Newsletter on Eco Labelling and Eco Friendly Products

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Eco Labeling and Eco friendly products

Foreward

As the national economy is now moving towards globalization, the standards in industrial products being manufactured in the country have also to move towards international requirements. This is precisely why the industry has now started orienting their products for international marketing. One of the major requirements in these standards is that of ECO-FRIENDLY PRODUCTS manufacture. More and more companies are now recognizing that environmentally responsible design and production are an integral part of their mission (and value they want to deliver to their customers.) If the country has to take up greater responsibilities in the manufacturing sector on a global basis, it will have to take care about improving the health, safety and welfare of people and the planet. It will have to recognize that environmental priorities can be translated into market advantage only if eco-marked products are designed accordingly.

By ensuring environmentally responsible products through proper identification, certification and promotion, one can:

a) Improve the environment by reducing toxic pollution and waste, thereby conserving resources and habitats and thus minimizing global warming and ozone depletion problems.

b) Increase health and well being, particularly in populations most affected by product choice, such as school children, hospitals and the elderly people.

c) Demonstrate to different business segments that environmentally responsible products can improve quality and boost productivity in the long run.

Information contained in this ENVIS issue provides some basic input into the ECO-MARKING aspects of industrial products and services for the consumer market. Selected from different countries, these write-ups help the readers understand and realize the broad spectrum of ECO-LABELLING aspects of ENVIRONMENTAL INFORMATION SYSTEMS.

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Why An Eco-label?

The dynamic character of the concept of sustainable development requires a continuous improvement of specific environmental performance in the building sector. Ecological construction that goes beyond general standards therefore needs voluntary engagement at the highest possible level. At the same time, outstanding ecological "better practice" in the construction industry often cannot be sufficiently distinguished by the general public from the growing number of overblown private eco-labelling schemes. Self-determined labels declaring a building (product) to be "ecological" "environmentally friendly" or "sustainable" often appear largely arbitrary or highlight just single aspects of the overall environmental impact of a building. At the same time, existing assessment and labelling schemes are of an extremely varied nature, rendering comparison even more difficult.

