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.*
(`Source: The Carbon Catalogue https://www.nature.com/articles/s41597-022-01178-9`)

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 CO_2 (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!

🐘 Projects Data   DataFrame as `carbon_emissions_by_industry`

```sql
-- Update your query here
SELECT
    industry_group,
    COUNT(DISTINCT company) AS num_companies,
    ROUND(SUM(carbon_footprint_pcf), 1) AS total_industry_footprint
FROM product_emissions
WHERE year = (SELECT MAX(year) FROM product_emissions)
GROUP BY industry_group
ORDER BY total_industry_footprint DESC;
```

	industry_group		num_com...		total_industry_footprin
0	Materials		3		
1	Capital Goods		2		
2	Technology Hardware & Equipment		4		
3	Food, Beverage & Tobacco		1		
4	Commercial & Professional Services		1		
5	Software & Services		1		

Rows: 6