

Eco-labels as a tool for sustainable choices

ENGINEERS SHOULD TAKE THE LEAD

Engineers and built environment professionals need to take responsibility for driving the change towards building and designing in a resource-efficient cradle-to-cradle approach. The challenge is the mindset shift towards a 'circular economy' and to change behaviour without clients, users or designers, or the functional integrity of the designed solution, being compromised.

As professionals in the industry we have the ability and responsibility to lead this change and to make choices in our designs, specifications and advice to clients to make sustainable decisions based on a business case.

Being able to understand how to make sustainable choices is becoming increasingly important. Unfortunately, 'sustainability' has become associated with 'fads' and 'green-washing' marketing techniques. Hence it has become difficult to differentiate between genuinely sustainable products and processes on the one hand, and marketing gimmicks on the other.

In this article we would briefly like to expand on the purpose and vision of EcoStandard, and that being more aware of how to make sustainable choices makes business sense.

WHAT IS EcoStandard?

EcoStandard is South Africa's first eco-label for building and construction materials. It is a non-profit organisation (NPO) which was developed in 2009 and launched at the end of 2013. EcoStandard provides independent verification and reward for responsible design and manufacture of products in the building sector.

WHAT IS THE PURPOSE OF ECO-LABELS?

Eco-labels (see Figure 1) provide an easy way for professionals and the general consumer to identify products which are environmentally preferred in terms of their sourced materials, their manufacturing processes, their use and their end-of-life design qualities, i.e. ease of disassembly for reuse or recycling. It also provides a way for businesses to authenticate the

Viola Milner
Civil Engineer
JG Afrika
milnerv@jgafrika.com

Cindi Braaf
Undergraduate Student
Stellenbosch University
cindibraaf@gmail.com

Sally-Anne Käsner
Chairperson
EcoStandard
sally@ecostandard.co.za

use of eco-materials and eco-methods for specific products.

HOW ARE PRODUCTS ASSESSED AND CLASSIFIED?

The sustainability of the entire life cycle of the product is considered in five key categories, based on the life cycle principles shown in Figure 2.



Figure 1: EcoStandard's eco-label

DID YOU KNOW?
There are no SANS standards for the level of green.

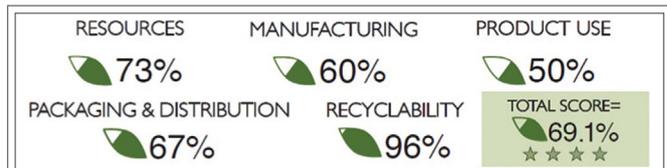


Figure 2: An example of the assessed scores per category and the overall total score that can be assigned to a product



Figure 3: Star ratings and their corresponding percentages

MAKE SMART DECISIONS

Many manufacturers make use of self-proclaimed eco-labels. EcoStandard ensures independent third-party certification.

For manufactures in the industry, there are currently no fixed criteria or methodologies set out to claim, “green status” or to make decisions about “more green” options.

EcoStandard is developed based on the ISO14024 guideline standard for Type I environmental labelling programmes. The standard includes:

- the selection of product categories
- product environmental criteria
- product function characteristics
- assessing and demonstrating compliance.

There are two other types of ISO14024 standards that are used by manufacturers in terms of eco-labels:

- Type II: informative environmental self-declaration claims, e.g. manufacturer – most often used and can be misleading, as these are often not verified by an independent third party.
- Type III: voluntary programmes that provide quantified environmental data of a product, based on life cycle assessment, and verified by a qualified third party, e.g. LCA calculations.

EcoProducts need to meet certain criteria (Figure 3) to gain an “EcoStandard Star”. A maximum of five stars can be awarded. A re-certification process is required every three years to ensure that the product is still compliant with the rating awarded.

IS THIS SIMILAR TO THE GREEN BUILDING RATING? WHY IS THERE A NEED FOR ANOTHER ECO-LABEL?

The EcoStandard system is similar, but different. The Green Building Council of South Africa (GBCSA)’s Green Star rating tools are also a type of eco-label for commercial property. Each Green

Star SA rating tool reflects a different market sector, including office, retail, multi-unit residential, public and education buildings, as well as others that are in development, like interiors and existing buildings’ performance.

For manufactures in the industry, there are currently no fixed criteria or methodologies set out to claim, “green status” or to make decisions about “more green” options. This emphasises the importance of having an eco-label, such as EcoStandard, which holds a respectable standard.

EcoStandard is an eco-label for products in the building industry and is recognised by the GBCSA as a way to make more “sustainable choices”. The EcoStandard 4 and 5 Star Rating is considered a GBCSA Level A Certification (the highest level), and can be recognised for the award of points towards a GBCSA rating.

HOW CAN ENGINEERS AND BUILT ENVIRONMENT PROFESSIONALS UTILISE EcoStandard IN THEIR DAILY WORK?

Being aware of independent eco-labels versus self-proclaimed marketing eco-labels will assist everyone in making responsible decisions and changing behaviours in all aspects of their life. The more one thinks about resource efficiency and a circular economy, and design decisions at all phases of a project, the more it will begin to change behaviour and design standards.

Engineers and architects can specify the use of EcoStandard (or equivalent) approved materials in their projects, particularly in building or housing projects.

IS THERE SCOPE FOR EcoStandard IN LARGE CIVIL WORKS PROJECTS?

There is the ability to do once-off product assurance in local/in-situ situations. One example of this could be a contractor proposing a localised concrete mix to demonstrate sustainability and benefit for the client in addition to the structural performance results. Another example could be the assessment of the benefits of using a local material in pavement layer works design.

WHAT HAS BEEN THE BIGGEST ACHIEVEMENTS FOR EcoStandard SO FAR?

- Gaining recognition from the GBCSA as a third party eco-label and being incorporated into their evaluation tools.
- Receiving an award at the *Greening the Future Awards 2014* as winner of the category “Non-profit organisations that promote economic growth and job creation in conjunction with low carbon development and natural resource efficiency. These are projects that encourage and/or demonstrate the wisdom of investment in the green economy”.

CASE EXAMPLES

A number of products have already been assessed for companies like HQ&CO, Clay Tile, HWZ International, Dauphin, Use-It, ISO Board, Superfine and Xanita.

MORE INFORMATION

For a list of certified products and more information, please visit: www.ecostandard.co.za □



Examples of products certified by EcoStandard