

## Striving for Resource Conservation and Sustainability at Sikla



We have nature to thank for the existence of our company. We are conscious that the success as well as the future of Sikla depends, in the long term, on how we handle material resources.

In our role as a responsible family-owned company, Sikla has firmly embedded the conservation of resources and ecological practices in its corporate mandate:

“In fulfilment of our corporate mandate, we spare resources and follow environmentally sustainable principles.”

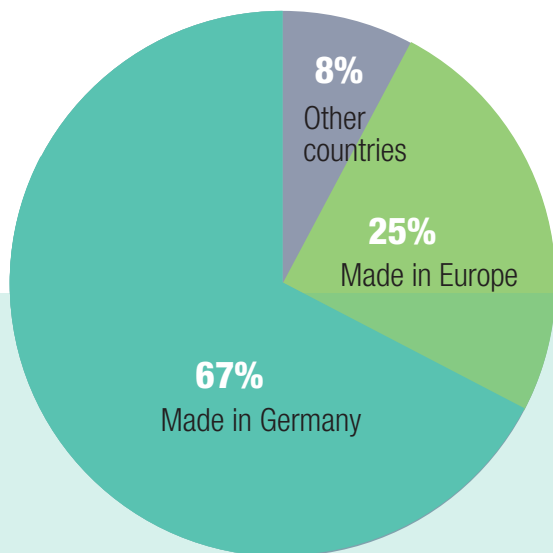
*“Only in a world which strives to optimise the circular economy will it be possible to achieve growth and prosperity for us and our children.”*

*Dieter Klauß, company owner*

## Products and Manufacture

Beginning with the product development, we strive for a high recyclability.

We provide safety data sheets for products which require an appropriate degree of handling care in terms of environmental and occupational safety.



*At Sikla, we focus on market-based production. Long transport routes as well as small transports over long distances are avoided.*

Sikla consequently pursues the principle of the “extended workbench”. When selecting our producers, our priority is on production methods which preserve the environment.

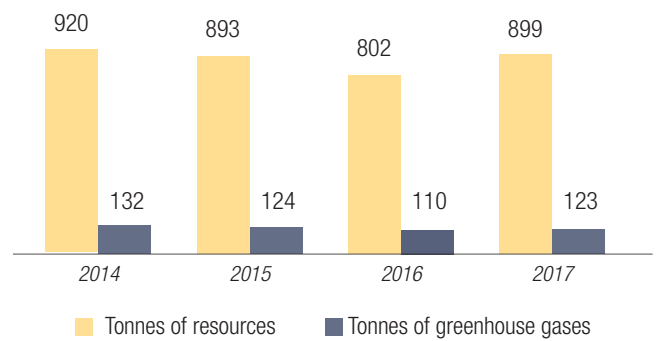
To us, it is especially important that our A suppliers are certified in accordance with the international environmental management standard ISO 14001. Our producers are obliged not to use materials which are detrimental to the environment or to health.

## Packaging

We only use cardboard boxes made from environmentally friendly and recyclable materials and have deliberately stopped using bleaching and printing methods which pollute the environment.

Only certified disposal service providers are responsible for the return and recycling of our packaging. (See the recycling certificate at [www.sikla.de](http://www.sikla.de)).

### Savings from an innovative recycling method



Savings of  
**878 tonnes of resources**  
**122 tonnes of greenhouse gases**  
 in the last 4 years.

## Reduction of Energy Consumption and Pollutant Emissions

An energy audit was conducted at the company headquarters in VS-Schwenningen in Southwest Germany and in other distribution locations beginning of 2016.

The results collected from this audit have been integrated into measures for improving energy efficiency.

Energy-generating and energy-saving technologies are used for the construction of new buildings, the extension of our existing plant or for the upgrading of our building facilities. For example, the new warehouse in Villingen-Schwenningen was fitted with a 99 KWp photovoltaic system.

Approx. **511 m<sup>3</sup>** water consumption

Approx. **6,530 m<sup>2</sup>** floor space

Approx. **1,397,136 kWh** total consumption

Energy consumption in 2018	in kWh
Electricity mix	285,956
Natural gas	999,080
Photovoltaic <small>(no in-house consumption)</small>	112,100

## Conserving Resources by Using siFramo

The siFramo support system has a better ecological footprint than conventional steel beams thanks to its much lower weight.

