

ESA 21: Environmental Science Activities

Ozone
Capstone Activity Sheet

Name:

Professor:

Attach your runs of the Online Nitrogen Oxide Calculator to this sheet.

Nitrogen Oxides from Electricity:

(a.) Enter the results from the calculator in the table below. List your average monthly electric bill, the annual NO_x emissions (from the left side of the page beneath the "Nitrogen Oxide" heading), and the driving equivalent of these emissions.

Monthly Electric Bill (\$)	Annual NO_x (lbs.)	Driving Equivalent (mi.)

(b.) Seattle, Washington, is about 2,600 miles from Atlanta by car. How many one-way trips from Atlanta to Seattle is your driving equivalent due to electricity?

Number of trips from Atlanta to Seattle:

Are you surprised by the driving equivalent of your electricity pollution? Explain why or why not.

Online Nitrogen Oxide Calculator:

(a.) List your total annual emissions and the driving equivalent in the table below.

Total Annual NO_x emissions (lbs.)	Driving Equivalent (mi.)

How do your NO_x emissions compare to those of the average American? If your emissions are appreciably higher or lower than the average, explain why *you* think yours is higher/lower.

(b.) Make one reasonable change in your lifestyle that affects one of your two largest categories of NO_x emissions (likely driving and electricity), and run the calculator again. If the change involves driving or electricity, you should revisit the appropriate web site and run the calculator again with your change. Describe the change below, and how it affected your total emissions.