

Petrochemical Producer, Asia Pacific

Reliability & Performance Improvement Project

This company is an ammonia-based petrochemical manufacturer and is part of a major international integrated oil company having upstream, refining and a range of petrochemical assets. Today, the company's production facilities are among the largest in Asia for their type of product.

Although our Client has confirmed the factual correctness of this case study, their corporate policy restricts us from naming them as they operate in a competitively sensitive environment.

"I found Renoir's implementation very effective and we achieved significant cost savings. I am confident that with Renoir's high emphasis on sustainability, we can ensure the continuity of the performance improvements."

**Chief Executive Officer
Petrochemical Producer**

Key Results

Tangible savings in excess of
\$4,000,000

ROI in excess of 3:1 against the
project investment

Overtime reduced by 28%

Maintenance velocity improved
from 57% to 78%

Contractor cost reduced
by 27%

Reduction by over 50% of
planned vacancies

Maintenance productivity
improved from 35% to 60%

ANALYSIS

Recent changes in the global economy have resulted in increasing challenges for the petrochemical industry. Fluctuating product prices and increased feedstock costs have added significant uncertainty particularly in the marketplace for our Client's products. In order to remain relevant in the market, manufactures need to be ever more productive and efficient to ensure unit costs are kept as low as possible.

In January 2009, after an initial analysis, the Client and Renoir embarked on a project to achieve sustainable performance improvement. The Client Performance Improvement (CPI) project aimed to step up the pace and productivity in the way they do things, whilst ensuring the necessary competency to run the business more efficiently.

The analysis concluded that significant opportunities existed for our client to improve margins by improving internal processes, management systems and working practices. The effect of this improvement would be to help mitigate risk in the market. The analysis findings were based not just on operating and financial data but on observational studies conducted within the Client's production facilities. As well as defining the structure of the improvement effort – described in more detail below – the analysis quantified the benefits against which the success of the project was to be ultimately measured.

PROJECT APPROACH

The CPI project vision was to achieve sustainable performance improvement with two main objectives:

- **Cost optimization:** Managing cost more effectively
- **Competency enhancement:** Ensuring necessary capabilities to run the business more efficiently

The Client agreed that the project approach would follow Renoir's Focus Process™ which has two key stages, namely Definition and Development before actual implementation of changes.

Three focus areas – or workstreams - were identified during the analysis as being the most appropriate in delivering the CPI objectives:

- Maintenance
- Operations
- Support Departments (i.e. SCM, HR, Finance)

World Leaders in Sustainable Change

© Renoir Consulting Limited. This document remains the property of Renoir Consulting Limited and must not be copied or distributed in hardcopy or electronic form without the prior written approval of Renoir Consulting Limited.

Maintenance

Within Maintenance, the team focused on how to improve the work planning, performance management and active supervision. The team provided a set of management tools to streamline the work planning and performance measurement. As a result, Productivity (the rate at which we complete maintenance jobs given our available resources) and Velocity (the speed of how fast we execute the job against the standard) are visible to both shop floor and management level on daily basis.

Operations

In the second area, Operations, the team introduced a plant floor management control system designed to drive appropriate levels of supervision and instil proactive resolution of problems. The planning and productivity tools were also used to complement the existing equipment reliability management system.

Support

Under Support departments, the team set up departmental scorecards and weekly reviews to enhance performance across the business. By improving the management of labour contractors and assessing the required number of internal staff to run the plant competently and safely, the team developed comprehensive manning strategy which is being used to deliver future productivity improvements.

The two main themes used to deliver the objectives were Productivity and Agility. The benefits showing from the themes are summarized into the four quadrants below:

- OPEX Reduction by rationalization of manpower, OT and contracts
- OEE Financial Savings by reduction of production loss (i.e. minimizing the shut down period)
- Capability Building by SFM (Skill Flexibility Matrix)
- Behaviour/Mindset Change improved and monitored by SA (Situational Audit)

PROJECT RESULTS

Tangible annualized cost savings in excess of USD 4 million were achieved arising out of the Key Results as listed above. However the results that will be felt the longest are those relating to behaviour:

- Greater transparency to ensure poor performance is highlighted and tackled in a consistent & timely manner.
- Enhanced focus on operational performance
- A productivity focus and culture across the business.

THE RENOIR GROUP

Renoir Consulting is a world leader in sustainable, implemented change. Founded in 1994, Renoir has offices located in North and South America, UK, Europe, Turkey, Middle East, Southern Africa, India, Pakistan, China, South East Asia and Australasia. With over 350 fully employed and highly trained consultants, their work across a wide range of industry sectors gives them a broader perspective of the issues facing your business, allowing them to be sensitive to your unique challenges, culture and specific business issues. This cross-pollination ensures truly effective, rapid and sustainable solutions.

Visit Renoir at www.renoirgroup.com for more information and a complete list of regional contacts or send us an e-mail at: renoir.office@renoirgroup.com

World Leaders in Sustainable Change

© Renoir Consulting Limited. This document remains the property of Renoir Consulting Limited and must not be copied or distributed in hardcopy or electronic form without the prior written approval of Renoir Consulting Limited.