

Photo by Maxim Tolchinskiy on Unsplash

When factoring heat generation required for the manufacturing and transportation of products, *Greenhouse gas emissions attributable to products, from food to sneakers to appliances, make up more than 75% of global emissions.* The Carbon Catalogue 💆

Our data, which is publicly available on nature.com , contains product carbon footprints (PCFs) for various companies. PCFs are the greenhouse gas emissions attributable to a given product, measured in CO₂ (carbon dioxide equivalent).

This data is stored in a PostgreSQL database containing one table, product_emissions, which looks at PCFs by product as well as the stage of production that these emissions occurred. Here's a snapshot of what product_emissions contains in each column:

product_emissions

field	data type
id	VARCHAR
year	INT
product_name	VARCHAR
company	VARCHAR
country	VARCHAR
industry_group	VARCHAR
weight_kg	NUMERIC
carbon_footprint_pcf	NUMERIC
upstream_percent_total_pcf	VARCHAR
operations_percent_total_pcf	VARCHAR
downstream_percent_total_pcf	VARCHAR

You'll use this data to examine the carbon footprint of each industry in the dataset!

••• ↑↓	, id ↑ _↓	••• ↑↓	product_name \cdots \uparrow_{ψ}	company ··· ↑↓	••• ↑↓	industry_group ····
0	10056-1-2014	2014	Frosted Flakes(R) Cereal	Kellogg Company	USA	Food, Beverage & Tobacco
1	10056-1-2015	2015	Frosted Flakes, 23 oz, produced in Lancaster,	Kellogg Company	USA	Food & Beverage Processing
2	10222-1-2013	2013	Office Chair	KNOLL INC	USA	Capital Goods
3	10261-1-2017	2017	Multifunction Printers	Konica Minolta, Inc.	Japan	Technology Hardware & Equipment
4	10261-2-2017	2017	Multifunction Printers	Konica Minolta, Inc.	Japan	Technology Hardware & Equipment
4						•
Rows: 5	<u> </u>					

٠٠٠ ٠٠١	industry_group ···	↑↓	num_c ••• ↑↓	total_industry_footprint \cdots \uparrow_{\downarrow}	
0	Materials		3	107129	
1	Capital Goods		2	94942.7	
2	Technology Hardware & Equipment		4	21865.1	
3	Food, Beverage & Tobacco		1	3161.5	
4	Commercial & Professional Services		1	740.6	
5	Software & Services		1	690	
Rows: 6 <u>↓</u>					