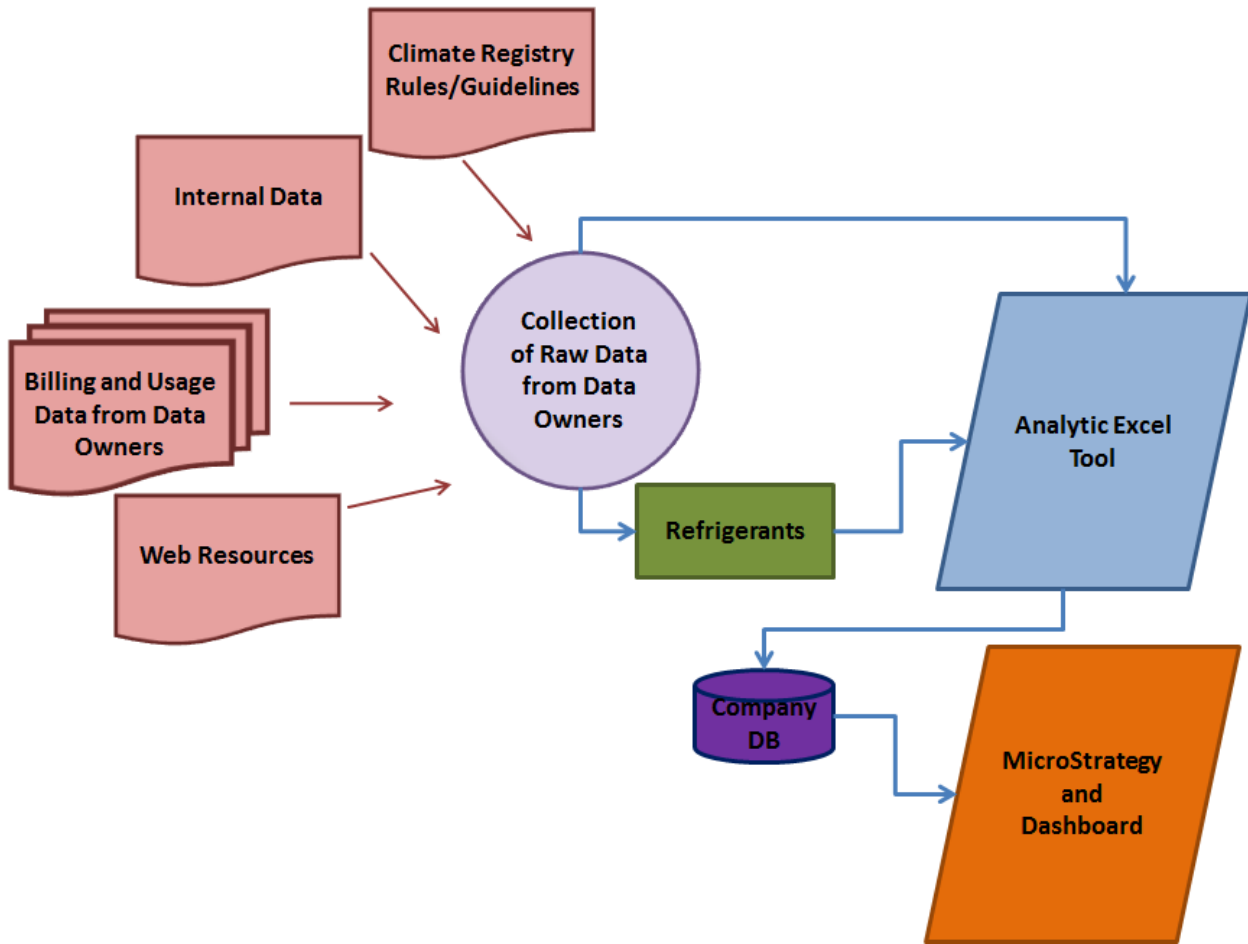


PROCESS FLOW – CHART



## FORMULA REVIEW

There are a number of complex formulas used in the excel tools. Below are some examples with a detailed breakdown of what each segment does

This formula is in cell K9 of the Combined Emissions All tab

```
=IF(K$5="Y", (SUMIF(EI_S,$A9,EI_Q71)+SUMIF(NG_S,$A9,NG_Q71)+((SUMIF(RF_S,$A9,RF_Q71))+SUMIF(F_S,$A9,F_Q71)+((SUMIF(RF_D,$A9,RF_DCQ71))))), "")
```

- This checks cell K5 for a Y.

```
=IF(K$5="Y", (SUMIF(EI_S,$A9,EI_Q71)+SUMIF(NG_S,$A9,NG_Q71)+((SUMIF(RF_S,$A9,RF_Q71))+SUMIF(F_S,$A9,F_Q71)+((SUMIF(RF_D,$A9,RF_DCQ71))))), "")
```

