



MONGOLIAN AGENCY FOR STANDARDIZATION AND METROLOGY

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# **ECO-LABELLING STANDARDS**



## MONGOLIAN AGENCY FOR STANDARDIZATION AND METROLOGY

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The main functions are:

- Standardization
- Certification
- Accreditation
- Metrology

## STANDARDIZATION AND TECHNICAL REGULATION

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### **MAIN FUNCTIONS:**

- Management and coordination the activities of national standardization technical committees
- Harmonization of national standards with international ones
- Coordination of implementation of WTO Technical barriers to trade agreement
- Implementation and transfer of new and advanced technology through the international and regional standards

# CERTIFICATION

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## **MAIN FUNCTIONS:**

- Certification of products
  - Mandatory
  - Voluntary
- Certification of systems of national measurement standard system
- Verification of measuring equipments

## ACCREDITATION

### **MAIN FUNCTIONS:**

- Accreditation of laboratories according to national rule or ISO/IEC 17025
- Accreditation of product certification bodies according to national rule or ISO/IEC Guide 65
- Representation of Mongolian interests in national and international organizations dealing with general issues of accreditation
- Research and development of advanced accreditation competence



### Basic laws:

- ✘ Law on Standardization and Conformity assessment, 2003
- ✘ Law on Guarantee the uniformity of measurement, 1994

# CERTIFICATION ISO STANDARDS AND GUIDES ON CERTIFICATION

- ISO/IEC 17021 *General requirements for bodies operating assessment and certification/registration management*
- ISO/IEC Guide 65 *General requirements for product certification bodies*
- ISO/IEC Guide 67 *Conformity assessment -- Fundamentals of product certification*
- ISO/IEC Guide 68:2002 *Arrangements for the recognition and acceptance of conformity*

# International Organization for Standardization (ISO)

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**Mongolia is a member body  
for ISO since 1979**

## **MONGOLIA PARTICIPATION:**

**148** Technical committees:

- **26** TC and SCs “P” member
- **122** TC and SCs “O” member



# ISO TC 207 – Environmental Management Systems

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- 1993 онд Олон улсын стандартын байгууллага (ISO)-аас Байгаль орчны удирдлагын тогтолцооны асуудал хариуцсан 207-р техникийн хороог (ISO/TC 207) байгуулсан.
- ISO/TC 207 - Олон улсын стандартын байгууллага (ISO)-г нийт 246 техникийн хорооны нэг .
- ISO/TC 207-р техникийн хороонд 74 гишүүн улс орон идэвхтэй гишүүнээр, 28 орон ажиглагч гишүүнээр оролцдогос Монгол Улс ажиглагч гишүүнээр оролцдог.
- Монгол Улс ажиглагч гишүүн (“O” member) .

# ISO TC 207 –Environmental Management Systems

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## MONGOLIA:

ТХ 207/ДХ 1 Байгаль орчны удирдлагын тогтолцоо - “P” member

ТХ 207/ДХ 2 Байгаль орчны аудит - “P” member

ТХ 207/ДХ 3 Байгаль орчны тэмдэглэгээ - “P” member

ТХ 207/ДХ 4 Байгаль орчинд нөлөөлөх байдлын үнэлгээ

ТХ 207/ДХ 5 Байгаль орчны амьдралын мөчлөгийн үнэлгээ - “O” member

ТХ 207/ДХ 6 Байгаль орчны нэр томъёо тодорхойлолт

ТХ 207/ДХ 7 Хүлэмжийн хийн менежмент ба холбогдох үйл ажиллагаа

# Environmental Management Systems standards

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MNS ISO 14001, 14004 – EMS General requirements and principles

MNS ISO 14050 Terms and definition

MNS ISO 14040, 14041, 14042, 14043 – Lifecycle assessment

MNS ISO 14021, 14024 14025 Eco labeling and declaration

## Why an Eco-labelling Standard?

- About 30 Eco-labelling schemes      confusion and possible barriers to trade
- Proliferation of signs and symbols not understood by consumers
- Rules needed to guide in this jungle

