EnMS background in IKORC

Before starting EnMS in IKORC they had energy manager and also they had been doing some activities for energy. But the activities of the energy management department was not based on UNIDO’s systematic approach. After implementing EnMS within CDU/VDU units, energy analysis become a day to day function and because of change in operation behavior and proper level of personnel motivation, they are targeting for energy saving.

UNIDO program and development of the methodology within IKORC

UNIDO’s developed methodology within IKORC consists of getting management commitment, planning, implementing and checking.
Defining energy performance indicators

The main concept which was considered within the plant is how to define the boundary and select the energy performance indicator. To cover this subject, the below model have been proposed by national consultants and is implemented by the staff of IKORC energy department.

Establishing a baseline and setting energy saving targets

As it can be seen in the below graph, total energy consumption of the CDU/VDU units influenced by different variables.

Based on analysis the energy baseline of the CDU/VDU units has been defined using the following formula:

\[
\text{Total Energy} = (5.7 \times \text{Overhead}) + (57.6 \times \text{Naphtha}) - (0.06 \times \text{Kerosene}) - (15.6 \times \text{LFO}) + (2.2 \times \text{V102toRCD}) + (0.89 \times \text{FeedtoV151}) + 730612.9
\]

According to analysis for the base year, the following trends have been drawn using actual and model data. It has been understood that the developed model is highly confirmed by actual data.

Main achievements

- Changing the culture of operation;
- Raising personnel awareness;
- Implementing new systematic approach to management;
- Preparing IKORC for ISO certificate;
- Training energy team members;
- Improving the plant operation due to proper maintenance joined to energy management processes.

For more information

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