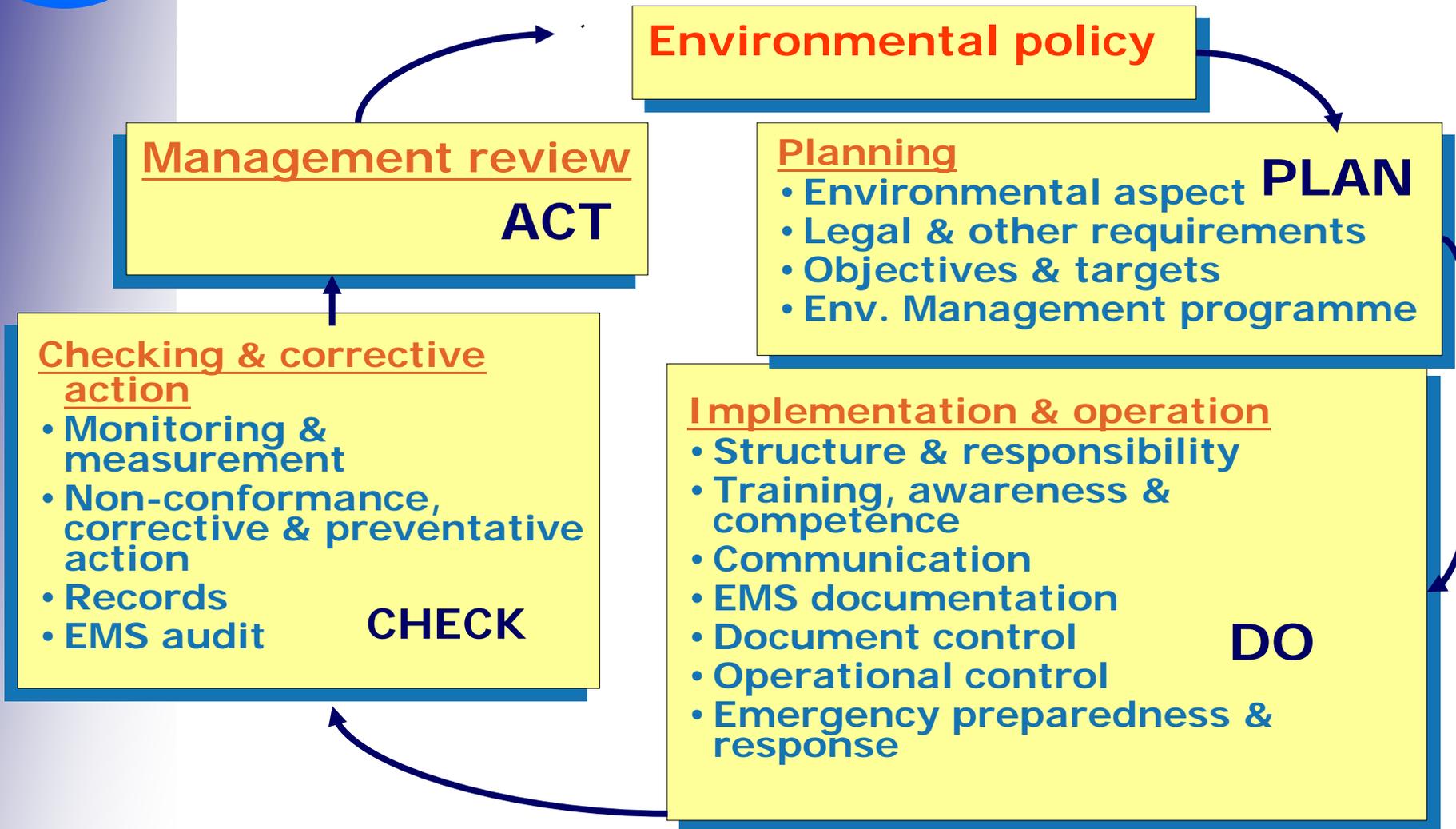
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# Continual improvement - 1





# Topics in the Section: Policy and commitments

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# Environmental policy

- **Top management commitment to...**



- *Continual improvement*
- *Prevention of pollution*
- *Legal compliance*
- *Compliance to other requirements*