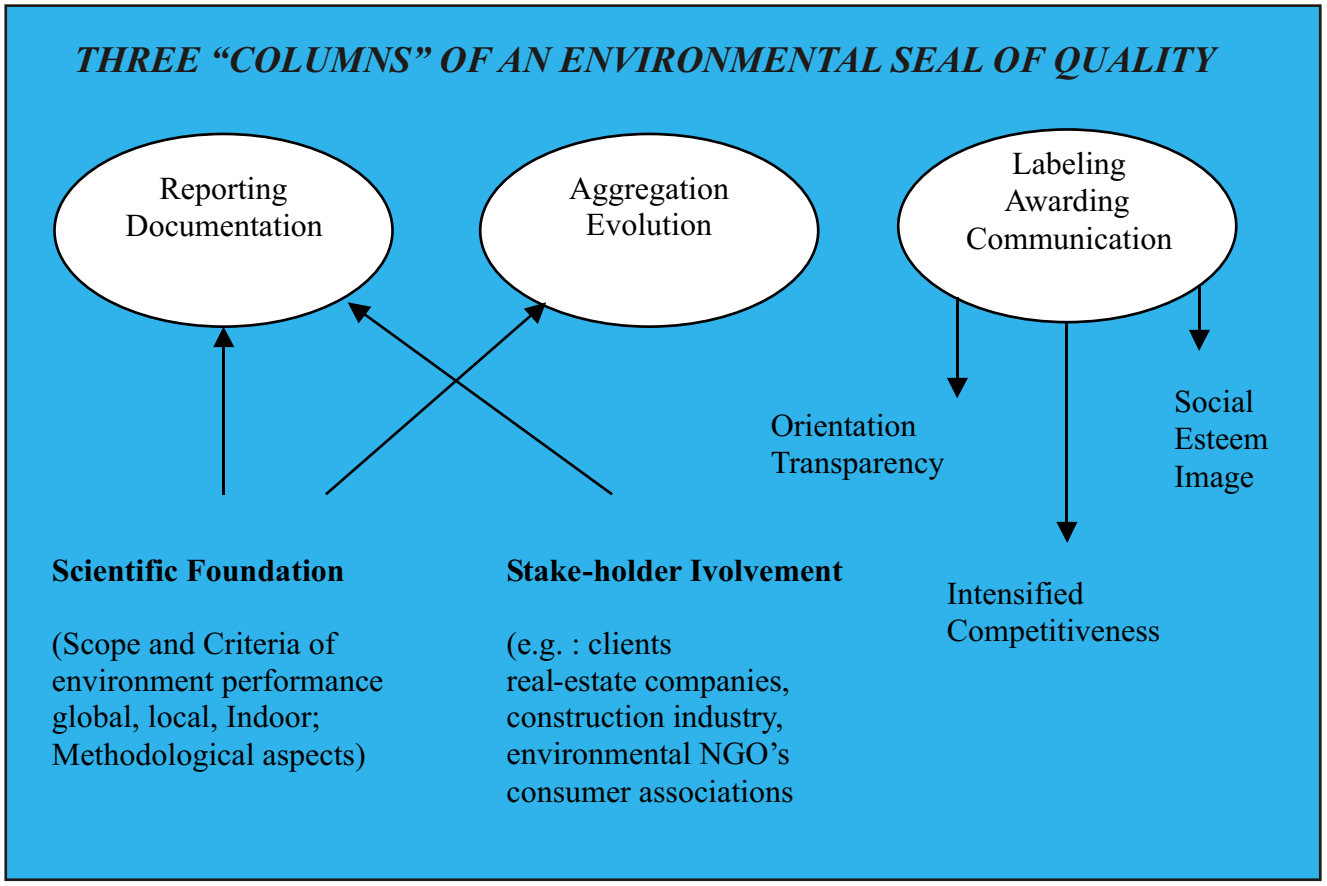
It is a fundamental phenomenon that tangible or observable features of a product in general have a stronger influence on market decisions than more hidden characteristics. In consequence, buildings or building concepts with extraordinary environmental (and health) characteristics often cannot utilize their superiority to succeed in the market as they should do ("adverse selection"). This problem is especially likely to arise in the case of 'innovators' marketing their products for the first time. At the same time, however, 'innovators' are required, since existing standards of building quality and performance in the construction industry address environmental issues to a limited degree only, and do not suffice for a development of the building stock oriented towards the concept of sustainability.

In general it is not possible or at least rather difficult to straightforwardly force innovative developments into existence by normative regulations. 'Soft' instruments such as (financial) incentives, information and advice can be brought together in environmentally oriented product labelling. Environmental labelling therefore provides an opportunity to support voluntary ecological better practice in the building market. On the one hand suppliers are given the opportunity to point up their particular ecological quality ("signalling"). On the other hand, the demand side acquires initial orientation concerning often invisible and rarely tangible qualities, which can thus be included in the process of information-gathering in preparation for the final decision ("screening").

Nevertheless a variety of demands have to be fulfilled (criteria of 'usefulness') before eco-labelling can become effective. First of all, there has to be a lack of information on the side of the target group for a given eco-label concerning the specific environmental qualities of a product. Such a deficit can be absolute (because of the innovative character and novelty of a product) or arise in situation where the required information exists in principle but cannot however be processed by its recipients because, for example, of its bulk. Furthermore, the demand for information generally rises depending on the longevity and price of an asset. All of these aspects are of importance when trying to come to environmentally-driven decisions in the building and real estate sector. Therefore it can be assumed that in principle there should be high demand for environmental labelling of buildings.

To satisfy these requirements, the label or seal of quality must have a variety of characteristics. Generally we can say that it should fall mid-way between the poles of "no information" and "information-overload" by transforming *factually necessary* information input into acceptable information output. Depending on how the label is designed, this transformation will involve a stronger or weaker condensation/aggregation of the information input.

Documentation, aggregation, and communication are the three columns of any environmental seal of quality for buildings. Very often the discussion concentrates on the first column, the design of a suitable, or often rather practicable catalogue of criteria. However, all three columns are of equal importance for the acceptability and validity of the instrument and have to be discussed in conjunction with the organisational structure that links them together.



