# **Kunshan GCL Blue Sky Distributed Energy Project**



## Challenges

This is the first gas-fired distributed energy project of GCL as well as of Kunshan High Tech Zone. The gas-fired combined cycle applications will ensure the heating and power supply to the companies within the high tech zone. The project is located in the central part of Yangtze River Delta which requires strict environmental standard and a high level of complex technique.

## Units:

2×50MW SGT-800 gas-fired combined cycle applications

#### Advantages of Siemens Industrial Gas Turbines

With over 300 units had been sold, SGT-800 counts the number 1 market share worldwide in terms of the 50MW equivalent industrial gas turbines.

Key Technique Features :

- 1 ) Proven high simple cycle efficiency
- 2 ) Proven high combined cycle efficiency
- 3) Proven high availability and reliability
- 4) Proven low NOx & CO emissions

## **Project Vision**

Technical Target :

- 1) Flexible load regulation ability.
- 2) High efficiency of combined cycle cogeneration as well as steam-raising capability
- 3 ) Proven high availability and reliability.
- 4) Based on strict environmental requirement, many of the existing coal-fired units needs to be replaced by the low emission applications in order to meet clean energy requirement.

## Economic Target:

- 1 ) High efficiency of combined cycle and steam-raising capability minimize the unit gas consumption and lower the operation cost.
- 2) Highly modular units design dramatically reduce the installation time and commissioning cost, which also realize faster operation
- 3) Proven operational performance and worldwide installed fleets provide rich references and support customers to lower operation cost.

## Advantages of Distributed Energy

- 1) Effectively increase the multipurpose utilization rate of resources in order to achieve energy gradient utilization and improve economic benefits.
- 2 ) The clean and highly efficient gas-fired distributed energy makes good effect on energy conservation and emission reduction.
- 3) Ensure the safety of power and heat/cold supply within the distributed energy area, with the result of ensuring customers production.
- 4) Structure advantage: Ensure reliable power and heat supply during summer peak power demand and winter heat supply season.

