



# NET ZERO

## Climate Change Action Plan – Carbon Neutrality Net Zero Analysis YouTube Channel

### Case Study 3

#### **“How do we develop a Carbon Neutrality Plan when Utilities are included in the Rent, and We Have Remote Employees?”**

Business spaces are leased under a wide variety of terms and when utilities are included in the rent, it can be difficult for an organization to estimate that part of its carbon footprint. This is a common concern for a number of companies. We have developed a spreadsheet to use with the Carbon Intensity Calculator. The Spreadsheet uses data from the following: US Environmental Protection Agency, US Energy Information Administration, US Department of Energy, and Commercial Building Energy Consumption Survey.

To apply this method of carbon footprint estimation:

Determine the floor area of your office space. This should be in your lease, or you can take your own measurements. Office space for in-office or remote employees is 150 – 200 sq. ft., or 14 – 19 sq. m. per employee in North America, Europe and Asia. This is the bases used in the calculations to follow. (A side note for new construction in Asia: There is a move to reduce the office space per employee in new construction to 100 sq. ft. or 9 sq. m. and under. Here is the link to the article:

***Open Office plans and remote employees can be calculated with this formula:***

Annual Electrical Energy use per employee is 3,150 kWh /employee/location so the calculation would be  $([\text{Total Number of Employees}] + [\text{Contract Employees in the Company}] \times 3,150 \text{ kWh} = \text{Company Total Annual Energy Use})$  which is your International Standards Organization 14001 – 2015 Estimated Electrical Carbon Intensity or Annual Electrical Carbon Footprint.

Annual Water Use per employee is 8,517 Liters (2,250 Gal) per employee per location. So, the calculation would be:  $([\text{Total Number of Employees}] + [\text{Contract Employees in the Company}] \times 8,517 \text{ Liters (2,250 Gal)} = \text{Company Total Annual Water Use})$ , which is your International Standards Organization 14001 – 2015 Estimated Water Carbon Intensity or Annual Water Carbon Footprint.

Annual Natural Gas Use per employee is 50 Therms per employee per location. So, the calculation would be  $([\text{Total Number of Employees}] + [\text{Contract Employees in the Company}] \times 50 \text{ Therms} = \text{Company Total Annual Natural Gas Use})$ , which is your International Standards Organization 14001 – 2015 Estimated Natural Gas Carbon Intensity or Annual Natural Gas Carbon Footprint.

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In the Carbon Intensity Estimator you will include the Annual Square Footage, Electric, Water, and Natural Gas Use Totals in the International Carbon Intensity Estimator for your International Standards Organization 14001 – 2015 Estimated Annual Carbon Intensity or Annual Carbon

Footprint. Also please note that if you are traveling or using vehicles you will need to include your fuel totals, using shipping services there are a number that offer carbon neutral shipping.