Dataset Information: ema_demo.gold.electricity_consumption_w_address_w_address

Column	Type	Description
Date	date	The specific date of the recorded electricity consumption.
Month	date	The month of the recorded electricity consumption.
Postal	int	The postal code of the location where the electricity consumption is recorded.
latitude	double	The latitude coordinate of the location.
longitude	double	The longitude coordinate of the location.
road_name	string	The name of the road where the building is located.
address	string	The full address of the building, including block number and road name.
flat_type	string	The type of flat in Singapore, with possible values: "HDB 1-Room", "HDB 2-Room", "HDB 3-Room", "HDB 4-Room", "HDB 5-Room", "HDB Executive".
electricity_provider	string	The electricity provider, with possible values: "Geneco", "Keppel Electric", "Senoko Energy", "Tuas Power", "Pacific Light", "Sembcorp".
electricity_consumption_kwh	double	The amount of electricity consumed in kWh.

Example Queries:

- **Total Electricity Consumption by Month**

sql

```
SELECT Month, SUM(electricity_consumption_kwh) AS total_consumption
FROM ema_demo.gold.electricity_consumption_w_address
GROUP BY Month
ORDER BY Month;
```

```
Results:
Month    total_consumption
2023-01-01    4882569.849602748
2023-02-01    4423548.624750192
2023-03-01    4903195.510237945
2023-04-01    4821937.231822868
2023-05-01    4952034.567477026
2023-06-01    4821724.955434622
2023-07-01    5048016.144197442
2023-08-01    5017443.765601392
2023-09-01    4909562.856380235
2023-10-01    5098838.651847866
2023-11-01    4943107.73612222
2023-12-01    5164208.01645075
2024-01-01    5153966.1728599435
2024-02-01    4849475.800273279
2024-03-01    5253445.1866871165
2024-04-01    5055885.808699817
2024-05-01    5227108.967335851
2024-06-01    5159967.875866972
```

- **Average Electricity Consumption by Flat Type**

sql

```
SELECT flat_type, AVG(electricity_consumption_kwh) AS avg_consumption
FROM ema_demo.gold.electricity_consumption_w_address
GROUP BY flat_type
ORDER BY avg_consumption DESC;

Results:
flat_type       avg_consumption
HDB Executive   10.944055868495294
HDB 5-Room      9.126535543021305
HDB 4-Room      7.30280310269348
HDB 3-Room      5.485423790960181
HDB 2-Room      3.648366241647153
HDB 1-Room      2.433448927578168
```

- **Total Consumption by Provider in a Specific Month**

sql

```
SELECT electricity_provider, SUM(electricity_consumption_kwh) AS
total_consumption
FROM ema_demo.gold.electricity_consumption_w_address
WHERE Month = $MONTH
GROUP BY electricity_provider
ORDER BY total_consumption DESC;
```

- **Daily Consumption for a Specific Postal Code**

sql

```
SELECT Date, electricity_consumption_kwh
FROM ema_demo.gold.electricity_consumption_w_address
WHERE Postal = $POSTAL_CODE
ORDER BY Date;
```

- **Top 10 Days with Highest Consumption**

sql

```
SELECT Date, electricity_consumption_kwh
FROM ema_demo.gold.electricity_consumption_w_address
ORDER BY electricity_consumption_kwh DESC
LIMIT 10;

Results:
Date    electricity_consumption_kwh
2023-04-02      67.1430580095655
2023-07-02      62.727837802361954
2024-02-04      62.24308561050351
2024-05-20      62.18987284888464
2024-02-04      61.825847750237095
```

```
2024-06-22      60.10014282985676
2023-02-05      59.8643386694531
2024-05-25      59.128567006176986
2023-06-04      59.10295621900657
2024-03-12      58.31964363622657
```

- **Total Consumption by Road Name**

sql

```sql
SELECT road_name, SUM(electricity_consumption_kwh) AS total_consumption
FROM ema_demo.gold.electricity_consumption_w_address
GROUP BY road_name
ORDER BY total_consumption DESC;
```

- **Average Consumption by Postal Code**

sql

```sql
SELECT Postal, AVG(electricity_consumption_kwh) AS avg_consumption
FROM ema_demo.gold.electricity_consumption_w_address
GROUP BY Postal
ORDER BY avg_consumption DESC;
```

- **Monthly Consumption Trend for a Specific Flat Type**

sql

```sql
SELECT Month, SUM(electricity_consumption_kwh) AS total_consumption
FROM ema_demo.gold.electricity_consumption_w_address
WHERE flat_type = 'HDB 4-Room'
GROUP BY Month
ORDER BY Month;
```

- **Electricity Consumption by Latitude and Longitude**

sql

```sql
SELECT latitude, longitude, SUM(electricity_consumption_kwh) AS
total_consumption
FROM ema_demo.gold.electricity_consumption_w_address
GROUP BY latitude, longitude
ORDER BY total_consumption DESC;
```

- **Electricity Consumption on a Specific Date by Provider**

sql

```sql
SELECT electricity_provider, SUM(electricity_consumption_kwh) AS
total_consumption
FROM ema_demo.gold.electricity_consumption_w_address
WHERE Date = '2023-06-01'
```

```
GROUP BY electricity_provider
ORDER BY total_consumption DESC;
```