

Federal Supplier Greenhouse Gas Emissions Inventory Pilot Training
Part 2: Calculating Your Company's GHG Inventory
Using EPA's Simplified GHG Emissions Calculator
Case Study: Company XYZ

Profile of Company XYZ:

XYZ is a small Ohio-based manufacturing company that sells widgets to the Federal government. The company owns two manufacturing plants and leases three offices close to Columbus, OH.

For two of the offices, XYZ leases the top floors and is able to sub meter its electricity usage. However, for the third office, XYZ occupies only one floor in a large building. For this third office, the utility bills are included in the rent and XYZ is unable to receive a breakdown in electricity usage from the landlord.

XYZ purchases natural gas for its boilers at each manufacturing facility.

Plant 1 and Plant 2 have the refrigerant R-22 in their air conditioning and the offices use HFC 134a for air conditioning.

XYZ owns 7 different kinds of vehicles for its operations: a van, 2 trucks, a small forklift, 2 pickup trucks, and a large forklift. The vehicles use the refrigerant HFC 134a for the air conditioning.

In 2010, both the President and Vice-President of XYZ flew to conferences and meetings in Illinois, California and Virginia. The conferences and meetings represent the only business travel for XYZ this year.

Control Approach?

We will choose operational control for this company because it is able to control how it operates most of the buildings, equipment and vehicles that are responsible for emitting GHG emissions.

Note: under the operational control approach, we will NOT include the third office where XYZ is not able to control its electricity usage.

Sources to Include in the GHG Inventory:

What are we including to create a corporate-wide (company-wide) inventory?

- a. The natural gas used for the boilers in both manufacturing facilities.
- b. All vehicles
- c. The electricity, in kilowatt hours (kWh), from the two manufacturing plants and the two offices where XYZ does have control over the electricity usage.
- d. Air conditioning from the offices and the vehicles. We will not include the refrigerant R-22 (because it is being phased out under the Montreal Protocol).

Optional Source:

Though not required for completing a company-wide GHG inventory, XYZ opted to include the GHG emissions associated with its business travel.