



GAS STORAGE

The ability to store large quantities of gas can help ensure that natural gas demand can be met. With a wealth of relevant expertise and experience, Costain is well positioned to deliver optimum solutions for underground gas storage and related surface facilities.

Costain has been a prominent player in the development of gas storage projects in the UK, working with a number of European utility majors on gas storage projects in depleted fields and salt strata.



PROJECTS INCLUDE DELIVERY OF MAJOR UNDERGROUND GAS STORAGE FACILITIES

IMPROVED PROJECT DELIVERY THROUGH COLLABORATIVE APPROACH

EFFICIENT SOLUTIONS BASED ON LONG HISTORY OF GAS PROCESSING EXPERTISE

COSTAIN'S CAPABILITY

Our expert gas handling and treatment knowledge as well as compression selection can be used to select the most suitable technologies for each project.

We provide comprehensive design and engineering services for hydrocarbon dew point control plants and gas dehydration, in which we are familiar with both TEG dehydration plants as well as molecular sieve technology.

We can also offer a variety of ground installations to include slug catching, inhibitor injection and regeneration, heating, pressure letdown and fiscal metering.

PROPRIETARY TECHNOLOGY

Costain offers an innovative approach to create improved value on storage projects through a defined process for concept evaluation. We can quickly and effectively assess investment opportunities by integrating with the client's team during concept development.

Costain has a comprehensive capability and can deliver projects across all phases of the lifecycle, from front end through project management and delivery to asset support.

We have an excellent record of leadership in safety, health and environmental performance where we provide our customers with process designs and facilities with the highest standards of safety and quality.

RELEVANT EXPERIENCE

E.ON Gas Storage

Holford Gas Storage Project



Fast cycle between injection and withdrawal to follow gas prices and optimise economics

- Underground gas storage facility to increase UK storage capacity and balance daily gas market
- Adheres to strict environmental guidelines and considers local communities
- Delivered a gas processing plant with TEG dehydration and three compressor trains, as well as modification works at all eight wellheads, including high pressure pipeline installation

Holford Key Facts



- 8 caverns, 600m below ground - combined capacity of 160 million m³
- Injection and withdrawal rate of up to 22 million m³ per day
- Flexibility to start up in just 30 minutes
- Available year-round

- ✓ HIGH LEVEL PEER REVIEW
- ✓ DETAILED ENGINEERING
- ✓ CONSTRUCTION MANAGEMENT
- ✓ DESIGN
- ✓ PROCUREMENT
- ✓ COMMISSIONING SERVICES

GDF Suez

Stublach Gas Storage Plant



- One of the largest salt cavity storage projects in the UK, with a withdrawal rate of 33 million m³ per day and up to 400 million m³ capacity
- Delivery of Brine and Water facilities to leach 20 underground caverns 600m below ground
- Constructed well sites and installed 22,000m of underground pipework
- Provided the FEED for the associated gas plant

- ✓ CONCEPTUAL STUDIES
- ✓ DETAILED ENGINEERING
- ✓ CONSTRUCTION MANAGEMENT
- ✓ FEED
- ✓ PROCUREMENT
- ✓ CONSTRUCTION

Wingas

Saltfleetby Gas Storage Project



- Underground gas storage in depleted gas reservoir for seasonal service
- Reservoir is located 1.5 miles below the surface of the South Humber Basin
- Withdrawal rate of up to 9 million m³ per day

- ✓ CONCEPTUAL STUDIES
- ✓ FEED