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# Continual improvement -2

## ISO 14001:

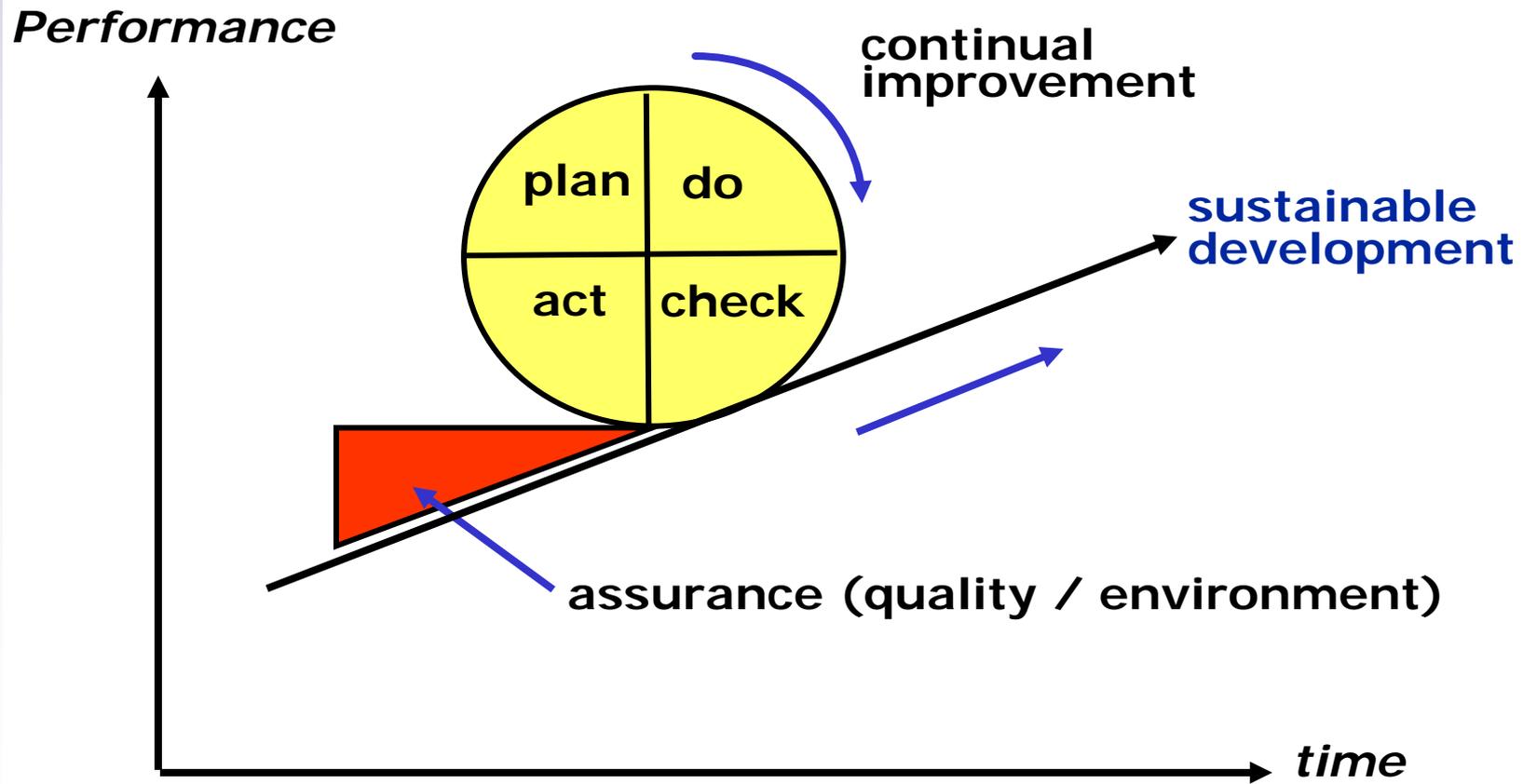
**Process of enhancing the EMS to achieve *improvements in overall environmental performance in line with the organisation's environmental policy*. The process need not take place in all areas of activity simultaneously.**

