



# ESPA: Energy Supply Project Analysis



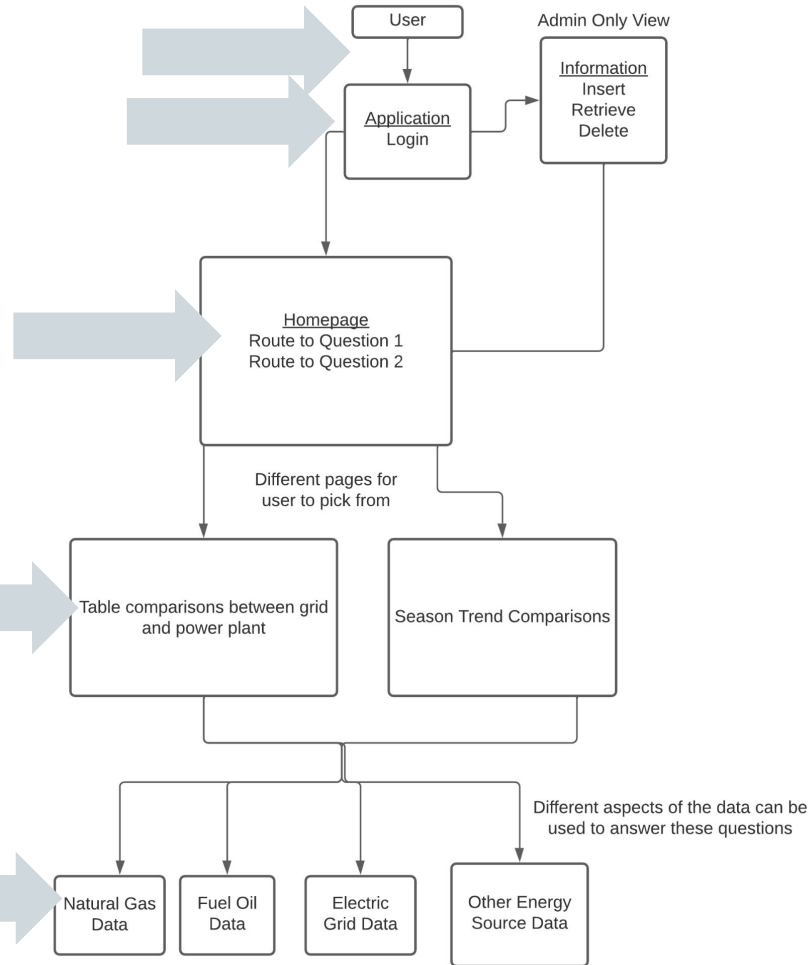
Sterly Deracy, Peter Kelly, Amy Vargas, Joseph  
Oczkowski, Matthew Seitz, Grant Bushoven,  
Daniel Melamed

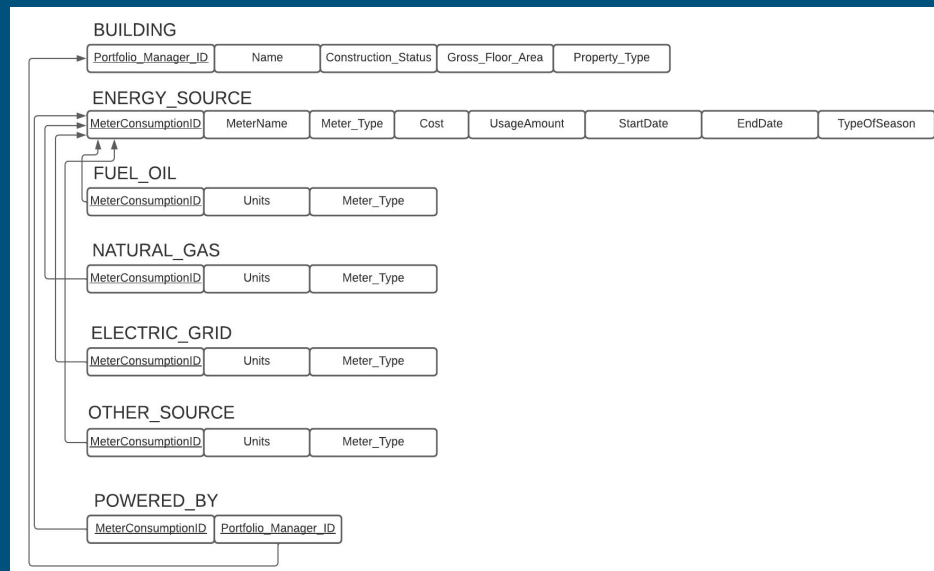
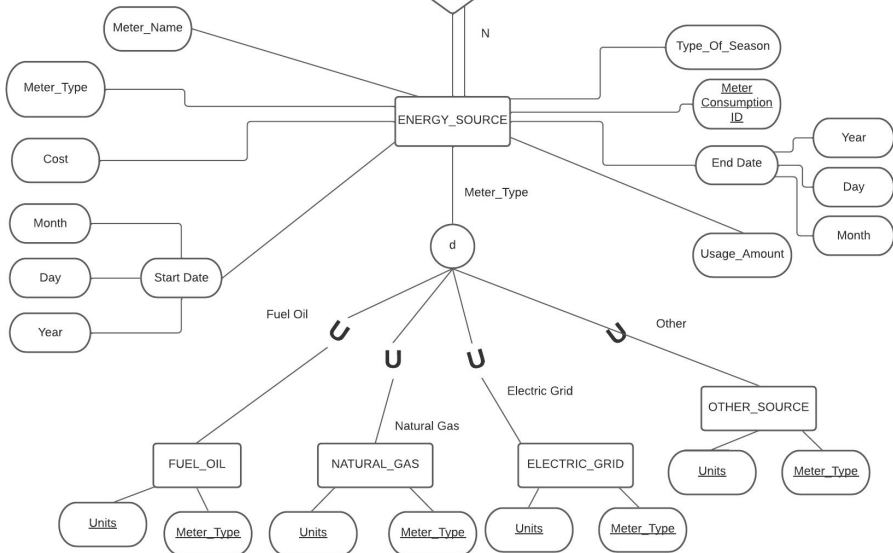
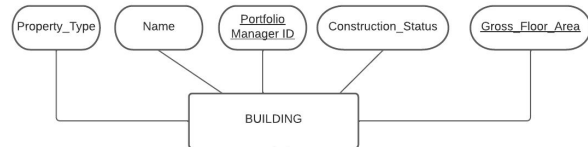


