

ISO14001

Environmental Management System



- Enjoyed by some at the expense of others
- Earths resources endangered

Emissions to air

- Acid rain
- Movement of pollution
- Ozon depletion
- Global warming
- Local air pollution
- VOC's
- Vehicle emissions

Discharges to water

- Effluent discharges
- Water supply
- Groundwater pollution
- Contaminated marine life
- Destruction of reefs

Solid waste

- Landfill
- Waste management
- Recycling
- Packaging
- Incineration

Quality of life

- Noise
- Dust
- Litter
- Scenery
- Polluted beaches

Natural environment

Deforestation

Sustainable resources

Damage to ecosystem

Desertification

Loss of bio-diversity

Soil pollution

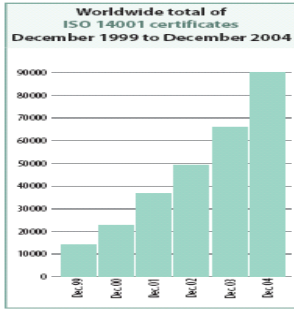
Sustainable development



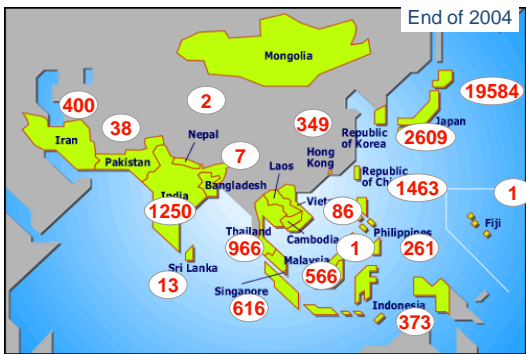
History

- 1987: WCED: Sustainable development in “Our Common Future”
- 1991: BCSD approached ISO and IEC to discuss development of environmental standards
- 1992: UNCED: Agenda 21 and Rio Declaration
- 1996: ISO14001:1996, ISO14004:1996
- 2004: ISO14001:2004, ISO14004:2004

Total of ISO14001 Certificates



ISO14001 Certifications



Top 10 countries - end of 2004

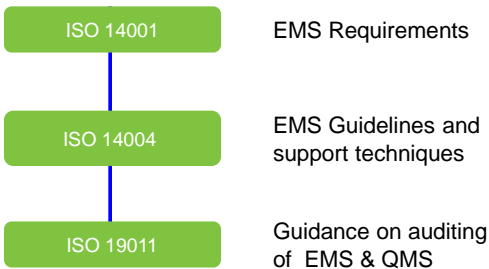


Good environmental management

- Reduce liability and risk
- Facilitate better business pr
- Minimise waste and energy
- Enhance company reputatio
- Improve compliance
- Meet interested parties concerns
- Gain International recognition
- Improve marketing potential



ISO 14000 series



ISO 14001

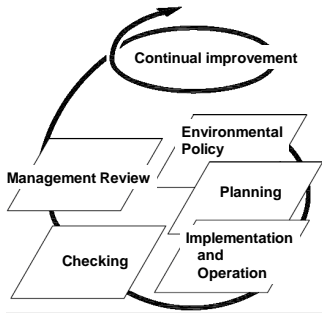
- A Management Tool
- Drives performance improvement
- Is NOT an award for being "environmentally friendly"
- Starting baseline of environmental performance can vary

Main purpose

- Ensure compliance with **legislation** and **other requirements**
- Framework for continual improvement
- Focus on environmental risks **Significant environmental impacts**



