

# VISUALIZATION CHALLENGE

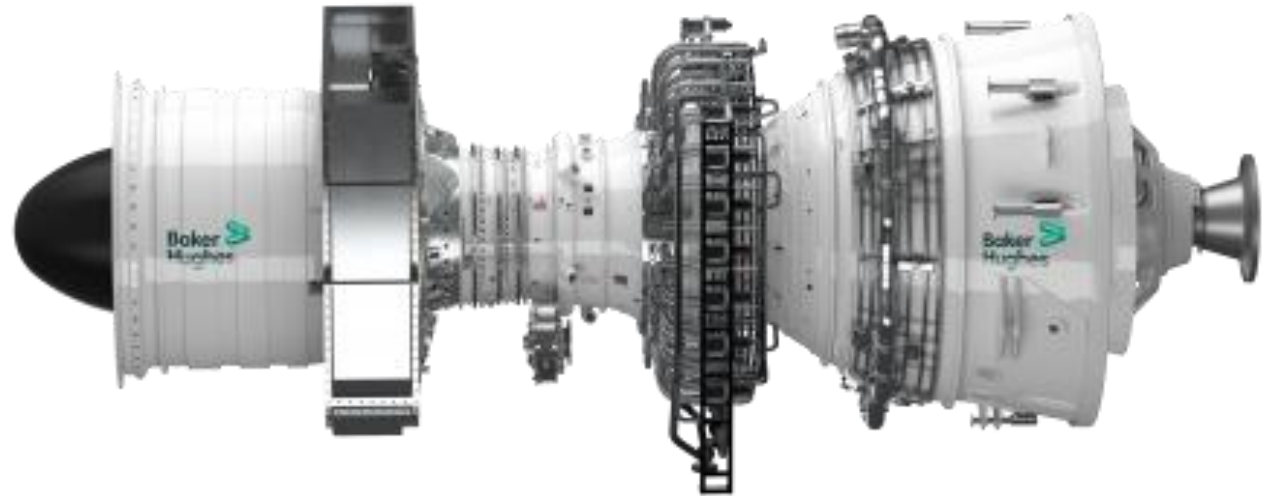
Team 4 - COde2Zero

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As an energy technology company, Baker Hughes' strategy is to help industry advance on the route to net zero and a sustainable energy future by identifying, controlling, and minimizing emissions from operations.

