

Carbon footprint of Bolia Journal 2023

The carbon footprint of a Bolia Journal 2023 is equivalent to **0,91 Cheeseburgers (without packaging)**. This climate calculation is based on information from Bolia and climate data from Ecoinvent version 3.8. The calculations are based on the EU Commission's Annexes 1 to 2, of the Product Environmental Footprint Method, Dec 2021. The PEF required data quality level has not been calculated for this calculation.

Production

The printing company Stibo Complete prints a total of 341.200 copies of the Bolia Journal 2023 through offset printing with heat setting. The certification FSC Mix Credit we do not regard as sustainable forestry.

Table 1: Production details of a Bolia Journal 2023

Parameter	Value	Unit	Description
Paper	276	pages	+ 4 pages for the sleeve
Weight	0,7916	kg	Based on weight/page: 0.0028 kg

An LCA of the Stibo Complete production has not been performed. Instead calculations are based on average data of the offset printing process (Ecoinvent 3.8). This includes resources for the printing process such as, paper and paper waste, printing ink, printing plates, waste treatment, and an average life of the production machinery of 10 years, as well as average energy and fuel consumption. The emissions are corrected according to the Danish electricity mix (Sphera 2021) as no certified green energy has been claimed.

Transport

The 341.200 copies are transported via DSV trucks from Stibo Complete, Saturnvej 65, 8700 Horsens, DK to a warehouse at Profilvej 4, 6000 Kolding, DK, corresponding to a distance of 3.48 km. Afterwards, Munich, DE is chosen as a representative of Bolia's stores in Europe. The calculations of the storage of a Bolia Journal 2023 follow the EU Commission's PEF rules for standard emissions from storage.

Waste treatment

According to the EU PEF average values for waste treatment of paper waste in the EU, 62% are recycled, 17% incinerated and 21% sent to landfill.

Cheeseburger

The total carbon footprint of the production, transport and waste treatment of a Bolia Journal 2023 is comparable to the carbon footprint of a cheeseburger (without packaging). The value is based on an estimated recipe of a McDonald's Cheeseburger, see **Table 2**. The carbon footprint of the ingredients are calculated using [Den Store Klimadatabase](#) from Concito as well as an electricity consumption of 0.075 kWh for frying the beef steak for 6 min according to the Danish energy mix (Sphera 2021).

Table 2: Ingredients of a cheeseburger estimated from a McDonald's cheeseburger recipe

Burger bun	Beef steak*	Slice of cheese	Lettuce leaf	Cucumber	Ketchup
90g	50g	28g	8g	15g	1 tbsp

*15-20% fat