- If that is true (there is a Y in cell K5), this segment will execute. It is a series of additions of conditional sums.
- SUMIF(EI\_S,\$A9,EI\_Q71) – a breakdown of one of the SUMIFs
  - SUMIF is a formula that sums a range if a condition is met. In these cases it is really pulling one number, but it makes for a shorter formula than a series of VLOOKUPs with overrides for null values. A SUMIF will return 0 if not found so the formula will work.
  - EI\_S – this is a named range. In this case it refers to a store list. This is the range that is checked for the condition. So it is saying, look in this range of cells.
  - \$A9 – this is the condition to be met. So look in range EI\_S where the value equals the value in cell \$A9
  - EI\_Q71 – this is a named range. In this case the GHG emissions for electric Q1 of 2007. This is what will be summed.
  - So, look in range EI\_S for the value matching \$A9, when it matches, sum the values in range EI\_Q71.

```
=IF(K$5="Y", (SUMIF(EI_S,$A9,EI_Q71)+SUMIF(NG_S,$A9,NG_Q71)+((SUMIF(RF_S,$A9,RF_Q71))+SUMIF(F_S,$A9,F_Q71)+((SUMIF(RF_D,$A9,RF_DCQ71))))), "")
```

- If that is false (there is no Y in cell K5), this segment will execute. IN this case, a blank is placed in the cell.

This formula is in cell K9 of the Combined Emission Open tab

```
=IF(ISERROR(VLOOKUP(A9,egrid_assign,6,FALSE)),10,VLOOKUP(A9,egrid_assign,6,FALSE))
```

- This function checks the resulting value of the formula for a #NA value

```
=IF(ISERROR(VLOOKUP(A9,egrid_assign,6,FALSE)),10,VLOOKUP(A9,egrid_assign,6,FALSE))
```

- This is the formula that is being checked for a #NA value

```
=IF(ISERROR(VLOOKUP(A9,egrid_assign,6,FALSE)),10,VLOOKUP(A9,egrid_assign,6,FALSE))
```

- If that is true (A #NA value is returned, meaning the lookup could not find a mach), then this is what is placed in the cell – 10. (the reason for this is that EGrid 10 is the one that has the factors closest to average)

```
=IF(ISERROR(VLOOKUP(A9,egrid_assign,6,FALSE)),10,VLOOKUP(A9,egrid_assign,6,FALSE))
```

- If that is false (A real value is returned, meaning there is a match), then execute the lookup.
- VLOOKUP(A9,egrid\_assign,6,FALSE)
  - A VLOOKUP searches a range for a matching value and returns the data in a specific column.
  - A9 – this is the cell that has the value being looked for.
  - egrid\_assign – this is a named range. A vlookup always looks the the leftmost column of the defined range for the match. So the formula searches the left column of the range for a matching value to cell A9.
  - 6 – this is the column of the range containing the data you want in the new cell.
  - FALSE – this means you are looking for an exact match only. A TRUE here would find the closest match.

TAB REFERENCE

Tab	Source	Used In
Overview	Notes only	na
Sites	data owner, Store List	All tabs with site level information except raw data tabs
Store Location	data owner	Sites
Combined Emissions - All	Sites, electric, natural gas, fuels, refrigerants	Key Results by Quarter
Combined Emissions - Open	Sites, electric, natural gas, fuels, refrigerants	Key Results
Electric	Data Convert Template, AIQ data	Combined Emissions (both) Key Results
Natural Gas	Data Convert Template, AIQ data	Combined Emissions (both) Key Results
Water	Water Calculation, AIQ data	Key Results, Key Results by Quarter
Refrigerants - Store	Separate Refrigerants excel workbook	Combined Emissions (both) Key Results
Refrigerants - DC	Separate Refrigerants excel workbook	Combined Emissions (both) Key Results
Waste Corrugated - Store	Raw data	Key Results, Key Results by Quarter
Waste Recycle DC HQ	Raw data	Key Results, Key Results by Quarter
Waste Solid	Raw data	Key Results, Key Results by Quarter
Metrics	Climate Registry and estimates from water	Water, Fuels, Electric
Climate Zone	See Overview tab for source	Sites (not currently being used)
Egrid	See Overview tab for source	Egrid Assignments
Egrid Assignments	Egrid, Sites	Electric
Key Results by Quarter	Combined Emissions All, Sites, Water, Waste(3 tabs)	Key Data Points, Graphs
Key Data Points	Key Results by Quarter, Key Results, Web info	na
Key Results	All usage tabs, Sites	Key Data Points, Key Results by State
Key Results by State	Key Results	graphs
Store Ranks by State	Sites, raw data	graphs
Graph tabs	noted on each tab	na