→ **ISO 14020 series**

# Environmental labels and declarations

## International standards developed by ISO/TC 207/SC 3

- |                  |   |
|------------------|---|
| <b>ISO 14020</b> | General principles – <i>published 1998</i>  |
| <b>ISO 14021</b> | Self declared environmental claims<br><i>Published 1999</i>                                       |
| <b>ISO 14024</b> | Type I Environmental labelling– <i>Guiding principles and procedures</i><br><i>Published 1999</i> |
| <b>ISO14025</b>  | Type III Environmental declarations<br><i>Published 1999</i>                                      |

## Who can use an Eco-label ?

- Consumers to obtain information and guidance to buy “green” products
- Retailers to choose environmentally sound products
- Manufacturers are stimulated to produce green products

## What is an Eco-label

Environmental Label or Declaration:

*claim indicating the environmental attributes of a product or service that may take the form of statements, symbols or graphics*

*(ISO 14020)*

## Objective of Eco-label

The overall goal of environmental labels ... is, through communication of verifiable and accurate information ... on environmental aspects, **to encourage the demand for and supply of those products and services that cause less stress on the environment, thereby stimulating the potential for market driven continuous environmental improvement.**

*(ISO 14020)*



## General Principles of Eco-labelling

- ① Accurate, verifiable, relevant and non-deceptive information  
e-g. % of recycled material, recyclable package or product, non-trivial aspects)
- ② Eco-label criteria should not create unnecessary trade barriers
- ③ Based on scientific methodology
- ④ Should consider life cycle of product
- ⑤ Eco-labels shall not inhibit innovation

*(ISO 14020)*

## General Principles of Eco-labelling

- ⑥ Accessible to all manufacturers with no unduly high costs, complexity or administrative demands
- ⑦ Criteria developed openly by consensus with participation of stakeholders
- ⑧ Information on environmental aspects should be available to all purchasers
- ⑨ Information concerning methodology and criteria used to support eco-labels and declarations available to interested parties

*(ISO 14020)*

# Types of Eco-labels

## Environmental Labels

### **TYPE I**

#### **Multiple-criteria Practitioner Programmes**

- Indicates overall environmental preference
- Rewards environmental leadership

### **TYPE II**

#### **Informative Environmental Self-declaration**

- e-g. recyclability, biodegradability
- Some times in the framework of a verification scheme

### **TYPE III**

#### **Eco-profile**

- Quantified information using preset criteria
- Supported by independent verification

## **Type II Ecolabelling – Definition**

**ISO 14021: Environmental labels and declarations –  
Type II Environmental labelling – Self declaration  
environmental claims**

***Type II:*** “*Environmental claim that is made, without independent third party certification, by manufacturers, importers, distributors, retailers or anyone else likely to benefit from such a claim*”

## Type II Ecolabelling – The Consumer is Confused!

- Proliferation of eco-symbols and statements      confusion
- Harmonization and standardization is necessary
- Consumer education is *very important*



## Type II Ecolabelling – ISO 14021 Requirements

- Claims shall be:
  - accurate and not misleading
  - substantiated and verified
  - relevant to product and setting
  - clear in indicating applicability to product, a component or packaging
  - true also in relation to life cycle of product
  - related to environmental aspects that exist or can exist during the product life

