```
SELECT
  SUM(net_generation-demand) AS total_enrg,
  region
FROM
  intel.energy_data
GROUP BY
  region
ORDER BY
  total_enrg DESC;

SELECT
  SUM(solar+wind+hydropower_and_pumped_storage) AS to_re_enrg,
  region
FROM
  intel.energy_data
GROUP BY
  region
ORDER BY
  to_re_enrg DESC;

SELECT
  (SUM(solar+wind+hydropower_and_pumped_storage)/SUM(net_generation))*100 AS
per_re_enrg,
  region
FROM
  intel.energy_data
GROUP BY
  region
ORDER BY
  per_re_enrg DESC;

SELECT
  date,
  region,
  SUM(solar+wind+hydropower_and_pumped_storage) AS energy_generated_mw
FROM
  intel.energy_data
GROUP BY
  date,
  Region;

SELECT
  date,
  region,
```

```
  SUM(solar+wind+hydropower_and_pumped_storage) AS energy_generated_mw,
  'renewable energy' AS energy_type
FROM
  intel.energy_data
GROUP BY
  date,
  region;

SELECT
  date,
  region,
  SUM(all_petroleum_products + coal + natural_gas + nuclear + other_fuel_sources) AS
energy_generated_mw
FROM
  intel.energy_data
GROUP BY
  date,
  region;

SELECT
  date,
  region,
  SUM(all_petroleum_products + coal + natural_gas + nuclear + other_fuel_sources) AS
energy_generated_mw,
  'nonrenewable energy' AS energy_type
FROM
  intel.energy_data
GROUP BY
  date,
  region;

SELECT
  date,
  region,
  SUM(all_petroleum_products + coal + natural_gas + nuclear + other_fuel_sources) AS
energy_generated_mw,
  'nonrenewable energy' AS energy_type
FROM
  intel.energy_data
GROUP BY
  date,
  region
UNION
```

```
SELECT
  date,
  region,
  SUM(solar+wind+hydropower_and_pumped_storage) AS energy_generated_mw,
  'renewable energy' AS energy_type
FROM
  intel.energy_data
GROUP BY
  date,
  Region;

SELECT
  *
FROM
  intel.power_plants as p
INNER JOIN
  intel.energy_by_plant as e
ON
  p.plant_code=e.plant_code;

SELECT
  COUNT(e.energy_type),
  p.region
FROM
  intel.power_plants as p
  INNER JOIN intel.energy_by_plant as e ON p.plant_code = e.plant_code
GROUP BY
  p.region,
  e.energy_type
HAVING
  energy_type = 'renewable_energy';


SELECT
  COUNT(e.plant_code),
  SUM(e.energy_generated_mw),
  p.region
FROM
  intel.power_plants as p
  INNER JOIN intel.energy_by_plant as e ON p.plant_code = e.plant_code
WHERE
  p.primary_technology = 'Solar Photovoltaic'
GROUP BY
  p.region,
```

```
  e.energy_generated_mw,
  e.plant_code
;


SELECT
  COUNT(e.plant_code),
  p.region
FROM
  intel.power_plants as p
  INNER JOIN intel.energy_by_plant as e ON p.plant_code = e.plant_code
WHERE
  p.primary_technology = 'Solar Photovoltaic'
GROUP BY
  p.region
;

SELECT
  SUM(hydropower_and_pumped_storage+solar+wind) AS net_renew,
  region,
  date_part('hour', time_at_end_of_hour) AS hour
FROM
  intel.energy_data
GROUP BY
  region,
  hour;


SELECT
  SUM(hydropower_and_pumped_storage+solar+wind) AS net_renew,
  region,
  date_part('hour', time_at_end_of_hour) AS hour
FROM
  intel.energy_data
WHERE
  region = 'California'
  OR
  region = 'Northwest'
GROUP BY
  region,
  hour;
```