

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
<code>id</code>	VARCHAR
<code>year</code>	INT
<code>product_name</code>	VARCHAR
<code>company</code>	VARCHAR
<code>country</code>	VARCHAR
<code>industry_group</code>	VARCHAR
<code>weight_kg</code>	NUMERIC
<code>carbon_footprint_pcf</code>	NUMERIC
<code>upstream_percent_total_pcf</code>	VARCHAR
<code>operations_percent_total_pcf</code>	VARCHAR
<code>downstream_percent_total_pcf</code>	VARCHAR

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

```
-- Find the most recent date
SELECT MAX(year)
FROM product_emissions;
```

Max: 2017

```
-- Complete the query
SELECT industry_group,
       COUNT(country) AS num_companies,
       ROUND(SUM(carbon_footprint_pcf),1) AS total_industry_footprint
FROM product_emissions
WHERE year = 2017
GROUP BY industry_group
ORDER BY total_industry_footprint DESC;
```

Industry_group	Num_companies	Total_industry_footprint
Materials	11	107129
Capital Goods	4	94942.7
Technology Hardware & Equipment	22	21865.1
Food, Beverage & Tobacco	22	3161.5
Commercial & Professional Services	2	740.6
Software & Services	1	690