Reference : Eco-labelling for buildings : German and European experience(Institute on Ecological and Regional Developmetns) Dresdon, GERMANY

Eco-mark Scheme Of India

The Scheme

The issue of environmental protection has brought the consumers, the industry, and the government to a common platform where each has to play its own role. The government and legislatures are using their influence to reduce environmental and health hazards due to industrialization and to stimulate the development of clean(er) technologies. However, the environment is under tremendous stress from rapid industrialisation, unplanned urbanization and changing consumption patterns in the race to achieve better living standards. It is amply clear that regulatory actions by pollution control agencies alone can not restore the environment to its pristine state. Pro-active and promotional roles should also be geared up in harmony with the overall environmental protection strategy. The time has come for consumers to take the lead in prompting manufacturers to adopt clean and eco-friendly technologies and environmentally-safe disposal of used products, along with preventive and mitigative approaches.

To increase consumer awareness, the Government of India launched the eco-labelling scheme known as 'Ecomark' in 1991 for easy identification of environment-friendly products. Any product which is made, used or disposed of in a way that

significantly reduces the harm it would otherwise cause the environment could be considered as Environment-Friendly Product.

The criteria follows a cradle-to-grave approach, i.e. from raw material extraction, to manufacturing, and to disposal. The 'Ecomark' label is awarded to consumer goods which meet the specified environmental criteria and the quality requirements of Indian Standards. Any product with the Ecomark will be the right environmental choice.

Criteria For Ecomark

The criteria are based on the cradle-to-grave approach, i.e. from raw material extraction to manufacturing and to disposal. The basic criteria cover broad environmental levels and aspects, but are specific at the product level. A product is examined in terms of the following main environmental impacts:

- that they have substantially less potential for pollution than other comparable products in production, usage and disposal.
- that they are recycled, recyclable, made from recycled products or bio- degradable, where comparable products are not;
- that they make significant contribution to saving non-renewable resources including non-renewable energy sources and natural resources compared with comparable products;
- that the product must contribute to a reduction of the adverse primary criteria which has the highest environmental impact associated with the use of the product, and which will be specifically set for each of the product categories.

Product General Requirements:

The product general requirements deal With the issues of compliance of the pollution control acts; raising environmental awareness among consumers etc., in addition to safety, quality and performance of the products.

Product Specific Requirements:

While determining the product specific requirements, the following issues have been taken into account:

- production process including source of raw materials;
- use of natural resources;
- likely impact of the environment;
- energy conservation in the production of the product;
- effect and extent of waste arising from the production process;
- disposal of the product and its container;
- utilisation of "Waste" and recycled materials;
- suitability for recycling or packaging; and
- biodegradability

Ecomark Criteria of the Product Categories covered under the scheme.

The Government of India has notified the final criteria for the following 16 product categories :

1. Soaps & Detergents
2. Paper
3. Food Items
4. Lubricating Oils
5. Packaging Materials
6. Architectural Paints and Powder Coatings
7. Batteries
8. Electrical/Electronic Goods
9. Food Additives
10. Wood Substitutes
11. Cosmetics
12. Aerosol Propellants
13. Plastic Products
14. Textiles
15. Fire-extinguisher
16. Leather

Reference: www/cpcb.nic.in/eco_criteria.htm

Life Cycle Concepts In Eco-labelling

Several programs have altered or revised the methodologies used to select product categories and set criteria, including France's NF-Environment Mark and Japan's EcoMark.

Some programs, including the NF-Environnement program, have simplified their methodology from a full LCA [life cycle assessment] to an analysis that concentrates on what the program determines to be the most important stages of a product's life cycle. France made this revision primarily due to cost considerations, but also to make the program more available to small- and medium-sized businesses and industries.

In contrast, Japan's EcoMark program has changed its methodology to incorporate a life-cycle matrix which considers the environmental impacts within each stage of the product life cycle. Originally, the Program based selection on the finished products' attributes, and did not incorporate the manufacturing processes of individual products within a category. In this way the logo was used more to call attention to products that were part of "an ecological lifestyle", than to weigh the relative impacts of consumer products throughout the life cycle. The process was also generally not open for comment from the public. These procedures were revised in March 1996 to conform to the [then] draft ISO 14024 standards. The Program now employs the use of life cycle analysis, consults with related parties, and provides for public review of draft criteria.

