*The World is in a transition phase and energy is central to it. India has been responsible for almost 10% of the increase in global energy demand since 2000 pushing the country’s share in global demand up to 5.7% in 2013 from 4.4% at the beginning of the century. The primary energy demand in India has grown from about 441 Mtoe (Million tonne of oil equivalent) in 2000 to about 775 Mtoe in 2013. This demand is expected to increase to about 1250 (estimated by International Energy Agency) to 1500 (estimated in the Integrated Energy Policy Report) million toe in 2030. One of the biggest problems facing India today is the challenge caused by increased energy consumption and the increase of greenhouse gas emissions almost double since 2000.*

**Problem Statement:**

In today’s industrial era, industries account for the major consumption (44%) of electrical energy and in this competitive market scenario. Households occupy a major percentage of the electrical Energy after Industries.

Today’s businesses have great necessity of optimizing their energy needs and also to keep cost under control for the same level of activity due to increase in energy prices, operational cost and carbon emission.

***“We were looking for a system that could monitor a wide range of energy parameters, provide clear management information and that would keep disruption in the plant to a minimum. “***

**Benefits of having a Machine Monitoring System:**

* **Reduces cost** byanalyzing the amount of data actually required and the amount of energy being consumed.The Dashboard provides the information and recommendation model which gives necessary tips observing the patterns.
* **24/7 alarm notifications** allow you or your Family to respond quickly to machine issues.
* Save time by having **remote access to machine data** and pinpointing faults to specific individual machines.

**Solution:**

Energy consumption monitoring of equipments in Households in real time . Displaying the real time insights on dashboard. Generating prediction using the collected data by data analysis and machine learning algorithms to empower the decision making of organization.

***ENIMO(Energy Information and Monitoring)****is the answer to all these problems.*

Enimo has two main objectives to complete and they are:

* Identify faults and weaknesses in the equipment early so preventative maintenance and replacement can be done in a safe and orderly way
* Ensure the machine is maintained in an optimum environment to maximize performance and life.

**How it works:**