# Information about Database

---

- 1430 rows of records within data set
  - Est. 4.1 million rows of records to display 15 minute fluctuations
- Type of searches
  - Select an energy source
  - Enter starting / ending year
  - Show meter costs
  - Select year, month, daily
  - Select by seasons
- Average number of searches
  - 2-4 per user





# Energy Supply Analysis

How can the two energy sources, electric-grid and elements from the power plant, differ in terms of its energy supply efficiency?

Select an energy source:

- ☒ Electric-Grid
- ☒ Natural Gas
- ☐ Fuel Oil
- ☐ Other

Select either:

- ☒ Year
- ☐ Month
- ☐ 15 minute

Please enter a starting year from (ex. 2009 - 2020):

2009

Please enter an ending year from (ex. 2009 - 2020):

2012

☒ Show meter cost?

Submit

[Home](#)[Energy Efficiency](#)[Energy Reliability](#)[Admin Login](#)

## Result:

### Standard kBtu / Cost

Year of Start Date	Cost (\$)	Standard kBtu	[Standard kBtu]/[Cost (\$)]
2009	1,767,096	295,958,925,234	2,317,644
2010	4,344,435	611,383,416,938	6,183,328
2011	3,995,550	608,920,998,752	6,524,884
2012	3,403,877	647,272,152,811	8,121,119

### Meter Costs

Year of Start Date	Electric - Grid	Meter Type1			Grand Total
		Fuel Oil (No. 2)	Natural Gas	Other:	
2009	112,548		1,654,548		1,767,096
2010	381,284		3,963,151		4,344,435
2011	341,038		3,654,512		3,995,550

[Home](#)[Energy Efficiency](#)[Energy Reliability](#)[Admin Login](#)

# Energy Supply Analysis

How can each energy source vary in energy supply depending on the dates and seasonal aspects?

**Select an energy source:**

☒ Electric-Grid

☒ Natural Gas

☒ Fuel Oil

☒ Other

**Select either:**

☒ By month

☐ By season

Please enter a starting year from (ex. 2009 - 2020):

2017

Please enter an ending year from (ex. 2009 - 2020):

2019

Please select a specific month:

January



Please select a specific season:

Season Drop Down



Submit

[Home](#)[Energy Efficiency](#)[Energy Reliability](#)[Admin Login](#)

## Standard kBtu / Cost Chart (5)

Month of Start ..	Electric - Grid	Fuel Oil (No. 2)	Meter Type1		Grand Total
			Natural Gas	Other:	
January 2017	12,493,644		34,714,986,135		34,727,479,779
January 2018	1,131,520	8,926,198,348	63,399,252,956		72,326,582,824
January 2019	963,229	7,358,649,636	59,819,459,732	0	67,179,072,597
Grand Total	14,588,393	16,284,847,984	157,933,698,823	0	174,233,135,200