Reference: Env labeling issues CEPA 742-R-98-009

A Swedish Eco-labelling System

How Does Eco-labelling Work?

Before a product is allowed to display the Good Environmental Choice eco-label it must meet certain requirements. These requirements or criteria, as they are called, are drawn up by various experts. They check the requirements carefully, work out how they might lead to improvements in the environment, and decide whether they will have an impact on the market. After several revisions the proposal is handed over to industry, the retail trade and the authorities to find out what their views are. It is important that everyone takes part and that no one feels victimised. Although the requirements may be stiff, they must not be unreasonable. Otherwise no one would get involved.

Before the Swedish Society for Nature Conservation draws up environmental criteria for a group of products, we first carry out a careful assessment of the environmental impact of the product. Every product affects the environment in several ways during the different phases of its life cycle. We must consider how the raw materials are extracted (or what is consumed in providing a service). We must also think about how the product is made and what happens to it when it has been used and discarded. This method of assessing the total environmental impact of a product is usually called a life cycle analysis.

A life cycle analysis is always based on assessments, and even if we have unlimited time and resources it will never give a clear cut picture of the environmental impact of a product. Models that weigh up one environmental hazard against another are often complicated and unclear. What's more, the life cycle analysis is only valid at the time it was carried out, since new information and new environmental factors must constantly be taken into account.

The criteria also make allowances for the environmental expertise of the Swedish Society for Nature Conservation and the potential that we and consumers have to influence the market. Eco-labelling will have the greatest impact if it is focused on the most important environmental problems.

Reference: www.snf.sc/bmv/english-move.cfm

Eco Products in Japan

Standards for Environmentally Conscious Products (Eco Products) (24 Standards)

Category	Target	Standards
Global warming prevention	Low power consumption (5)	Must have a design in which low power mode is switched to when machines are not used for a specific time
		Products registered with the International Energy Star Program must conform to the program standards
		Must have reduced rated power consumption
		Must have reduced standby power consumption
		Must have reduced off-mode power consumption
Resource recycling	Reduce (6)	Must use returnable trays or cardboard for packaging
		Must use recycled paper for manuals and avoid processing or treatment that inhibits recycling
		Must have reduced product volume and dimensions
		Must have reduced product mass
		Must have reduced packaging mass
		Must use a design promoting longer product life
Resource recycling	Reuse (1)	Must use reusable parts and units
Green procurement	Recycle (4)	Must display material names on plastic products, packaging materials, and accessories • Target products and accessories: 25 g or more • Target plastic foam packaging: 15 g or more
		Must display rechargeable battery material and have an easily separable structure
		Parts containing mercury must be easily separable
		It must be possible to easily disassemble products into individual materials (up to unit level) with a screwdriver or other general tool
	Chemical substance reduction (5)	Products, packaging materials or accessories must not contain substances banned by NEC (PCBs, polychlorinated naphthalene, asbestos, specific bromine flame retardants [PBDEs, PBBs])
		Products and materials produced using ozone depleting substances prohibited by the Montreal Protocol (CFCs, halon, 1,1,1-trichloroethane, carbon tetrachloride, HBFCs) must not be used
		PVCs must not be used for chassis
		Halogenated resins and halogen flame retardants such as PVCs should not be used for buffers or protection bags
		Must use reduced amount of lead solder
Other items	Environmental management system	Main product-related divisions (including development and design) and major production bases must have acquired ISO 14001
	Manufacturing	Chemical substances and facilities used in the manufacturing process must have been evaluated prior to product manufacture
	Information disclosure	Manuals and other documents must describe the proper handling and treatment of used rechargeable batteries

Reference: www.nec.co.jp/annual2004/11/11-2/hlml

News And Views In Brief

Raymond targets premium segment, launches eco-friendly fabric

The Rs.1,700 crore Raymond Ltd would expand its product portfolio to launch shoes and introduce eco-friendly soyabean fiibre fabrics.

The soyabean fibre fabric will range between Rs.7000 to Rs 9000 per metre and shoes are over Rs.4495 per pair.

