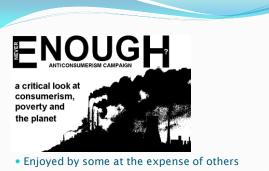
ISO14001

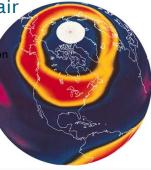
Environmental Management System



• 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



Quality of life

- Noise
- Dust
- Litter
- Scenery
- Polluted beaches



- Deforestation
- Sustainable resources
- Desertification
- Loss of bio-diversity
- Soil pollution





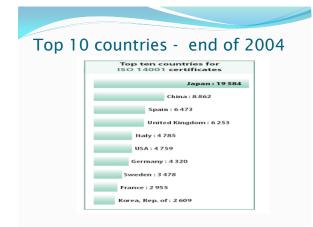
History

- 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









Good environmental management

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







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
 Check Do

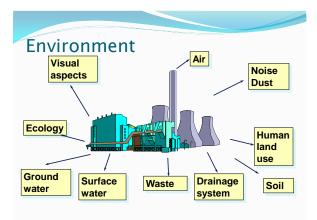


Purpose of ISO 14004

- 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)

Environment

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



Key Definitions [Section 3]

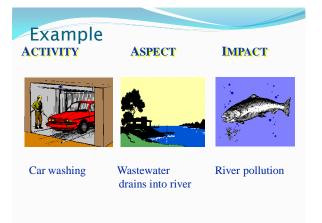
Environmental aspect

- 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*

Environmental impact

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





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

Environmental management system

Environmental management system

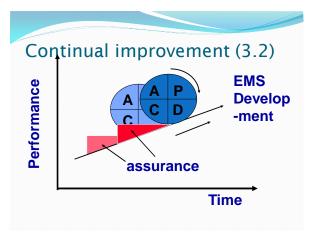
 Part of an organization's management system used to develop and implement its environmental <u>policy</u> and manage its environmental aspects

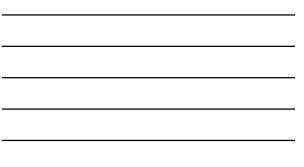


Key Definitions [Section 3]

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 <u>policy</u>
 - NOTE: The process need not take place in all areas of activity simultaneously





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
Generic – suitable for all Commitment of all Prevention of pollution – socio-economic needs
Comparable with ISO 9001 (and OHSAS 18001) Encourages integration Follows PDCA No set performance levels
Section 1 Scope All requirements applicable Scope of application can vary
Section 2 Normative references Use latest versions of reference standard No normative references are cited
Section 3 Terms and definitions
Section 4 Environmental management system requirements
Annex A. Guidance on the use of the standard B. Correspondence between 14001 and 9001 4.6 Management review



Summary

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