### Manufacture



All siFramo components are manufactured in Central Europe with a focus on resource conservation. Our main suppliers are certified according to the ISO 14001 standard.

#### 62% less CO<sub>2</sub> emissions thanks to weight reduction

During the production of one tonne of finished steel products, such as conventional steel beams, the equivalent of 1,46 tonnes of CO<sub>2</sub> are emitted.

#### Weight comparison in relation to CO<sub>2</sub> emissions

	HE-A 100 beam	siFramo 80
Weight kg/m	16,7 kg/m	6,4 kg/m
CO <sub>2</sub> emissions	24,38 CO <sub>2</sub> / kg	9,34 CO <sub>2</sub> / kg

The use of siFramo has reduced CO<sub>2</sub> emissions by an average of 13.762 tonnes over the past three years.

### Logistics chain



The siFramo 80 beam weighs 10.3 kg/m less than the HE-A 100 steel beam.

The rule of thumb is:

100 kg reduction in total weight saves approx. 5g CO<sub>2</sub>/km on average.

A full lorry load, saves approx. 19.8 kg of CO<sub>2</sub> per kilometre.

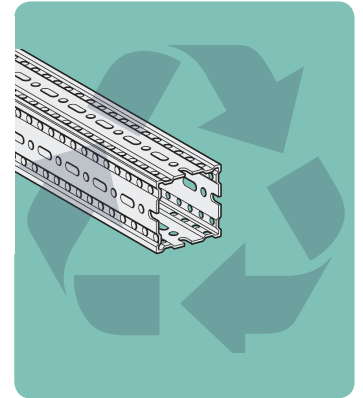


3 km **siFramo** beam sections



3 km HE-A 100 steel beams

### Recycling process



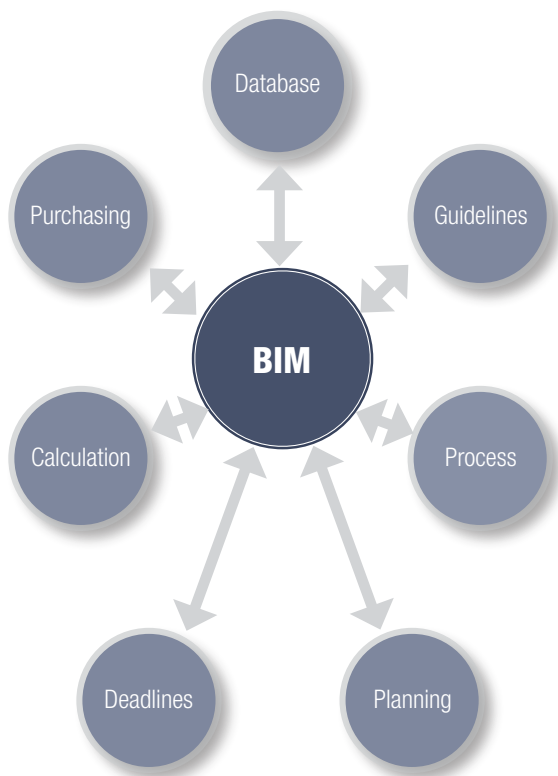
siFramo products can be recycled in a sustainable and environmentally friendly way.

The material thickness of a siFramo beam is 50 % less than that of conventional steel beams.

## Sustainable and Pioneering Building Design with BIM Software Applications

A building's quality and, above all, the value of a real estate depend increasingly on its sustainability.

With the advent of digitisation and BIM planning methods for construction, standardised working methods are also becoming relevant for building services. All those involved in the process can have access to information in business models and customise this with relevant or required content.



In the building's life cycle, there are various use cases with which inspections or assessments can be performed automatically based on a set of rules and with the availability of relevant information. This saves valuable resources and offers a better basis for decision-making. Vital, in this case, is an efficient coordination and the disciplined use of appropriate model guidelines. For collaborative planning on the digital model, influencing factors and decisions are documented in a traceable way. This transparency and systematic communication leads to better planning results and an increase in operability. This allows an overall improvement in quality.

The effect of economies of scale are often still underestimated in support planning. Based on efficient preliminary planning, industrial pre-assemblies are an excellent factor for guaranteeing the success of a project with an eye on deadlines and costs. Here Sikla looks back on over 20 years of experience.



With Sikla CAD applications **SiCAD4TRICADMS** and **SiCAD4Revit**, planners and processors can integrate our products into their CAD systems, in an intelligent and configurable way.