



Intergraph Smart® Cloud

LNG Joint Venture Utilizes Smart Cloud for FEED

Key Facts

Project Location: British Columbia

Operator JV: Lead Operator (50%), and three other global energy companies

Products Used:

- Intergraph Smart® 3D
- SmartPlant® Electrical
- SmartPlant Instrumentation
- SmartPlant Markup Plus
- SmartPlant Enterprise for Owner Operators
- SmartPlant P&ID
- SmartPlant Review
- · SmartSketch®

Delivery Platform:

• FEED via Intergraph Smart Cloud

Project Summary

This project consists of a global energy consortium joined together to design, build, and operate a liquefied natural gas (LNG) export terminal in British Columbia. The goal of this project was to export some of Canada's excess natural gas to Asian markets, and in the process, create a world-class export industry with a product recognized as both affordable and cleaner than other hydrocarbons, in addition to being safe to store and transport. This project utilized a Cloud environment for FEED. Upon full build out, the facility will be made up of a variety of buildings and equipment used to process and store LNG. Supporting infrastructure will also be in place, including power supply, water supply, and waste collection and treatment facilities.

Benefits of a Cloud Approach

This projects marks the Lead Operator's first full-cloud approach, with the goal of improving business processes from design to handover and operations.

Using Hexagon PPM's SmartPlant Enterprise for Owner Operators, this environment enables these processes by working on Smart Cloud, Hexagon PPM's hosted environment facilitating real-time information-sharing with partners and contractors, regardless of location.

- The Lead Operator included its product catalogue in its integrated engineering environment and connected it to the other planning tools, thus sharing data for up to 60% of the equipment coming from suppliers.
- Smart Cloud supports the Lead Operator's "copy and paste" approach, i.e. the reuse of information from planned plants and partial projects.

 Experts in the Lead Operating company believe that by applying a data-centric approach as early as the FEED phase, and by avoiding rework in later phases, savings of 1.5% will be achieved.

Smart Cloud for Operations

Intergraph Smart Cloud can help operators meet the challenges of quality, consistency, and maintaining the high value of data-centric systems for both large and small projects. The Smart Cloud environment can transition from project to operations faster and much more effectively by providing:

- Seamless handover from FEED to detail design
- Early access to common project plan, design data, and equipment data
- More efficient procurement and economies of scale
- Seamless handover to commissioning, startup, and handover

About Hexagon

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Hexagon's PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.9bn EUR. Learn more at hexagon.com and follow us @HexagonAB.