15 clients

45 plants

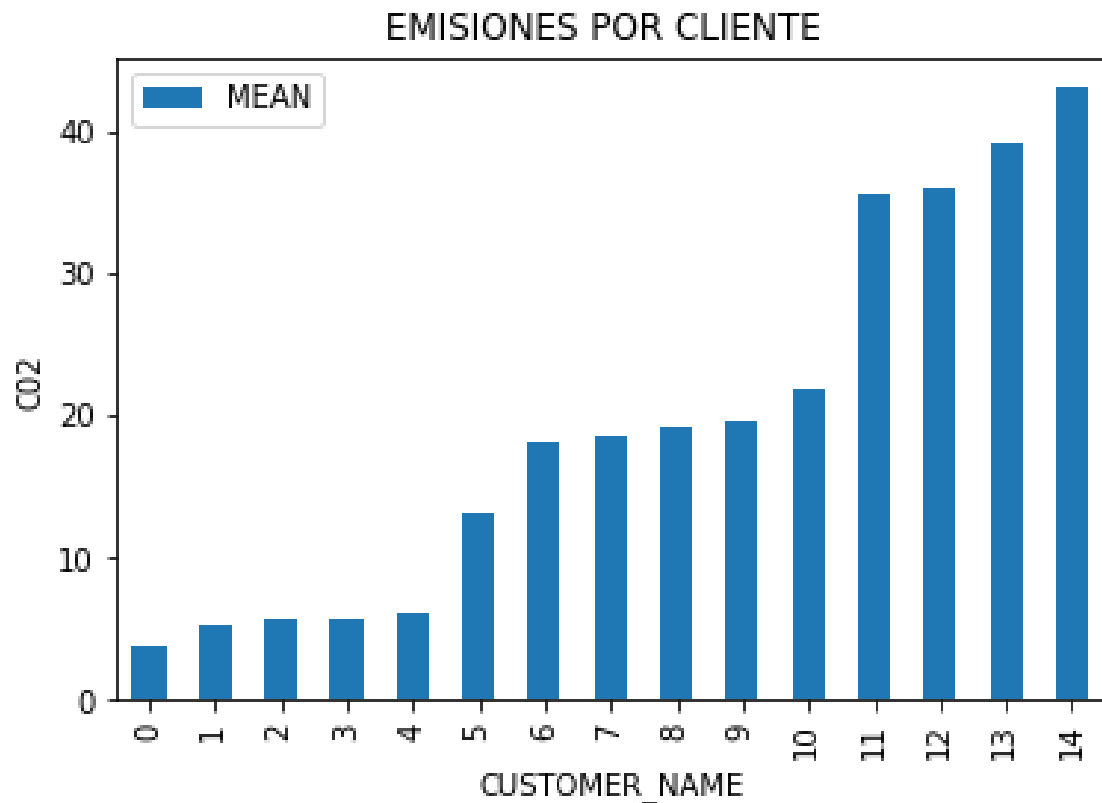
8 types of  
engines

# Location of plants around the world



# Solution – A visual report

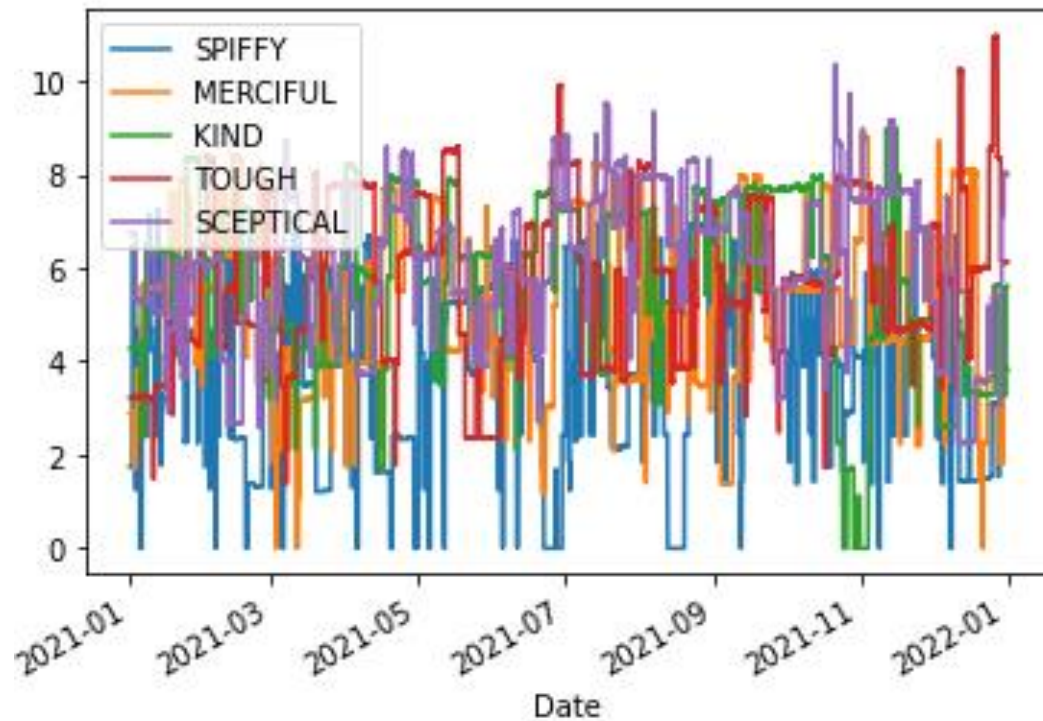
- Average of CO2 emissions per customer



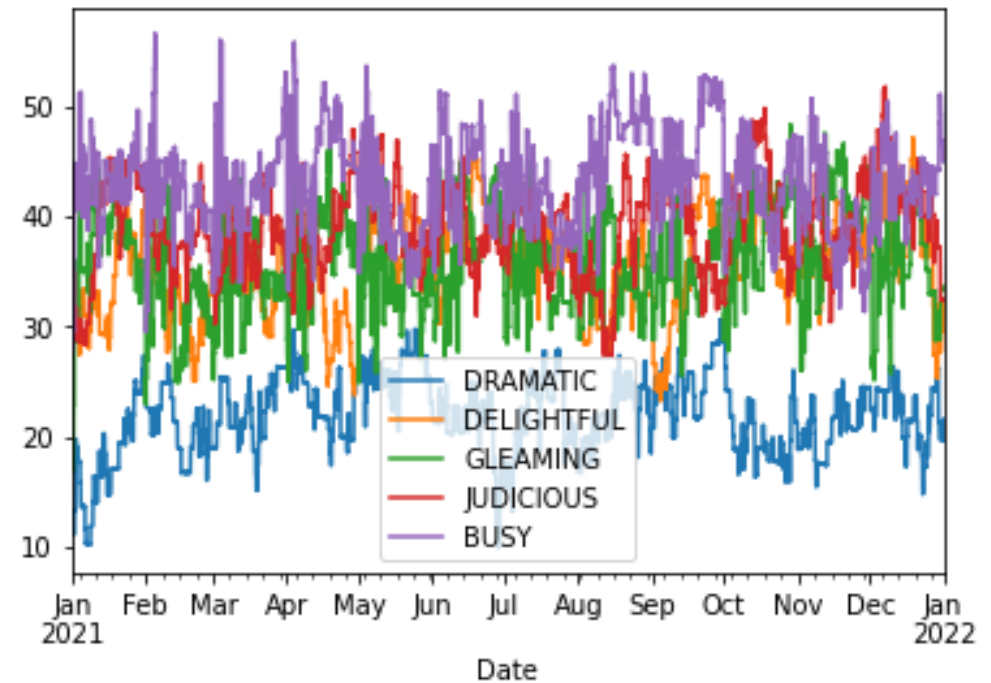
	CUSTOMER_NAME	MEAN
0	SPIFFY	3.761728
1	MERCIFUL	5.261316
2	KIND	5.717170
3	TOUGH	5.728964
4	SCEPTICAL	6.072971
5	TANGIBLE	13.119587
6	SOFT	18.055866
7	IDEALISTIC	18.613979
8	NONCHALANT	19.186721
9	FERVENT	19.482068
10	DRAMATIC	21.909288
11	DELIGHTFUL	35.666355
12	GLEAMING	35.950516
13	JUDICIOUS	39.004626
14	BUSY	43.031645