The company had earlier introduced garments made of bamboo fibre and fabrics made from milk protein fibre was also in pipeline, a Raymond trade partner official told reporters today.

The new launches are targeted at the premium segment of the market.

The company under Color Plus brand has launched shoes, leather wallets and belts.

There has been a shift among consumer preferences toward eco-friendly products.

The company will shortly introduce more accessories like sunglasses under the Park Avenue brand.

Numaligarh Sets Eco Friendly Industry Benchmark In The Country

Fifteen years ago, when the government decided to set up an oil refinery on the eastern fringes of the world-famous Kaziranga National Park, the first issue that everybody around raised was: Won't it cause serious damage to the national park? Today, this 3-mtpa refinery has not only brought down its treated effluent discharge to zero, but has also become India's first refinery to do so.

"We are proud to say that we have achieved zero-discharge as far as treated effluent from our refinery is concerned", said A.K.Maiti, a senior manager at the public sector Numaligarh Refinery, for which allegations of environment pollution and disturbance to natural elephant corridors was almost routine.

Numaligarh Refinery, in fact, was among several industrial units in Assam that was served with an ultimatum by the state's Pollution Control Board to close down if they were unable to minimize their effluent discharge by October 31.

This refinery has recently invested in service equipment worth Rs.30 crore that have, according to Maiti, not only brought down refinery effluent discharge to zero, but have also stopped sending out "even one drop" of waste water from the refinery to the Dhansiri river that flows through Kaziranga National park.

Three other refineries in the state, however, have yet to fulfil the conditions laid sown by the state pollution control board. IOC's Guwahati Refinery, which has been identified as one of the worst polluters has, however, given an extension of the deadline by the board to bring down its effluent discharge to the Brahmaputra.

"While we are glad that Numaligarh Refinery has been able to achieve zero-discharge, and have appreciated their response, it is important that not just Kaziranga, but even the Brahmaputra is not polluted. Which is why what concerns us is that if Numaligarh can do it, why not the other refineries," said Assam Pollution Control Board Chairman J.L.Dutta in Guwahati.

"We have not only brought down pollutant content of our effluent to near-zero, but have also started using the treated effluent in the refinery cooling tower, fire water network and also the gardens within the refinery," Maiti said. Numaligarh in fact has stopped draining out about 2,400 cubic meters of water per day to the Dhansiri that flows down from Nagaland to the Brahmaputra through Kaziranga.

The 3-mtpa Numaligrah Refinery has also adopted a non-illuminating ground flare system which, according to Maiti, was important not just because Kaziranga is located close to it, " but also because animals, especially wild elephants, have their natural corridors in the vicinity.

Gauhati University meanwhile has been engaged for monitoring air quality at five locations around the refinery, where two samples are collected every week and analysed. "One such location is at Agaratoli inside the Kaziranga National park. The National Environmental Engineering Research Institute, on the other hand is engaged in carrying out environment audit," Maiti added.

Ground-level concentration of pollutants have been also reduced and brought to a minimum, he said by increasing stack heights to above 60 metres.

"This distributes whatever gas we discharge to the air. But more importantly, ours is the only refinery in the country that has a public display of sulphur dioxide and nitrogen oxide content in the air, which is updated every five to ten minutes," he claimed.

Reference: Indian Express, Ahmedabad Edition Nov.23, 2006

Design For Environment - Eco Friendly Household Goods

S C JOHNSON

"We believe in contributing to the well being of the countries and communities where we conduct business. We commit ourselves to advance the economic and social development of every country and community where we do business, and to actively promote a sustainable natural environment".

The concept of Design for Environment is actively pursued and rewarded in all aspects of SC Johnson operation. Since 1992, the company has cut over 202,000,000 kilograms of waste from its products and processes worldwide, and realized substantial annual cost-savings as a result. Innovative technologies and practices are responsible for reducing the environmental impact of every life cycle stage of each product.

SC Johnson is private family- owned company founded in 1886. The company has about 9500 employees throughout its operations in over 60 countries around the world The company manufactures domestic products such as furniture polishes, air fresheners,glass and surface cleaners, insecticides, and shaving gels, which are marketed in 100 countries across the globe.

