

**kg** Steel bar

Steel is a ferrous metal and is an alloy of iron and carbon, as well as potential other elements. It has a very high tensile strength. Steel has been used in the construction industry for over a century.

The core material for making steel is iron, which is found in iron ore. Iron is extracted from iron ore in blast furnaces through the smelting process, while controlling for the content of carbon. The molten steel is usually further processed before being cast for its final use.

Steel is commonly used in the construction industry, mainly as a structural material. Steel (flat) bars are used as frames and cut and welded into steel plates.

**Category** Metals

**Type** Steel

**Functional unit** kg

**Specific heat** 490 J/(kg·K)

**Density** 7 850 kg/m<sup>3</sup>

**Common uses**  
Framing, plates

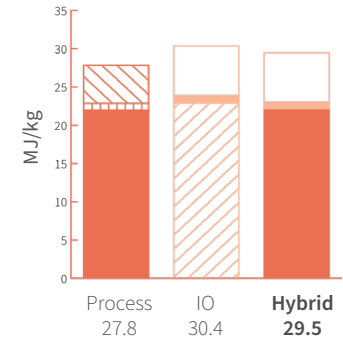
**Process name**  
Steel bar (custom)

**Input-output sector**  
Iron and Steel Manufacturing

**Further information**  
[doi.org/10.26188/5da55814c051c](https://doi.org/10.26188/5da55814c051c)

**TOP THREE INPUTS**

- 70.6%** Steel, converter, low-alloyed, at plant/RER U/ AusSD U
- 2.3%** Road Transport
- 0.5%** Non Ferrous Metal Ore Mining

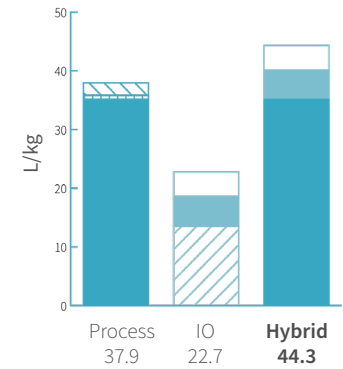


**ENERGY**



**TOP THREE INPUTS**

- 37.5%** Non Ferrous Metal Ore Mining
- 2.9%** Water Supply, Sewerage and Drainage Services
- 1.9%** Non Ferrous Metal Ore Mining

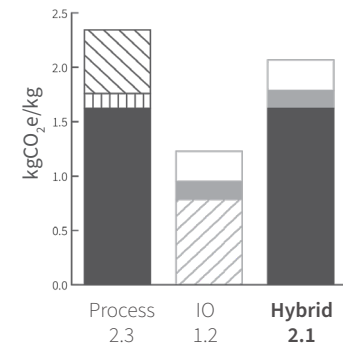


**WATER**



**TOP THREE INPUTS**

- 74.5%** Steel, converter, low-alloyed, at plant/RER U/ AusSD U
- 1.6%** Non Ferrous Metal Ore Mining
- 1.1%** Road Transport



**GREENHOUSE GAS EMISSIONS**

