

# RETROFIT SOLUTIONS FOR CRYOGENIC STORAGE & HANDLING FACILITIES @TGE



## INTRODUCTION

Today's industry for liquefied gas storage includes a large number of facilities which have been in operational service for significant periods, even decades already. Increasingly plant owners consider retrofitting these facilities for different reasons:

### PLANT LIFE TIME EXTENSION

- Design life time reached
- Material fatigue, e.g. due to environmental impact
- Availability of spare parts
- New regulations require new permits

### PLANT SERVICE MODIFICATION

- Maximising Existing Assets e.g. new product service allows a more profitable business
- Reaching new revenue streams e.g. extensions for new business like ship or truck loading

### OPEX OPTIMIZATION

- Reduction of energy consumption, e.g. heat recovery, more efficient equipment and up-to-date process control
- Reduction of maintenance by replacement of susceptible material

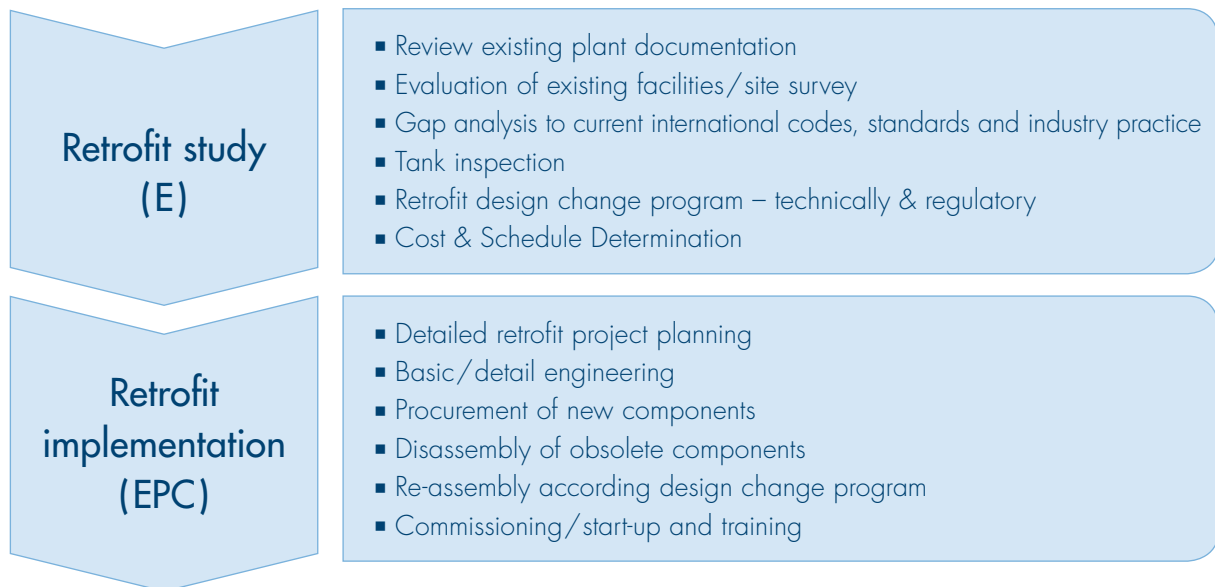
## CONDITIONS

Retrofits for cryogenic facilities requiring a full system decommissioning are usually complex projects rather than just replacements of single parts. Depending on the specific retrofitting project, the project management is confronted with additional tasks in comparison to an "empty plot" EPC project. Several conditions must be considered:



## EXECUTION

TGE offers retrofit solutions in two project steps:



## WHY TGE

- Strong experience in storage and handling of liquefied gases
- Full inhouse design and inspection capabilities for cryogenic storage tanks and terminals
- Experienced in project execution in "brown-field" conditions/environment
- Able to perform a full EPC for retrofitting cryogenic storages and/or terminals

### For further information

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