ISO14001 Model



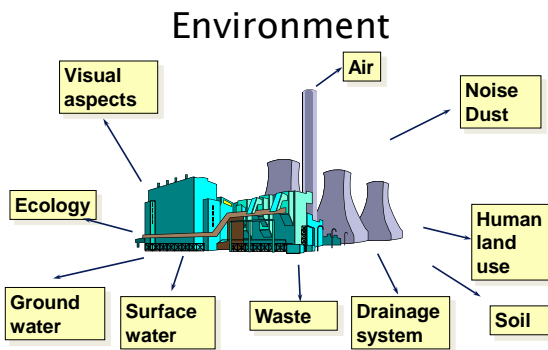
Purpose of ISO 14004

- Provide assistance to organisations implementing or improving an EMS
- Consistent with idea of sustainable development
- Compatible with diverse social, cultural and organisational types
- Non prescriptive: hence use of "should" rather than "shall" (related more to ISO 9004. ISO 9001/2/3)

Key Definitions [Section 3]

Environment

- Surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation



Key Definitions [Section 3]

Environmental aspect

- Element of an organization's activities or products or services that can interact with the environment

– NOTE: A **significant environmental aspect** has or can have a **significant environmental impact**

Key Definitions [Section 3]

Environmental impact

- Any change to the environment whether adverse or beneficial, wholly or partially resulting from an organization's environmental aspects

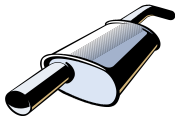
Example

ACTIVITY



Driving a car

ASPECT



Exhaust Gases

IMPACT



Global Warming

Example

ACTIVITY



Car washing

ASPECT



Wastewater drains into river

IMPACT



River pollution

Key Definitions [Section 3]

- System
 - Set of interrelated elements
- Management system
 - System used to establish **policy and objectives** and to achieve those **objectives**.
 - Includes organizational structure, planning activities, responsibilities, practices, procedures and resources.

Environmental management system

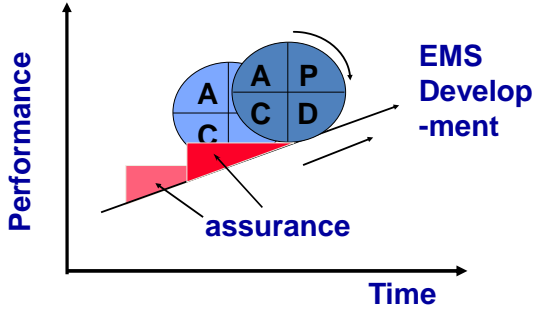
- Environmental management system
- Part of an organization's management system used to develop and implement its environmental **policy** and manage its environmental aspects



Key Definitions [Section 3]

- Continual improvement
- Recurring process of enhancing the environmental management system in order to achieve improvements in overall environmental performance consistent with the organization's environmental **policy**
 - NOTE: The process need not take place in all areas of activity simultaneously

Continual improvement (3.2)



Key Definitions [Section 3]

Prevention of pollution

- Use of processes, practices, materials or products that avoid, reduce or control pollution, which may include recycling, treatment, process changes, control mechanisms, efficient use of resources and material substitution.

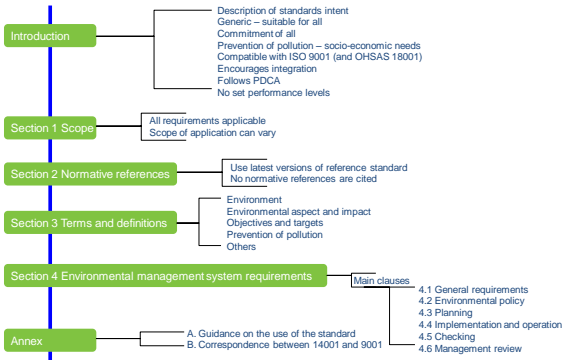
– NOTE: Prevention of pollution can include source reduction or elimination, process, product or service changes, efficient use of resources, material and energy substitution, reuse, recovery, recycling, reclamation and treatment.

Key Definitions [Section 3]

Internal audit

- Systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the environmental management system audit criteria set by the organization are fulfilled

ISO 14001 Requirements



Summary

- Environmental Management System
– Why, What, History, Certifications, Benefits
- ISO14000 Series
- ISO14001 Model
- ISO14004
- Key Definitions
- ISO14001 Requirements
