

SMALL SCALE LNG (SSLNG) SOLUTIONS @TGE



INTRODUCTION

TGE has developed small scale LNG plant solutions with a high level of standardization allowing fast-track and cost-effective delivery suitable even for remote locations. All facilities can be offered with high level of standalone operations. On our customer's demand we can also offer a tailor-made solution, e.g. the full integration of customer's detailed technical specifications into the design.

SSLNG TO POWER PLANTS

- Stand-alone regas- solution dedicated to an adjacent gas power plant in a remote area, e.g. island
- Key features being ship unloading, storage and regasification of LNG
- Synergies with adjacent power plant as option, e.g. heat integration
- LNG throughput less than 0.5 MTPA for power generation rated capacity within the range of 20–300 MW

SSLNG BUNKERING & DISTRIBUTION PLANTS

- Located in harbours within emission controlled areas (ECA's) with frequent ship traffic
- Basic features are ship unloading, storage and barge loading
- A truck/ISO container loading facility allows onshore LNG distribution to local industrial consumers or road vehicle fueling stations
- Typical throughput less than 0.5 MTPA LNG

SSLNG PRODUCTION PLANTS

- Often located upcountry, e.g. downstream a local biogas production plant
- Basic features are full required gas treatment facilities, liquefaction, storage and truck loading for LNG
- Typical annual throughput less than 0.25 MTPA LNG

■ ssLNG to power plants for distributed power generation

For remote locations, where no natural gas pipeline grid is in the vicinity, ssLNG-to-power is the fuel-supply solution for an adjacent gas fired power plant. On demand, these terminals can be equipped with LNG distribution facilities, e.g. truck or ISO-container loading.

■ ssLNG bunkering & distribution plants

Increasingly offshore carriers and cruise ships are fueled with LNG. This plant type is the solution for LNG ship fueling. On demand, these terminals can be equipped with additional LNG distribution facilities, e.g. truck or ISO-container loading facilitating a "virtual pipeline".

■ ssLNG production plants

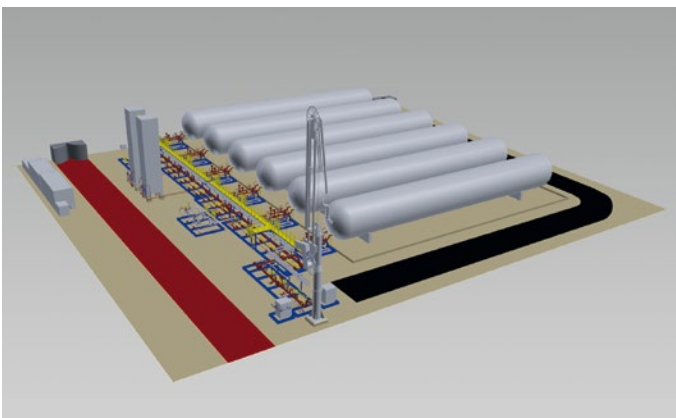
TGE utilizes technical proven solutions for the small-scale LNG production incl. pre-treatment, liquefaction, storage and distribution and can provide cost effective state of the art facilities that are tailored to our customer requirements. Depending on size, complexity and location, the right execution strategy and technology will be chosen. Our cooperation with well reputed technology partners is leading a successful execution, providing highest reliability and profitability for our customers.

EXECUTION

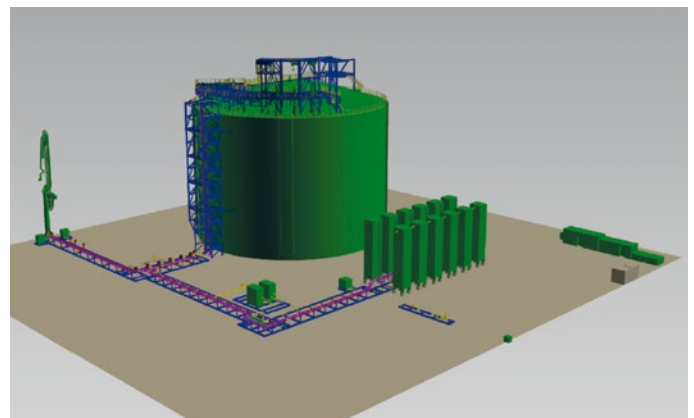
Depending on the individual project the standardized and modular design approach allows optimized execution by selection of either maximizing prefabrication or in-situ construction. This design approach brings clear advantages in plant expandability while providing for fast track project delivery with shortest time to commercial operations and an optimized return on investment.

WHY TGE

- Strong experience in storage and handling of liquefied gases
- Intense record of EPC project execution worldwide in the LNG business
- Proven reliable contractor delivering safety, quality and in time
- Full in-house engineering capabilities across all relevant disciplines make TGE your competent partner



LNG plant concept for up to 50 MW power generation



LNG plant concept for 50 MW-300 MW power generation

For further information

TGE Gas Engineering GmbH · Mildred-Scheel-Straße 1 · 53175 Bonn · www.tge-gas.com
T +49 (0) 228 60448 0 · F +49 (0) 228 60448 893 · tge-service@tge-gas.com