





# South East Asia Gas Processing Plant Increased Profits by Over USD 10 Million/Year

Profit improvement program exceeds target by 7 million/year

#### **Key Benefits**

- Increased profit by 10 million/year
- Exceeded target by 7 million/year

## Background

- Goal to improve yields by 3 million/year
- Create a culture of
  continuous improvement

## **KBC Solution & Results**

- Identified 10 million/year in noninvestment improvements
- Used Petro-SIM to create a site-wide simulation model and value test proposed improvements
- Created an on-line sparing management tool to optimize the utility system
- Trained engineers on continuous improvement

## **Client Challenge**

A gas processing plant that produces gas and liquefied petroleum gas in South East Asia was looking to increase profits. The plant had eight trains and the operator wanted to grow profitability by at least 3 million/year.

They contacted KBC to help them improve their yields and identify energy saving methods. The operators long term goal was to develop a corporate culture of continuous improvement. To meet that objective, they needed to improve their employee skill set so they could identify and implement their own profit improvement programs.

## **The Solution**

KBC used Petro-SIM simulation software to create a sitewide simulation model. The site team also created a utility model. These models helped to identify gaps and test the value of the proposed improvements.

KBC Consultants identified more than 50 profit improvement opportunities. Working with the client, the consultants narrowed down the profit improvement options based on practicality and feasibility.

The project team agreed to implement 24 of the identified opportunities worth over 10 million/year with no capex.

One of the opportunities KBC consultants addressed was an energy problem commonly seen in plants. The gas turbine generators had



spinning reserve with too many running at low loads.

KBC built an on-line sparing management tool. The tool assessed the gas turbines performance providing real-time recommendations to switch on or off the turbines. This maintained the necessary spinning reserve at maximum energy efficiency. The energy saving of this change was worth 3 million. The site team successfully implemented several other improvement opportunities tracking and reporting on the benefit the operator received.

#### Results

The operator increased profits by USD 10 million/year. KBC not only met the plant's program financial targets, the consultants exceeded expectations by 7 million. By closing gaps and eliminating instability, the operator also increased the value of their product.

The plant now operates on a corporate culture based on continuous improvement and maximizing plant profitability. They continue to identify and implement profit improvement programs to maintain their competitive edge.

#### Ingredients of sparing tool





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