



# One of the Largest Petroleum Refineries of a Fortune 500 Oil & Gas Company

## Client Profile

The Client is one of the largest refineries in India with a capacity of 7.5 MMPTA. Apart from being the sole producer of Jute Batching Oil, the refinery also produces low Sulphur content High Speed Diesel (HSD), BS-II and Euro-III equivalent HSD (part quantity), eco-friendly Bitumen emulsion and Microcrystalline Wax and superior quality Lube Oil Base Stocks (LOBS), meeting the API Gr-II standard of LOBS.

## Problem Statement

The Client has Flare Gas Recovery System which is responsible for recycling the excess gas produced in the refinery to various heat treatment sections in the refinery and also ensures that the emission is minimal to meet the environment norms. The redundant set of compressors was subject to frequent trips leading to huge financial loss by way of flaring the expensive gas in the air and also breaching the emission norms.

The O&M team was handicapped as there was no visibility in terms of the sequence of events leading to the Compressor Trip. There was also no system available for daily and shift-wise flare gas recovery reporting. The FGRS control set-up had only one SCADA located in the offsite unmanned FGRS room making it difficult for the Senior O&M personnel to monitor and control the system



## Solution Landscape

Greenwave Consulting team implemented a solution framework based on Rockwell's ControlLogix Platform and Hardware Based SOE (Sequence of Events) Module with 1 msec event resolution. The SOE reporting and analytics were developed on Rockwell's FactoryTalk Platform. The SCADA and the Reporting application was also extended to various engineering and process users across the refinery network using Rockwell's FT ViewPoint Web SCADA application.

- ### Technology Snapshot
- RS View 32 Migration to Rockwell FT View SCADA
  - Web SCADA Implementation - FT View Point
  - Rockwell Flex IO Extension for Gas Detection and Alarm Annunciation
  - Sequence of Events Implementation and Reporting on Rockwell ControlLogix PLC
  - Web Based Process Parameter Reporting - Green360 Portal