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CSC315

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<u>Installations</u>

Show the number of solar panel installations up to 2015 for this municipality:

SELECT COUNT(*) AS num_installations

FROM installation

WHERE Year_Installed <= '2015-12-31'

  AND Municipality = 'municipality_name';

Show the number of solar panel installations up to 2020 for this municipality:

SELECT COUNT(*) AS num_installations

FROM installation

WHERE Year_Installed <= '2020-12-31'

  AND Municipality = 'municipality_name';

Show the number of residential solar panel installations for this municipality up to 2015:

SELECT COUNT(*) AS num_residential_installations

FROM installation

WHERE Year_Installed <= '2015-12-31'

  AND Customer_Type = 'Residential'

  AND Municipality = 'municipality_name';

Show the number of residential solar panel installations for this municipality up to 2020:

SELECT COUNT(*) AS num_residential_installations

FROM installation

WHERE Year_Installed <= '2020-12-31'

  AND Customer_Type = 'Residential'

  AND Municipality = 'municipality_name';

Show the number of commercial solar panel installations for this municipality up to 2015:

```sql
SELECT COUNT(*) AS num_residential_installations
FROM installation
WHERE Year_Installed <= '2015-12-31'
  AND Customer_Type = 'Commercial'
  AND Municipality = 'municipality_name';
```

Show the number of commercial solar panel installations for this municipality up to 2020:

```sql
SELECT COUNT(*) AS num_residential_installations
FROM installation
WHERE Year_Installed <= '2020-12-31'
  AND Customer_Type = 'Commercial'
  AND Municipality = 'municipality_name';
```

Show the number of other solar panel installations for this municipality up to 2015:

```sql
SELECT COUNT(*) AS num_other_installations
FROM installation
WHERE Year_Installed <= '2015-12-31'
  AND Municipality = 'municipality_name'
  AND Program != 'Residential'
  AND Program != 'Commercial';
```

Show the number of other solar panel installations for this municipality up to 2020:

```sql
SELECT COUNT(*) AS num_other_installations
FROM installation
WHERE Year_Installed <= '2020-12-31'
  AND Municipality = 'municipality_name'
  AND Program != 'Residential'
  AND Program != 'Commercial';
```

Relation to municipality population

Create table that shows the percentage of solar panel installations in regards to population up to 2015 for this municipality:

CREATE TABLE insallations_population_2015 AS

    SELECT *, COUNT(Solar_Installations.Municipality) AS Total_installations

    FROM Municipality

    WHERE Year = '2015'

    AND Municipality = 'municipality_name'

    JOIN Solar_Installations

    ON Municipality.Municipality = Solar_Installations.Municipality

    AND Solar_Installations.PTO_Date <= '2015-12-31'

Create table that show the percentage of solar panel installations in regards to population up to 2020 for this municipality

CREATE TABLE insallations_population_2020 AS

    SELECT *, COUNT(Solar_Installations.Municipality) AS Total_installations

    FROM Municipality

    WHERE Year = '2020'

    AND Municipality = 'municipality_name'

    JOIN Solar_Installations

    ON Municipality.Municipality = Solar_Installations.Municipality

    AND Solar_Installations.PTO_Date <= '2020-12-31'

Create table that show the percentage of total MTCO2e in regards to population in 2015 for this municipality

CREATE TABLE MTCO2e_population_2015

    SELECT *, CO2_Emissions.Total_MTCO2e

    FROM Municipality

    WHERE Year = '2015'

    AND Municipality = 'municipality_name'

    JOIN CO2_Emissions

ON Municipality.Municipality = CO2_Emissions.Municipality

AND CO2_Emissions.Year = '2015'

Create table that show the percentage of total MTCO2e in regards to population in 2015 for this municipality

CREATE TABLE MTCO2e_population_2020

    SELECT *, CO2_Emissions.Total_MTCO2e

    FROM Municipality

    WHERE Year = '2020'

    AND Municipality = 'municipality_name'

    JOIN CO2_Emissions

    ON Municipality.Municipality = CO2_Emissions.Municipality

    AND CO2_Emissions.Year = '2020'

<u>Total MTCO2e</u>

Show the total MTCO2e in 2020 for this municipality

SELECT TOTAL_MTCO2e AS Total_CO2_2020

FROM C02_Emissions

WHERE Year_collected = '2020'

AND Municipality = 'municipality_name'

Show the total MTCO2e in 2015 for this municipality

SELECT TOTAL_MTCO2e AS Total_CO2_2015

FROM C02_Emissions

WHERE Year_collected = '2015'

AND Municipality = 'municipality_name'