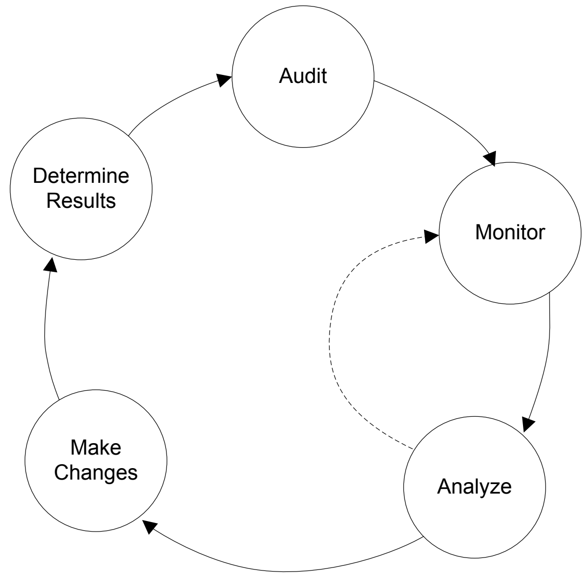
ENERGY MANAGEMENT SYSTEMS FOR PROGRESSIVE ENERGY MANAGEMENT

1.0 Energy Use Reduction Cycle



The energy use reduction cycle is a continuous improvement process that can be implemented to reduce Energy Costs within your organizaton. It can be broken down into the following steps:

- Energy costs can usually be divided into three components; electricity, gas and water. From the information available a decision is made as to which energy form to concentrate on.
- Monitoring Equipment is installed and gathers consumption data for the energy component.
- The consumption data is then analyzed to make recommendations for energy conservation. This recommendation could be to make changes to the process, install energy saving devices or to further install more monitoring equipment to gather more precise consumption data.
- Changes are incorporated in the facility to reduce energy consumption. They could be automated process controls, installing energy saving devices and/or peak energy consumption reduction.
- After the changes have been made energy consumption data is gathered and analyzed to determine the resultant energy reduction.

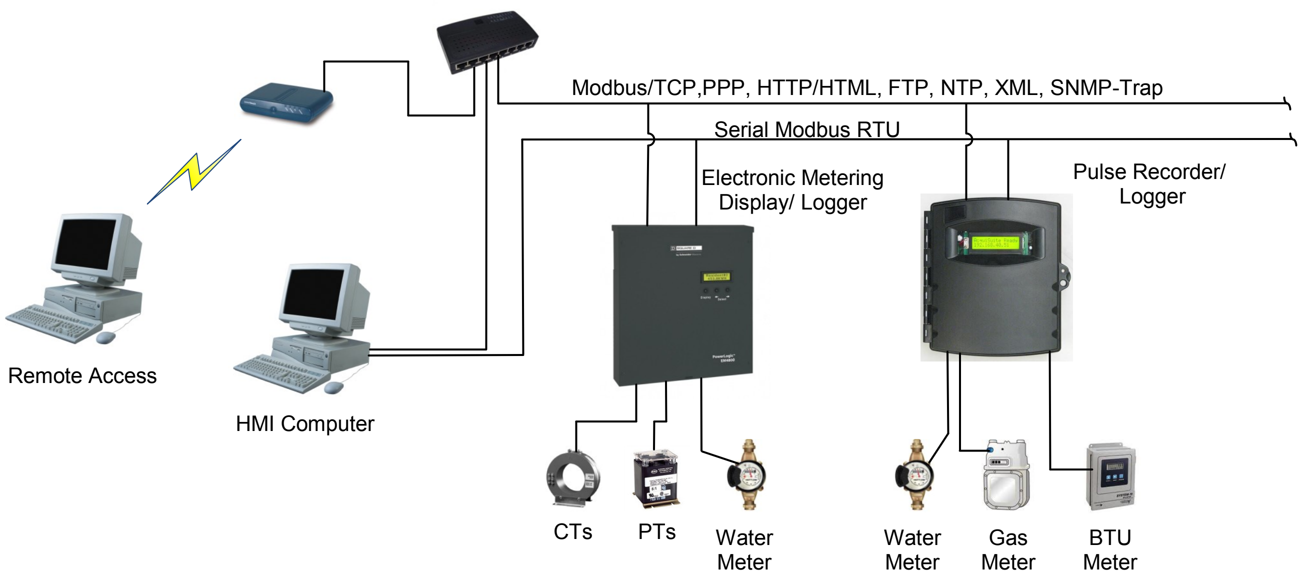
The process is repeated again for the next energy reduction project.

2.0 Energy Monitoring Systems

Digital Engineering has specialized in Energy Management Systems since 1977. We offer cost effective solutions for our customers. We can design an Energy Management System specifically for your application. They can range from a complex multiple submetering levels to simple starter systems. They can be new greenfield installation or we can utilize existing metering and add on new metering.

Shown Below is a small system designed by Digital Engineering for LEEDs verification.

Digital Metering System for LEED Measurement and Verification



2.1 Advantages of Digital Engineering's Energy Management System

- Based on an open architecture using industry standard communication protocols, including BACnet for interfacing into HVAC systems. Scalable, can be as small as a single metering point to a large multi-metering system incorporating abilities to measure various forms of energy including electrical, water, gas etc.
- Vendor Generic, if your standardized on one manufacturer or have multiple manufacturers within your plant, as long as they conform to standard communication protocols we can interface to them.

3.0 Analyze

Digital Engineering provides Software Services to help analyze your gathered information. We can provide services to integrate the information into your plant HMI system, develop custom web pages, or build custom applications to integrate the information into your plant business system.

4.0 Make Changes

Digital Engineering's Energy Management System is an open architecture platform. It can be interfaced into existing plant control systems or we can provide a new control system for Energy Management. Digital Engineering's team of software and automation specialists can assist you with implementing Energy Cost Saving Initiatives.

5.0 Determine Results

Digital Engineering's software group can assist your company in building your monitoring reports for determining the cost savings achieved by implementing an energy management initiative. This can be integrated into your plant HMI system, developed into a web application or integrated into your plant business system.

The Digital Metering System is a starting point to your Energy Management needs. Not sure if this solution will fit your needs? Digital Engineering is a fully equipped Energy Solution Provider. Our staff of Engineers, Technologist and Technicians have years of experience in developing software and hardware solutions that can meet your needs.