

ENERGY USE ANALYSIS

Based on the idea that you can manage what you measure, we identified the last 10 years of energy at Heritage. This retrospective picture of energy use revealed:

- The impact of key conservation measures
- The buildings that need immediate attention for energy conservation
- Opportunities for savings
- Comparisons of energy consumption
- The amount of carbon dioxide emitted from the site through energy use.
- Metrics for metered items.

We learned that in the most recent full year, Heritage emitted 1,031 US tons of carbon dioxide, This number includes offsets or reduction such as electricity purchased from a solar farm and the amount of carbon dioxide sequestered on site.

This analysis revealed some very specific information as well. For instance, there are 2 lamps on site that have individual meters. These are

- A halogen lamps in parking lot that averages 623 kWhs per month.
- An LED lamp and a pump that provides very similar illumination and the use of a pump that averages less than 1 kWh per month.

Again, you can manage what you measure so moving forward, Heritage will continue to measure, analyze, modify and measure again until the amount of carbon dioxide emissions drops a significant level. One scenario that is being explored is to move gas heating systems that are 95% efficient to heat pumps that have a 3:1 heat ratio, adopt renewable energy to power the heat pumps, and incorporate more energy conservation measures in key buildings. This would potentially drop the carbon dioxide levels by 66%.

Educational materials are available on setting up and energy use analysis for your organization. Please contact Cape Light Compact: www.CapeLightCompact.org - 800-797-6699