enterprise europe



ELEEN WP7 Report (DL 7.1)

Catalogue of success stories / good practices

Environmental services available to SMEs through public schemes

Swerea IVF, Sweden





Basic information about the company

Kenpo Sandwich specializes in the production and design of tailor-made sandwich-panels according to customer demands. Founded in 1990 Kenpo has advanced to become one of the leading companies in the branch.

Sandwich elements consist of a hard-foam core coated by two walls or covering surfaces. The surfaces absorb the external pressure and give the construction stability while the light-weight core ensures equal weight distribution in the whole element. In comparison with normal, single-component panels, sandwich-elements are considerably lighter and much more flexible as well as being extremely robust, thus becoming an ideal solution for a variety of application fields such as in transport, construction, marine or telecommunication projects.

The production units are situated in the company's own factory in Halmstad. The factory building was built with their own sandwich panels.

Description of services provided by EEN/ESP

An environmental product declaration, EPD, is a way of communicating about products' environmental characteristics that can be used on all product and services. According to ISO 14025 environmental declarations are based on life cycle assessment. Within the framework of the International EPD® system it is allowed to extract a climate declaration if there is an underlying LCA that comprehensively covers other environmental aspects.

Climate declarations have recently become very popular because of the interest in the climate issue. When customers to Kenpo Sandwich demanded an environmental product declaration, Kenpo Sandwich turned to Swerea IVF for assistance. With financial assistance from the Eleen project, Swerea IVF carried out a life cycle assessment of several different sandwich configurations and the results were presented in a climate declaration. Bureau Veritas carried out third party verification of both the LCA and the climate declaration.

Results of provided service/ changes after implementation of ESP advices

The climate declaration was introduced at a Construction fair in Stockholm during fall 2011. The interest from customers and competitors was considerable. The climate impact in kg carbon dioxide equivalents per kg and m² of panel for manufacturing the panels is presented alongside important information such as the overall heat transfer coefficient which describes how well a building element conducts heat. This enables architects to judge the merits of the panels from a manufacturing perspective as well as from a building perspective.

Climate declarations are not only a great communications tool. The underlying life cycle assessment is also a very good basis for improving the product's environmental characteristics. The life cycle assessment showed that using recycled EPS is an effective way of reducing the climate impact of the panels. Kenpo Sandwich will work towards spreading this knowledge so that effective routes for recycling EPS building scrap will be installed also in Sweden. In addition, the company expects to meet future demands of environmental product declarations with the elaborated third party verified climate declaration.



