

Methodology for National Pollutant Inventory analysis

To populate data for key pollutants:

1. <http://www.npi.gov.au/npidata/action/load/browse-search>
2. **Option 1:** 2019/2020 > NPI Data > Industry > Electricity, Gas, Water and Waste Services > Electricity supply [26] > Electricity Generation [261] View Data > “Sources” TAB >
 - a. Find power station in list. Viewing more results per page makes it easier to find the power station you’re looking for. Power stations are listed in alphabetical order of the generation company.
3. **Option 2:** 2019/2020 > NPI Data > Search by location > state > region > sources > find power station
4. Once have clicked on relevant power station > “Emissions” Tab > view data for each pollutant. **This data is rounded, not exact.**
5. Scroll down to bottom of page. Select ‘Export to CSV’ (bottom left) then open the csv file in Excel to view emissions data. **This data is exact.**
6. Input “air total” data into EJA spreadsheet for all pollutants

To populate greenhouse gas emission data for electricity generation:

1. <http://www.cleanenergyregulator.gov.au/NGER/National%20greenhouse%20and%20energy%20reporting%20data/electricity-sector-emissions-and-generation-data/electricity-sector-emissions-and-generation-data-2019-20> - download excel of data
2. Input data into EJA spreadsheet
3. Use these figures to determine:
 - a. How much electricity generation has changed over years.
 - b. To compare changes in pollutant emissions with changes in electricity generation.
 - c. To determine power station emissions of CO₂
 - d. To determine pollution per unit of energy produced (Tab 3 EJA spreadsheet)
 - i. Note energy in megawatt-hours is equal to the gigajoules multiplied by 0.277778.

To determine the proportion of coal-fired power station emissions to total emissions of major pollutants in Australia:

1. <http://www.npi.gov.au/npidata/action/load/browse-search>
2. NPI Data > Search NPI data > browse search year > substance > [select pollutant - SO₂, NO_x etc]
3. The “Summary” tab gives you total emissions in kg **from industrial sources only**. To find total emissions **from all sources**, click on “Emissions” tab.
4. Scroll down to bottom of page. Select ‘Export to CSV’ (bottom left) then open the csv file in Excel to view emissions data.
5. Use excel sum formula to add up all the sources to find the total emissions of this pollutant to air (e.g. NO_x) from all sources. Divide the total for Electricity Generation by the total for all sources. Multiply this result by 100 to get the percentage of Electricity Generation as a source of total emissions of the pollutant.

- a. To display figures without scientific formatting: Right Click > format cells > numbers > custom > select "general".