## Islandmagee Storage



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## Overview of InfraStrata plc / Islandmagee Storage

- 90% owner and developer of Islandmagee salt cavern gas storage project in Northern Ireland
- Compelling market dynamics increased volatility in gas demand expected
- Shortage of comparable UK gas storage developments
- £11m invested in the project to date
- Technical feasibility completed and next stage ready to proceed subject to funding: £6M programme for Front End Engineering Design (FEED) and commercialisation
- Recognised as a strategic project for Europe; secured £2m grant from EU for 2017 FEED programme
- Expert FEED contractors prepared to share risk and participate in financing the project's development (agreed £1m in secured loans)
- Only AIM-quoted gas storage company; management changes implemented to reflect company's strategic focus

### **Project fundamentals**

- Location: Islandmagee / Larne Lough, Northern Ireland
- Storage type: up to 8 salt caverns, fast cycle
- Planned to be capable of switching from injection to withdrawal in 90 minutes
- Total working gas capacity: ~400 M Nm3
- Anticipated start-up date: 2020/21
- Construction cost: approximately £308m modelled
- Only known location on the island of Ireland where a fastacting facility could be constructed
- Low unit cost of construction: very close to connecting infrastructure
- Fully consented
- Recognised as a strategic project for Europe



## UK gas market fundamentals



- Gas is the single most important fuel in the UK's energy mix today. It is the primary fuel used to generate 45% of our electricity and heats around 80% of our homes
- Increasing levels of renewables, declining indigenous production and coal plant closures
- Making gas demand increasingly more difficult to predict over the short term
- This will tighten the supply demand balance for flexible gas causing upward pressure on prices and more volatility
- Gas storage is a very effective source of flexibility in the market - shippers contract for fast-acting salt cavern capacity to meet these demand spikes
- Aged Rough facility providing 67% of storage volume <u>may close</u> - potential "gamechanger" for gas storage market

# Volatility in gas prices has increased markedly during 2016



SOURCE : The gas storage market in the UK and review of revenue assumptions in economic model for the Islandmagee gas storage project', The Energy Contract Company

UK faces winter gas crunch followingstorage shutdownThe TelegraphJuly

Gas prices rocket after storage shutdown

UtilityWeek July 2016 UK needs 'greater access' to gas storage in Europe UtilityWeek August 2016

Traders Delight as U.K. Gas Goes Wild on Centrica Rough Halt

#### Bloomberg

2016

September 2016

U.K. Gas on Longest Winning Streak in Nine Years on Absent LNG

Bloomberg Markets

> October 2016

## Low levels of storage capacity in UK compared to Europe



Storage, Securing the future of the UK energy market

- The UK has less storage than other European countries that rely on the global market for gas imports
- Historically the UK has relied on UK Continental Shelf (UKCS) for supply and flexibility
- As UKCS/North Sea production declines, this flexibility is expected to decrease along with the ability to withstand supply shocks so other sources of UK flexibility such as gas storage will become more important

### Gas storage facilities in UK





# 2017 activities to position the project for construction financing

- Front End Engineering Design ("FEED")
  - Above Ground Facilities
  - Sub-surface
- Product and Key Contract Development
- Develop project financing strategy for the construction of the facility
- Regulatory
- PCI and Grant for Works (GfW) Applications

## Summary of indicative economics<sup>1</sup>

(Revenue modelling by Baringa; CAPEX modelling by WSP Parson Brinckerhoff; all other modelling by internal project team)



- Capex: £308m
- Debt Gearing: 65:35
- Revenues (20 yrs): £1219.5M (real/money of the day)

- Annual Opex: £6m
- Repayment: 17 years
- NPV with assumed discount rates: NPV(8) = £67m
  NPV(10) = £38m

NOTE: <sup>1</sup> Economic model based on 20 operating years, but project life is 40 years. **Indicative figures only based on a number of** assumptions and actual amounts and final economics may differ



- Gas price volatility increases in response to renewables and declining indigenous supply
- Demand for flexible gas becomes urgent as wind generation increases in UK and Ireland - fast-acting gas storage very effective at meeting this demand
- Peak gas demand is rising
- Shortage of comparable UK storage developments largest gas storage facility at Rough is ageing and may close or capacity be reduced
- Following current fundraising, by end of 2017 c. £17m will have been invested in the gas infrastructure project recognised as a strategic project for Europe
- The only AIM-listed company with exposure to the gas storage market
- Compelling market dynamics for the Islandmagee project and, subject to securing necessary funding, 2017 programme essential to position project for construction financing