kg Sand

Sand is comprised of small particles of quartz (silica), feldspar and calcium carbonate from various forms of life that have been eroded down over thousands of years. It is strong, durable, chemically inert and has excellent drainage characteristics.

It is commonly extracted through open pit mining and is available in many different grades and levels of purity. Due to the extended period of time required to create sand, it is considered a non-renewable resource.

Sand can be used as a substrate for footings, pathways, and concrete slabs. It is also used as an additive in concrete, mortar, asphalt, and various exterior finishes. It is one of the primary materials used in the production of silicon for various construction products.

Category *Sand, stone and ceramics*

Type *Other minerals*

Functional unit *kg*

Specific heat *830 J/(kg·K)*

Density *1 500 kg/m³*

Common uses
Landscaping, concrete slabs, material additive, external finishes

Process name
Sand, at mine/CH U/AusSD U

Input-output sector
Non Metallic Mineral Mining

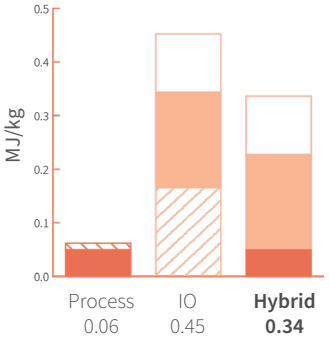
Further information
doi.org/10.26188/5da5574945e6e

EPiC Database

ENERGY

TOP THREE INPUTS

- 6.8% Exploration and Mining Support Services
- 4.5% Diesel, burned in building machine/GLO U/AusSD U
- 1.9% Coal mining

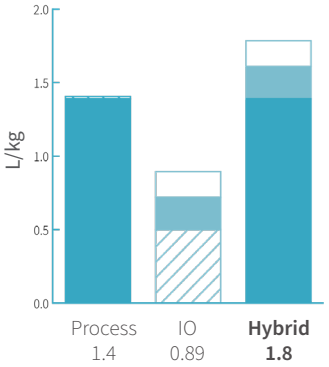


0.34 MJ/kg

WATER

TOP THREE INPUTS

- 1.5% Exploration and Mining Support Services
- 0.6% Agriculture, Forestry and Fishing Support Services
- 0.4% Electricity Transmission, Distribution, On Selling and Electricity Market Operation

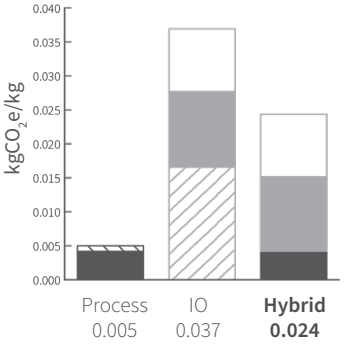


1.8 L/kg

GREENHOUSE GAS EMISSIONS

TOP THREE INPUTS

- 10.6% Exploration and Mining Support Services
- 4.7% Diesel, burned in building machine/GLO U/AusSD U
- 4.0% Coal mining



0.024 kgCO₂e/kg