

## Case Study

### The Hong Kong and China Gas Company Upgrades Plant Operations with Integrated Solution for Process Control and Safety



“We’ve had a good experience with Honeywell’s products and services. We are confident that the decision to upgrade our control systems will provide us with many improved ‘abilities,’ including system reliability, stability, availability, flexibility and controllability. From the start, Honeywell’s team showed us over and over again strong project-team spirit and how very much customer-focused they are in meeting all our needs.”

Stephen Chan, Maintenance & Development Manager

#### Benefits

The Hong Kong and China Gas Company (Towngas) sought to upgrade its control and safety platform in order to gain new levels of efficiencies and operation. The company turned to Honeywell to provide implementation expertise and an integrated solution for process control and safety systems.

Among the benefits realized from Honeywell process control and safety solution are:

- Protection of initial technology investment while upgrading overall system performance
- Enhancement of the gas plant’s safety standards
- Move to latest technology in process control and safety systems with no interruption to normal operations; project was finished on time and on budget
- Gaining full redundancy of controllers, power supplies and I/O modules to improve overall plant reliability
- Recognition that strong inter-company teamwork and open communications between the partners are essential for making any project a success

#### Background

The Hong Kong and China Gas Company Ltd. (Towngas) has been serving the people of Hong Kong for more than 140 years with the best in services and products. The first public utility in the area, Towngas currently maintains more than 3,000 km of pipelines and supplies some 1.6 million customers with efficient service that provides a safe, reliable supply of gas. While its core business produces and distributes gas, markets gas and appliances as well as offers comprehensive after-sales services, in recent years Towngas has diversified into various green businesses, including LPG filling stations and utilization of landfill gas, in an effort to preserve, protect and improve the environment. In the past 10 years, Towngas has developed a city-piped gas business in mainland China. The company also has joint ventures in 30 cities, including projects across Guangdong, Eastern China, Shandong, Central China, Northern China and Northeastern China.



Towngas Turns to Honeywell to Upgrade Plant Operations

## Challenges

Towngas knew the time had come to replace its aging Distributed Control System (DCS) at a major production facility. The process automation technology in place continued to work as required but the company knew it was missing out on the major advantages that newer technology would provide. The company also sought to upgrade its safety management system and integrate it with its control system to ensure the highest level of safety available.

The company considered a systematic approach to upgrade its business-critical process automation system as well as full budget justification to move forward. Also under debate was which distributed control system (DCS) or technology was best suited for its operations. Key determinants here included the safety, reliability, flexibility and maintainability of the technology as well as its lifecycle costs and availability of spare parts.

In starting to search for the proper technology partner, Towngas also looked for a single source with deep and vast real-world experience, including project team competency and delivery, technical support and training as well as a long-term commitment to product development and system-wide improvements.

“Because of our unique and far-reaching business, we needed a partner that was flexible in project scheduling so our operations needs would be accommodated,” said Stephen Chan, Maintenance & Development Manager, Towngas.

### For More Information

Learn more about Honeywell’s products and services visit our website [www.honeywellprocess.com](http://www.honeywellprocess.com) or contact your Honeywell account manager.

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## Solution

Towngas chose to extend its existing relationship with Honeywell, chosen as the best source to deliver the right mix of best-in-class technology and expertise required to implement and sustain this extensive upgrade project.

In partnership with Towngas, Honeywell mapped out the best way to develop and implement a control and automation solution that was tailored for Towngas’ requirements.

Honeywell assisted Towngas in delivering and implementing a control platform and safety system upgrade strategy that was executed in phases. Taking advantage of a plan that included maximizing available windows of opportunity resulted in no business interruptions and only minimal inconveniences to plant operations during the upgrade.

“Maintaining our high standards for safety and reliability of gas supply to our customers was paramount during this operation,” said Chan. “Honeywell’s years of experience, reliable products and superlative workmanship has made this upgrade progress go smoothly.”

Choosing Honeywell has let Towngas gain major improvements in a number of areas, including operator performance and asset management. Implementation of fully redundant controllers, power supplies and I/O modules has resulted in raising the reliability of Towngas’ plant operations. Meanwhile, migrating from IPC to FSC has enhanced the gas plant’s overall safety standards.

“We are happy with the reliability of Honeywell technology and the support provided us by the Honeywell staff,” added Chan. “Through the upgrade process we have worked closely with Honeywell’s experts from Taiwan, Tianjin, Singapore and Hong Kong. Their teamwork and dedication to getting the job done right and on time combined with maintaining open communication with all our personnel has been essential in making this project a success.”