SC Johnson has one manufacturing site in Australia and a distribution, marketing & sales office in New Zealand, with 150 employees. Products made in Australia include Windex, Toilet Duck, and Glade Raid & Mr Muscle.

Processing And Sales Recycled Paper Containers Aimed At Zero Waste Generation

"Hokkaru" is Proposal for the New Country's Eco Lifestyle

Today the containers, packaging and paper industries are being increasingly forced to consider the environment from a viewpoint that embraces the conservation of limited resources, simplification, reduced use of petroleum, and resource reuse and recycling.

Against this background, Shuei has developed a new kind of recycled paper container called Hokkaru. This container features a two-layer stucture consisting of an inner film layer and an outer paper layer. After use, the film can be separated from the paper and discarded as waste, while the paper is re cycled. This reduces the volume of refuse while the effectiveness of forestry and petroleum utilization is maintained. By preserving forests, we can help to secure water resources as well as making a contribution to absorbing atmospheric CO2 and preventing global warming. Moreover, Hokkaru is a container that can help to educate consumers in the propositions "if you throw it away it's trash, but if you separate the layers it becomes a resource" and "nature for everybody", both of which are worthy 21st century themes.

Hokkaru containers are already being employed as take out containers by the Tokyo University and Osaka University Cooperatives, and we fully expect that separable containers of this kind will become mainstream packaging products in the future.

Hong Kong Green Label Raised High At Eco Expo Asia2006(2006/11/10)

Hong Kong just had her first ever "Hong Kong Green Label" Pavilion in an environental protection themed exposition!

Eco Expo Asia 2006 was held on 27-30, October 2006 at AsiaWorld-Expo,Lantau.Kicked off by Ms Anissa Wong, the Permanent Secretary for the Environment, Transport and Works(Environment)andMrFred Lam,theExecutiveDirectorofthe Hong Kong Trade Development Council, the Expo was organized by the Hong Kong Trade Development Council and Mess Frankfurt (HK) Ltd with Green Council as one of the supporters.

The "Hong Kong Green Label" Pavilion was the second largest pavilion (second next to Environmental Protection Department's) at the four-day trade fair. It successfully drew visitors' attention with the impressive "Hong Kong Green Label Tower" and the informative displayofHongKongGreenLabel awarded quality products. The staffs were always busy to answer curious visitors' enquiries about the Hong Kong Green Label Scheme and the China Environmental Labelling Scheme. Ms Linda Ho, the Chief Executive Officer of Green Council, was invited to deliver a presentation on "Green Markets and Practices in China and Hong Kong" which turned out to be one of the most welcomed presentations at the Open Forum.

The Expo was an Asia-Pacific regional trade exposition on products and services relating to environmental protection which served as a platform for local and internationalsuppliersandbuyers at different levels. Activities like conferences, seminars, talks, booths and games have raised business interests on environmentally preferable products as well as public awareness on environmental protection.

Green Council is devoted to promote green consumerism and is working to help Hong Kong score a distinction in environmental protection. Companies and individuals who are interested to know more about the Hong Kong Green Label Scheme and the China Environmental Labelling Scheme are welcome to contact GreenCouncil,tel 28101122.