# Customers with higher and lower amount of emissions

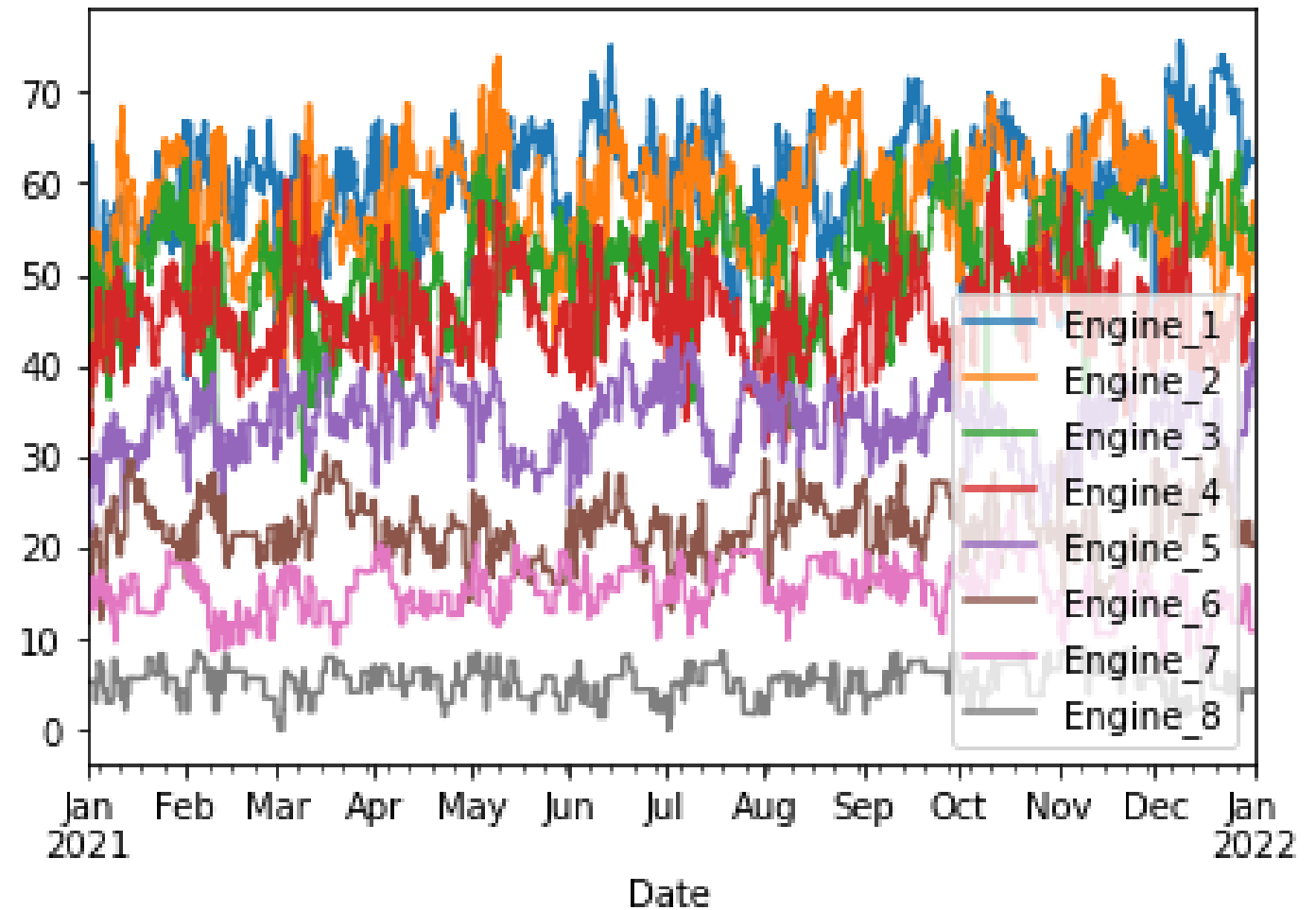
Minor 5 emitters



Largest 5 emitters



CO2 emissions  
(kg/s) per type  
of engine



# Average CO2 emissions (kg/s) per type of engine



category

- Engine\_1
- Engine\_2
- Engine\_3
- Engine\_4
- Engine\_5
- Engine\_6
- Engine\_7
- Engine\_8

category	value
Engine_1	1.354554
Engine_2	1.374815
Engine_3	1.422970
Engine_4	1.379984
Engine_5	1.407147
Engine_6	1.296316
Engine_7	1.272117
Engine_8	1.344876

# Thermal Efficiency (%)



Engine\_type

- Engine\_1
- Engine\_2
- Engine\_3
- Engine\_4
- Engine\_5
- Engine\_6
- Engine\_7
- Engine\_8

Engine_type	value
Engine_1	22.289093
Engine_2	22.346286
Engine_3	23.168484
Engine_4	22.743465
Engine_5	23.043314
Engine_6	21.137872
Engine_7	20.557539
Engine_8	21.638046



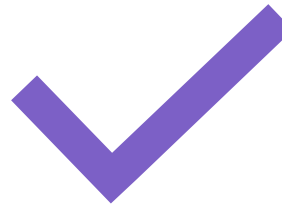
# Value proposition



Measure and track emissions for cleaner gas turbine operations



Plan net-zero targets



Calculate an opportunity score of current performance vs. benchmark in other clients' facilities



Provide insights to users for better decision making