



**SIEMENS**  
*Ingenuity for life*

# SeaFloat Power Plants

## Solution with the SGT-800

The SCC-800 SeaFloat plant utilizes the advanced and robust industrial SGT-800 gas turbine mainly designed for combined cycle applications with highest possible efficiency

### Short project duration

The high degree of modularized design and delivery based on pre-assembled and pre-tested plant modules minimizes the manpower required at yard as well as it is minimizing the hook up and commissioning time at final location.

### Typical fields of application

New power generation installations based on LNG and expansion of industrial applications in remote coastal areas are the most prominent applications of SGT-800 based SeaFloat. The SCC-800 is a perfect fit for provision of baseload power to public or industrial grids in remote parts of the world.

### Less project risks

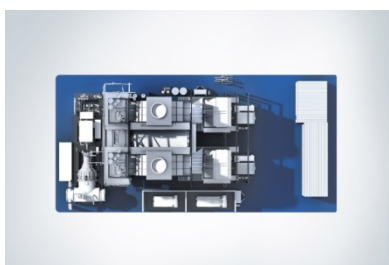
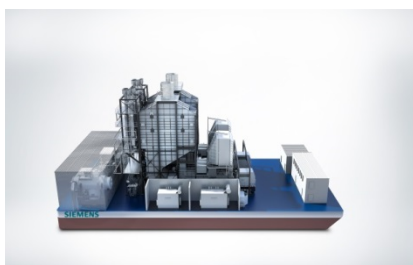
Typical soil risks do not apply to SeaFloat. Project risk resulting from brown field activities such as demolition works, site leveling activities, relocation of existing structure can be avoided by using SeaFloat power plants when for instance replacing outdated plants. Due to installation at modern ship yards the project progress is not depending on availability of qualified labor and infrastructure at the final location of installation/operation.

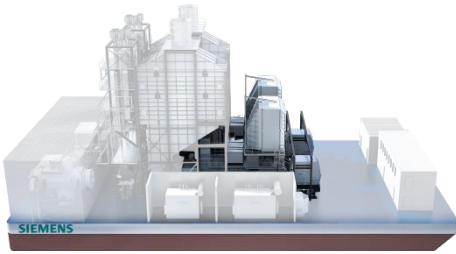
### Reliability and easy maintenance

Core engine exchange within 48 hours and on-board maintenance concept ensure highest availability.

## Key benefits

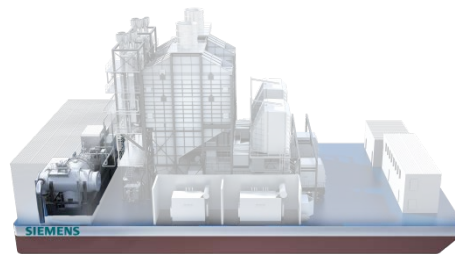
- Smallest footprint of a world class combined cycle power plant
- Highest quality with low CAPEX
- Easy installations due to pre-designed solutions with plug & play concept
- Lowest OPEX based on easy and fast service concept
- Lowest emissions





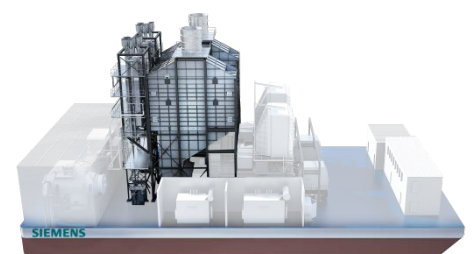
**SGT-800 Package weight 265tons with a size of 22m x 4.7m x 5.3m (length width, height)**

The 3-point mount package is a complete skid-mounted train consisting of gas turbine, mechanical auxiliary systems, gear box, generator and generator switch gear.



**SST-600 Package weight 475tons with a size of 25m x 7.0m x 5.5m (length width, height)**

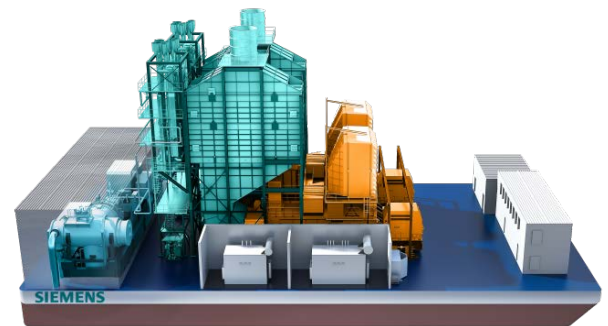
The 3-point mount package is a complete skid-mounted train consisting of steam turbine, condenser with evacuation systems, generator and generator switch gear.



### HRSG and Balance of Plant

The design concept of the balance of plant is based on Siemens proven booster pump configuration optimized for SeaFloat application. In-house HRSG SeaFloat design results in a harmonized overall plant concept.

	SCC-800 2+1	SCC-800 3+1	SCC-800 4+1
<b>Net plant output MW(e)</b>	149,4	224,4	299,3
<b>Net plant efficiency (%)</b>	56,6	56,6	56,7
<b>Emissions, NO<sub>x</sub>, [ppmV / mg/Nm<sup>3</sup>]</b>	<25 / 51.3 @ 15% O <sub>2</sub> (50-100% GT load)		
<b>Emissions, CO, [ppmV / mg/Nm<sup>3</sup>]</b>	<5 / 6.3 @ 15% O <sub>2</sub> (50-100% GT load)		



Installed performance at:

- 25°C ambient air temperature
- 25°C sea water temperature
- 60% relative humidity

Sea water temp. rise [°K] <10

\*) Gas fuel supply 30 Bar(a), 25°C, 48.6 MJ/kg LHV (Siemens standard gas composition). At generator terminals.

\*\*\*) Gas fuel supply 30 Bar(a), 25°C, 48.6 MJ/kg LHV (Siemens standard gas composition). Including transformation and auxiliary losses. Excluding condenser cooling water pumps and auxiliary consumption of the barge, power ship or other structures.