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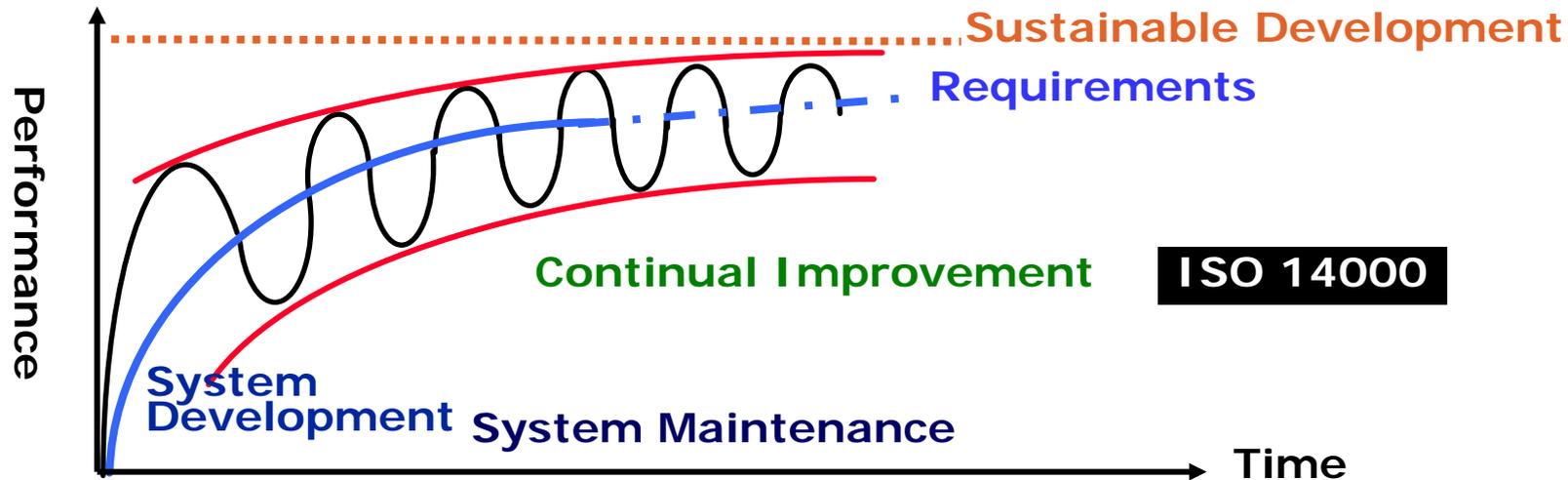
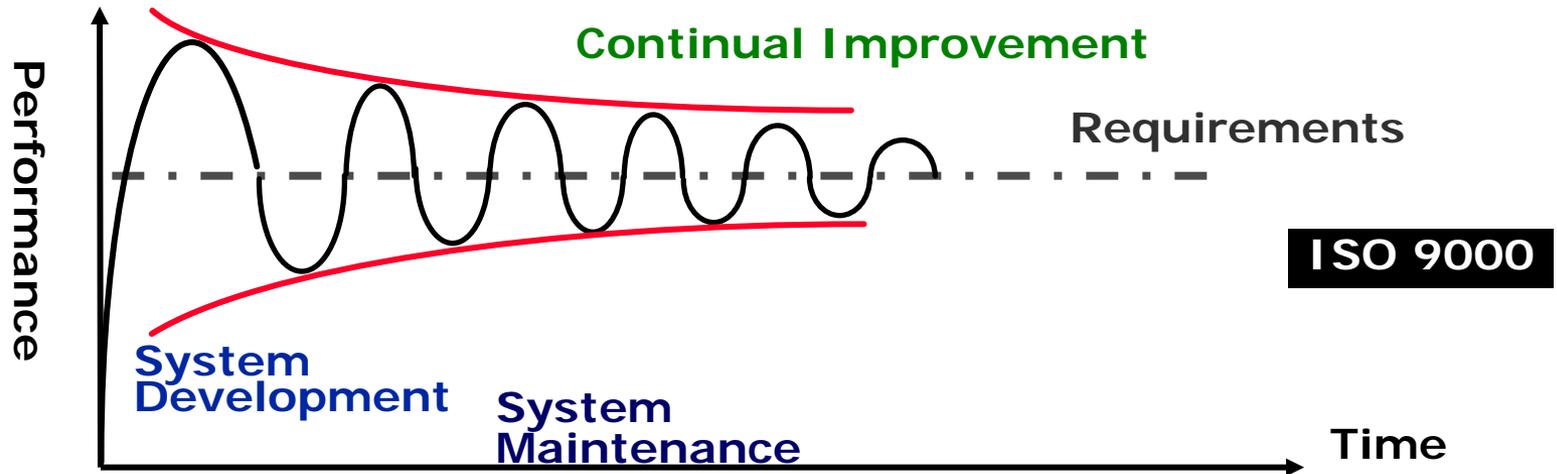
# Continual improvement -3



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# Continual improvement: ISO 9000 vs 14000



