

kg Flat glass

Flat glass, also known as soda-lime glass, is made from a combination of silica, soda, lime (from limestone), dolomite and aluminium oxide. Cullet, or waste glass, can also be added. The raw materials are melted at high temperature and the molten glass is then formed into flat glass using a variety of processes. A floating process, where the molten glass is floated on a bed of tin, is most common for manufacturing window glass. This gives it the common name of float glass.

The speed at which glass flows across the tin bath determines the glass thickness, which typically ranges from 2 to 25 mm. The glass is then gradually cooled (annealed) and cut to size. It can also be coated with a range of materials to provide particular characteristics (such as thermal, reflective, privacy).

Flat glass is commonly used in buildings to provide daylight and views. It is used for windows, glass doors and transparent walls.

Category	Glass
Type	Glass
Functional unit	kg
Specific heat	840 J/(kg·K)
Density	2 600 kg/m ³

Common uses
Windows, skylights, internal partitions, doors

Process name
Flat glass, uncoated, at plant/RER U/AusSD U

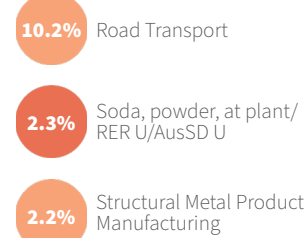
Input-output sector
Glass and Glass Product Manufacturing

Further information
doi.org/10.26188/5da554738e0e0

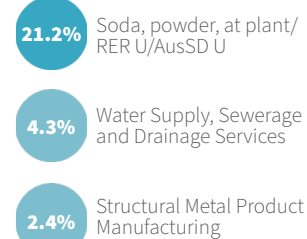
Material variations

	Unit	Energy (MJ/unit)	Water (L/unit)	GHG emissions (kgCO ₂ e/unit)
Flat glass	kg	28.5	32.2	2.0
Flat glass sheet - 3 mm	m ²	222	251	15.7
Flat glass sheet - 4 mm	m ²	296	335	21
Flat glass sheet - 5 mm	m ²	370	418	26.2
Flat glass sheet - 6 mm	m ²	444	502	31.4
Flat glass sheet - 10 mm	m ²	740	837	52.4
Flat glass sheet - 12 mm	m ²	888	1 004	62.9

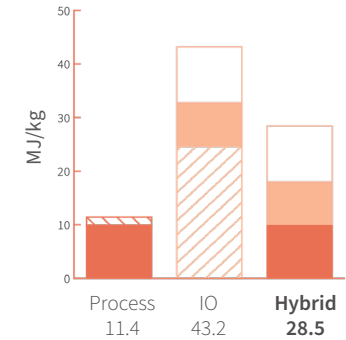
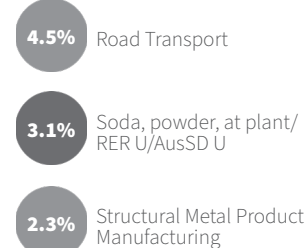
TOP THREE INPUTS



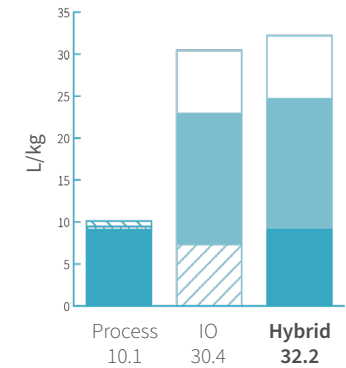
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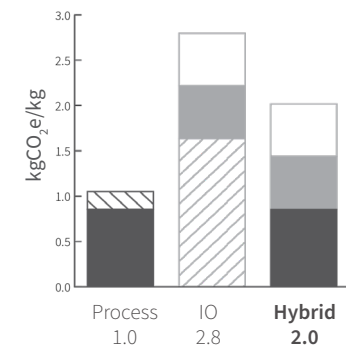
TOP THREE INPUTS



ENERGY



WATER



GREENHOUSE GAS EMISSIONS