## **Type III Ecolabelling – Definition**

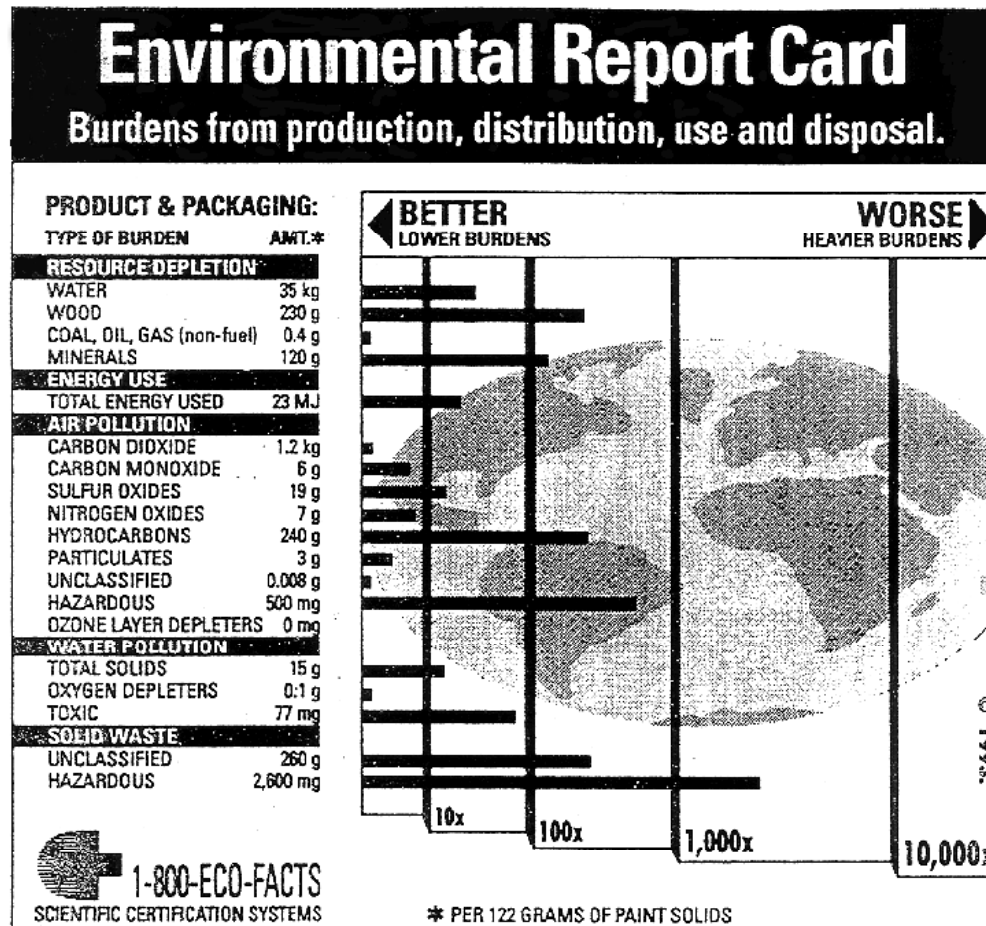
### **ISO/TR 14025: Type III Environmental declarations**

#### ***Type III Environmental declaration:***

*“Quantified environmental data for a product with pre-set categories of parameters based on life cycle assessment”.*

# Type III Eco-labels for consumers

## Example 1: Environmental Report Card for Paint





## Type III Environmental Declarations for Industrial Users

- Due to complexity of issues      Type III Eco-labelling for consumers not widespread
- Type III Declarations for industrial and large-scale buyers has the objective of
  - satisfying the increasing demand for credible quantified environmental information based on LCA
  - utilizing “supply-chain” pressure and “green procurement” to promote environmental objectives
- A number of programmes have been/are being established

# Examples of Environmental Product Declarations for Industrial Users

## EPD, Sweden



Gunnar Bengtsson  
Cecilia Ramberg

EPD

99-05-27

### Environmental Product Declaration

Lever-operated basin mixer tap FMM 9050-0050  
FM Mattsson AB; Reg. No.: S-EP-0000X

#### 1 Description of company and product

##### 1.1 The company

FM Mattsson AB

##### 1.2 The product

**Product name:** Lever-operated basin mixer tap FMM 9050-0050

The product belongs to the FM Mattsson 9000 range.

