



### NEED

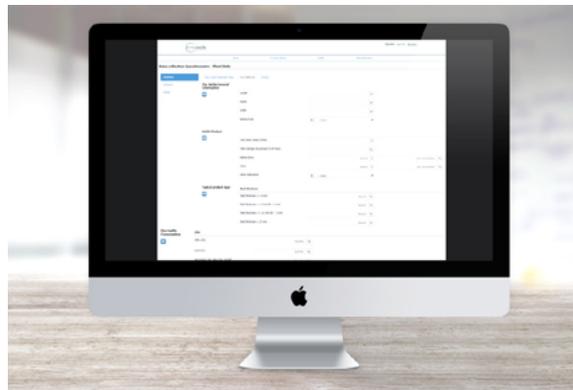
European General Galvanizers Association (EGGA) is the industry organization for Europe's general galvanizing sector. It is a federation of the National Associations of most of the European Union Member States, together with Norway and Turkey, representing about 600 general galvanizing plants.

The galvanizing process guarantees long-term durability to steel products. In 2005, EGGA wanted to know if this advantage in terms of durability could also be achieved with relatively low environmental burden, if compared with other corrosion protection solutions. For this reason, the association asked us **to perform a pan-European life cycle inventory (LCI)** study of hot dip galvanized products, with the scope of delivering life cycle inventory data sets for the galvanizing process.



### RESPONSE

We quantified the average energy, resource consumption and emission of substances to the environment of sample processes operating in several plants in Europe. The sample covered more than 1 Million tonnes of steel galvanized by 66 plants in 14 European Countries, corresponding to around 20% of the overall European hot-dip galvanizing market. A **customized on-line tool** was also developed for data collection, EPD generation, LCA reporting, and R&D elaborations at plant level, and was third party verified. The model obtained allowed generating the eco profiles by product classes, by country and technology to feed EN 15804 based databases. At present, the web tool is still used for easily collecting updated data at plant level, which is a crucial point for data monitoring and update.



### OUTCOMES

Nowadays LCI datasets are available, on request from EGGA, to LCA professionals and customers who wish to generate an environmental product declaration for a galvanized steel construction product. Furthermore, some indicators from the 2005 project were included into "Galvanising and sustainable construction – a specifier's guide" by EGGA and IZA-Europe, <http://www.galvanizing.org.uk/publication/galvanizing-and-sustainable-construction/>.

In 2014, with a general increasing interest on having reliable and representative data of galvanizing sector, EGGA decided for a revision of the project to be then third party verified and leading to an EPD publication.

In 2016, EGGA published the EU Sectoral EPD for "Batch hot-dip galvanizing of steel products according to EN ISO 1461" covering up to 20% of EU market, with the involvement of 66 companies by using our web tool for environmental analysis (TEA). The EPD is currently available at [www.environdec.com](http://www.environdec.com), [www.epd-online.com](http://www.epd-online.com) and [www.eco-platform.org](http://www.eco-platform.org)



### GEOGRAPHICAL COVERAGE

The study was conducted among up to 66 plants in Europe