



GREEN
SHOES
4ALL

ECODESIGN FOR FOOTWEAR



WHAT IS ECODESIGN?

Ecodesign can be defined as the “integration of environmental aspects into product design and development, with the aim of reducing adverse environmental impacts throughout a product’s life cycle” and should be applied at an early stage in the product development phase leading to improved design specifications.

WHAT ARE THE MAIN GOALS OF ECODESIGN?

The aim of ecodesign is to develop new sustainable products, minimizing the environmental impact throughout the product’s life cycle, without compromising the performance, functionality, quality, safety, ergonomics, and cost. It is necessary to find the right balance to develop footwear products that fulfil the environmental requirements, the company business’s and consumer’s expectations.

WHO SHOULD BE INVOLVED IN ECODESIGN?

Ecodesign involves the knowledge and competencies of several disciplines and requires a multidisciplinary team and departments that covers the whole shoe development process, such as: Designers; Product engineers; Material specialists; Purchasing department (e.g., materials, components, chemical products, etc.); Environment; Quality; and Marketing & sales.

The implementation of ecodesign process in a company requires the involvement of top management, ensuring that the new footwear concepts are integrated in the strategy and fulfil the environmental and business objectives of the company. Also, the top management must ensure the allocation of human, technical and financial resources for the planning, implementation, and improvement of ecodesign.

ECODESIGN STRATEGIES



Design for sustainability

- Footwear concepts with a function/purpose
- Multifunctional footwear to be used in different occasions
- Modular and upgradable footwear
- Durable and repairable footwear
- Create timeless aesthetic design
- Create emotional connection to product
- Easy maintenance and repair
- Simple models
- Easy disassembly
- Biodegradable, compostable and/or biobased footwear
- Recycled, reusable, recoverable footwear



Select low impact materials

- Recycled materials
- Natural and renewable materials
- Organic materials
- Biobased and/or biodegradable and compostable materials
- Recyclable materials
- Lower energy content materials
- Labelled materials
- Local materials
- Use trustworthy providers



Reduce materials and components usage

- Reduce the diversity of materials and components.
- Use lighter materials and components
- Reduce the volume of materials and components.



Avoid potentially hazardous substances and materials

- Select materials in compliance with REACH, CADS list, ZDHC MRSL, etc.
- Use water-based chemical products
- Find alternatives to metals



Optimize production techniques

- Minimize number of production stages
- Use of cleaner production techniques
- Eliminate toxic emissions
- Use more energy efficient processes
- Minimise waste production
- Implementation of production quality control procedures



Use low impact packaging

- Reduce packaging volume and weight
- Reduce unnecessary packaging
- Use single materials
- Use recycled materials
- Use local materials and production
- Avoid the use of inks and colorants
- Packaging design conceiving other uses



Select more efficient distribution

- Use containers of standard and modular size, to maximise transport
- Use more efficient transports



Reduce the environmental impact in the use phase

- Provide best practice guide (e.g., cleaning, maintenance, repair)
- Supply a cleaning and maintenance kit.
- Supply a kit with replaceable damage/lost pieces.
- Offer a repair service in the stores/companies.
- Offer a customization service.
- Offer a discount on future purchases for the collection and management of old footwear.
- Offer a repair guarantee.



Optimise the end-of-life

- Provide a best practice guide (EoL)
- Labelling the products/materials to facilitate the sort and recycling.
- Provide information on the recycling benefits.
- Promote collection campaigns.
- Offer incentives to give a second life to product
- Create a recycling business model.
- Establish agreements with companies that collect used footwear to recover certain materials.
- Provide a collection product service



www.greenshoes4all.eu

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