**Total weight:** 1.42 kg (incl. installation fittings)

**Materials and weight proportions down to 0.5% by weight:**

- Brass 70.7%
- Zinc 10.8%
- Copper 10.2%
- Plastics/rubber 3.4%
- Stainless steel 2.4%
- Ceramics 1.9%
- Nickel 0.6%



#### 2.1 Manufacture

Functional unit: one basin mixer tap FMM 9050-0050, weight 1.42 kg (incl. installation fittings).

##### Resources used

Non-renewable resources	Copper	732 g	of which 587 g recycled
	Zinc	560 g	of which 335 g recycled
	Lead	11 g	of which 8.3 g recycled
	Iron	26 g	
	Ceramics	27 g	
	Nickel	11.3 g	of which 2.8 g in stainless steel
	Chromium	5.6 g	of which 5.3 g in stainless steel
	Swedish nuclear energy	94 MJ	
	Oil	22 MJ	
	Oil (raw material)	20 g	manufacture of plastics
Gas	11 MJ		
Gas (raw material)	29 g	manufacture of plastics	
Coal	7 MJ		
Renewable resources	Hydroelectric power	44 MJ	
	Wood	10 MJ	
Energy consumption	Own production	70 MJ	(20 kW)
Energy consumption	In total	192 MJ	(53 kW)

##### Emissions (expressed as potential environmental impact)

Greenhouse effect	GWP <sub>100</sub>	3.19 kg CO <sub>2</sub> equivalents*
Acid precipitation	AP	36.9 g SO <sub>2</sub> equivalents*
Formation of ground-level ozone (summer smog)	POCP	2.1 g ethene equivalents*
Chemical oxygen demand substances to water (eutrophication)		82.7 g O <sub>2</sub> equivalents
Ozone degradation		1.7 mg CFC equivalents
<b>Toxic substances:</b>		
Heavy metals to air		20.9 mg
Heavy metals to water		20.2 mg

## **Type I Ecolabelling – Definition**

### **ISO 14024: Environmental labels and declarations – Type I Environmental labelling – Guiding principles and procedures**

**Type I:** *“Voluntary, multiple criteria-based, third party programme that awards labels claiming overall environmental preferability of a product within a particular product category based on life cycle considerations”*

# Characteristics of Type I Eco-labelling Schemes

- Voluntary nature
- General principles of ISO 14020 apply
- Compliance with environmental legislation a precondition
- Based on life cycle
- Selective – granted only to environmentally preferable products

# Characteristics of Type I Eco-labelling Schemes

- Transparency through all stages of development/operation:
  - information available to interested parties
  - adequate time for comments
  - set for a pre-defined period
- Potential barriers to trade should be avoided (criteria, procedures, access, fees, language, transparency)
- Equal access to all local and foreign producers
- Avoidance of conflict of interest
- Mutual recognition encouraged

# Procedures for Establishing Type I Programmes

- Selection of product categories
  - Feasibility study
  - Proposal to interested parties
- Selection & development of environmental criteria
  - Selection (using matrix)
  - Development based on environmental issues, available technology and economic aspects

TABLE 1—TYPICAL PRODUCT ENVIRONMENTAL CRITERIA SELECTION MATRIX

Stage of the life cycle	Environmental input/output indicators					
	Energy	Resources	Emission to			Other
	Renewable/ Non Renewable	Renewable/ Non Renewable	Water	Air	Soil	
Resource Extraction						
Production						
Distribution						
Use						
Disposal						

## Granting the Ecolabel (Certification)

- General rules should address
  - Publicity by licensee and use of logo
  - Conditions for suspension/withdrawal
  - Corrective action in case of non-conformity
  - Dispute resolution
  - Procedures for testing and verification
  - Fee structure

## Granting the Ecolabel (Certification)

- Procedures for assessing/demonstrating compliance
  - Supervision and control
  - Eco-labelling body shall obtain/make available on request documentation concerning categories, criteria, functional characteristics validity period, testing, certification and award criteria etc.
- Compliance monitoring (in case of changes)
- Protection of label



# MNS 4600:1998 “National conformity mark”

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# MNS 5600:2003 “National eco label”



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THANK YOU FOR YOUR ATTENTION