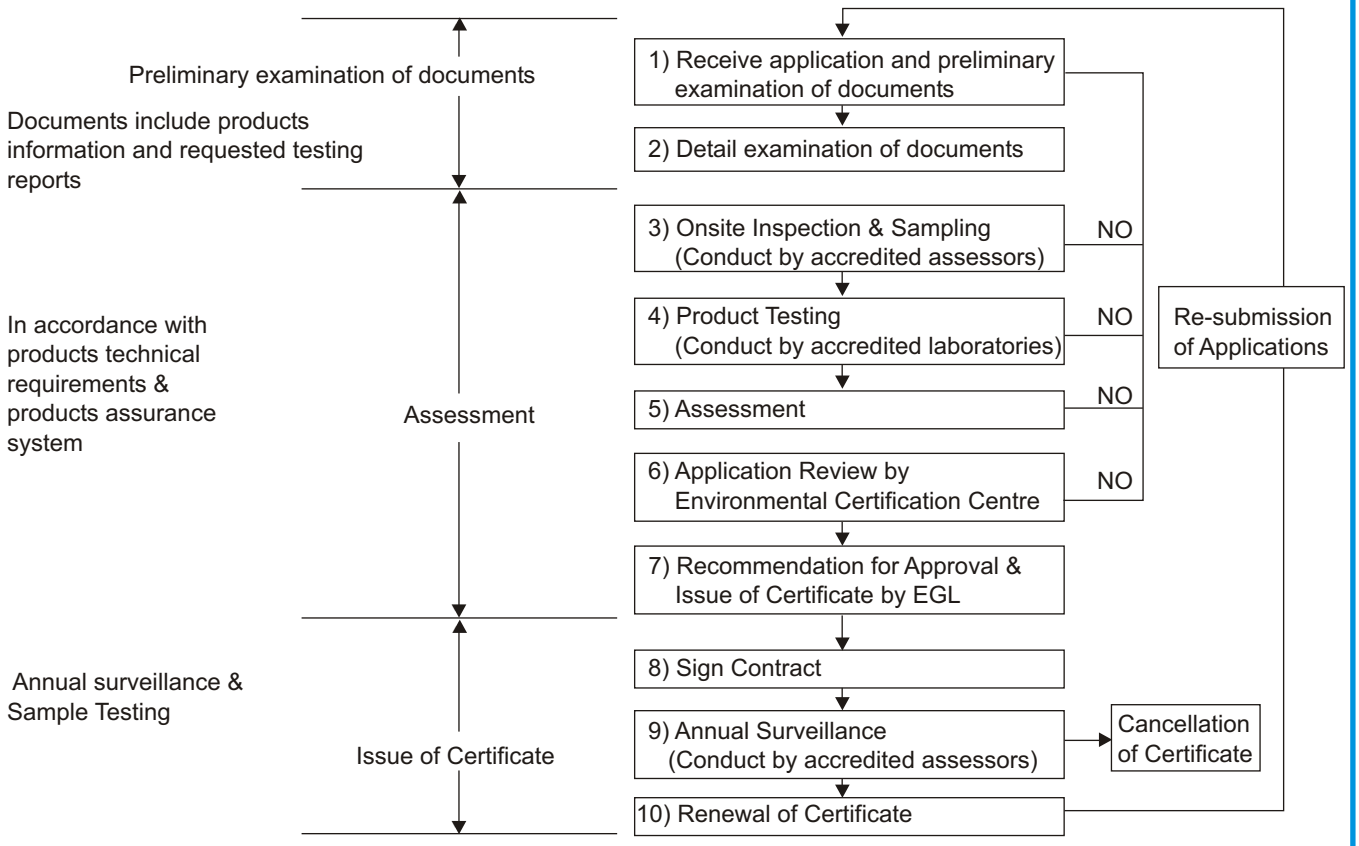
China Environmental Labelling

In 2003, the China Environmental Labelling Scheme was lauched by Environmental Protection Administration Environmental Certification Centre (SEPA). They had developed a set of technical criteria for each product category of the Scheme and each product has to be independently assessed by undertaking On-site Inspection and Sample Product Testing, and the test results will be subjected to review and approval. It has adopted international standards and fulfills the technological requirement of environmental products proclaimed by the National Environmental Protection Bureau.

Products with environmental labels possess superior quality and environmental performance. Annual inspection and random sample checks will be carried out to ensure that good standards are maintained at all times. Since 1994 up to mid 2006, assessments have been conducted for 800 enterprises, and 12,000 products have been awarded the environmental label.

The China Environmental Labelling Scheme assists the general public to become more environmentally responsible in their everyday life by raising the awareness and promote green consumerism. It also assists enterprises not to be wasteful in using resources and non-renewable energy, encourages the development and production of green products which are friendly to the environment and not harmful to human. It also enables enterprises in China to gain a competitive edge in international trade. In a way the China Environmental Label has formed an environmental bridge for enterprises, consumers and the government. For more information, please visit the website *http://www.sepacec.com.*

Flow Chart of China Environmental Labelling Scheme



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