REINWASTE Project - Infosheet paper #2



Reducing raw materials packaging Ecodesign



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The new technological developments in packaging for food and beverage industry are committed to eco-design. New packaging systems that improve the transport of the product and extend the useful life in a sustainable way, reducing raw material used.



Food industry is committed, among other actions, to minimize the amount of plastic and other materials used in their packaging, thus helping to reduce their weight, consume fewer raw materials and make them more sustainable.

Eco-design, the design and production of packaging taking into account sustainability criteria, has become a key tool for companies to minimize the environmental impact of their packaging and, at the same time, consume less raw materials during their manufacturing process.

ECOEMBES, non-profit organization dedicated to the recovery of packaging throughout Spain, has developed a methodology to apply ecodesign to all those companies that put packaged products on the market and which is included in the « Packaging Ecodesign Guide».

The methodology proposed in this guide tries to address both creative and technical aspects, involving the different departments of the company (purchasing, production, marketing, logistics, quality, environment ...) in the development of more sustainable, more desirable packaging for the consumer and technically and economically viable.

This guide provides two complementary points of view that allow the company,whatever their experience in packaging ecodesign, carry out the ecodesign project successfully:

• A creative method for devising the sustainable vision of the packaging and specify the desirable aspects implement in the ecodesign project, relying on the knowledge of the company.

• From a technical and objective perspective, the creative method is complemented with environmental quantification to know the profile packaging environment and evaluate the impact of changes in design.

OBJECTIVES

- Minimum amount of packaging material.
- Minimum diversity of packaging materials.
- Optimal performance of the material.
- Maximum use of locally sourced materials.
- Maximum use of materials of renewable origin.
- Maximum use of recycled materials.
- Maximum use of certified materials environmental.

The ecodesign measures applied in the last twenty years have saved 528,700 tons of raw material and the emission of 1,430,500 tons of CO2 has been avoided



Ecodesign is not something new, but rather it is a concept that companies have been putting into practice, together with Ecoembes, for 20 years in Spain.

Since 1999, significant **weight reductions** have been achieved in packaging such as water bottles, which weigh 18% less, yogurt containers (21% less) and aluminum cans (20% less). This lightening of the weight of the containers fundamentally translates into less use of natural resources when producing them.

Throughout these years, the companies that have opted for the ecodesign of packaging in Spain have implemented more than 48,000 measures that range from the **elimination of unnecessary material to the reincorporation of recycled plastic.**

With this purpose, more than 2,100 companies worked with Ecoembes, the environmental organization that coordinates packaging recycling in Spain, which implemented a total of 3,653 ecodesign measures.

Thanks to this commitment, more than 25,200 tons of raw materials were saved during the packaging design process, a phase in which it is estimated that 80% of its environmental impact occurs.

Within the eco-design measures applied by companies, 4 out of 10 were aimed at reducing the weight or eliminating material from packaging, thereby minimizing the amount of plastic and other materials used, avoiding the unnecessary consumption of raw materials. and achieve more sustainable packaging.

Other measures applied have been aimed at facilitating the recycling of packaging and favoring its reuse, thus anticipating European legislation that states that by 2030, all plastic packaging must be recyclable and plastic bottles, specifically, must incorporate a 30% recycled material.

Ecodesign, a tool for packaging sustainability

Recycled PET packaging from post-consumer, cardboard packaging for vegetables or trays made from pressed paper pulp, are some examples of ecodesign.

Links to article related to this subject:

- https://www.ecoembes.com/sites/default/files/archivos_publicaciones_empresas/10-guia-ecodiseno-envases-2018.pdf
- https://www.ecoembes.com/es/empresas/como-podemos-ayudarte/mejora-diseno-envases/metodologia-ecodiseno
- https://www.ainia.es/tecnoalimentalia/consumidor/ecodiseno-sostenibilidad-packaging-alimentario/
- https://ide-e.com/wp/medidas-de-ecodiseno-aplicadas-a-los-envases-encaminadas-a-la-reduccion/

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