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# EMS definition

## ISO 14001:

that part of the overall management system which includes organisational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy

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# Environmental performance

## ISO 14001:

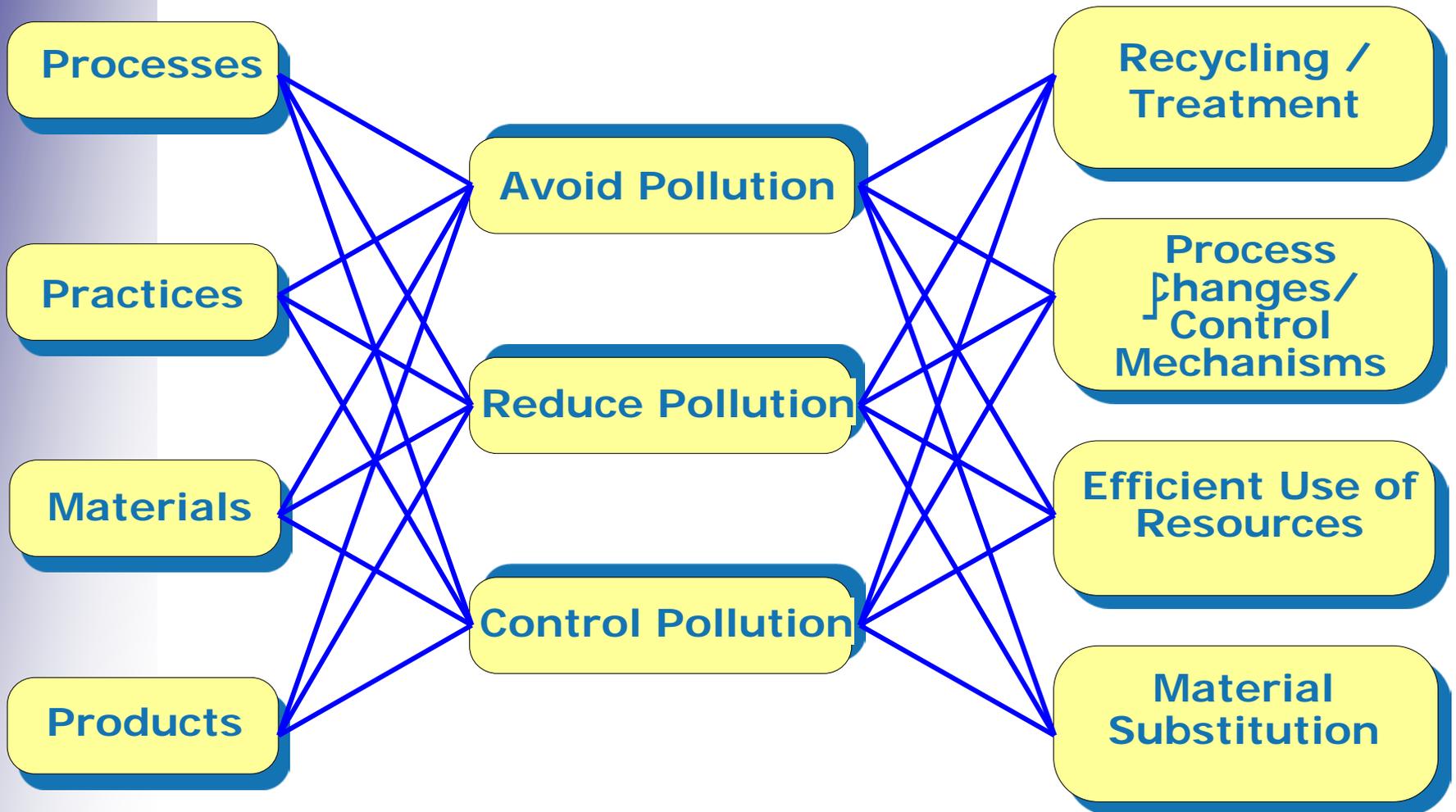
Measurable results of the EMS, related to an organisation's control of its environmental aspects, based on its environmental policy, objectives and targets.



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# Prevention of pollution





# Legal & other requirements -1

- **Shall identify laws, regulations and other requirements which are applicable to environmental aspects of organization's activities, products or services**
- **Shall ensure continuous access to these requirements**



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# Legal & other requirements -2

- **Examples of other requirements are**
  - *ICC Business Charter for Sustainable Development*
  - *Agreements with authorities*
  - *Non-regulatory guidelines*



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