

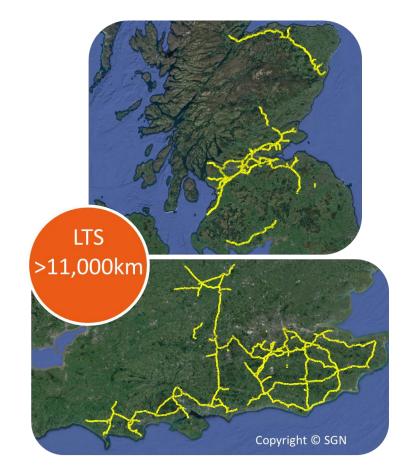
# **Scale of Local Transmission System**

- Pipelines are the safest and most cost-effective way of transporting hydrogen at scale.
- Transmission pipelines play a critical part in hydrogen transportation at "whole systems" level.

National Transmission System (NTS) owned and operated National Gas



Local Transmission System (LTS) owned and operated by GDNs

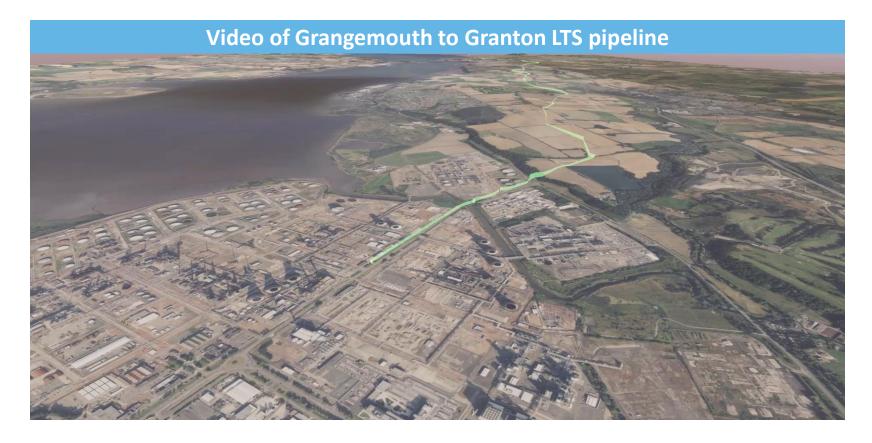




## LTS Futures Overview

### **Project Objectives**

- 1. Understand the suitability of wayleaves and communication with landowners
- 2. Determine the **suitability of the materials** in the network **for hydrogen.**
- 3. Validate the operational strategy for operating a hydrogen network, identifying any differences from operating a natural gas network.
- 4. **Develop the skills, competencies,** and procedures, for managing, operating and maintaining assets in a hydrogen network
- 5. Define the role of LTS in a hydrogen system transformation.

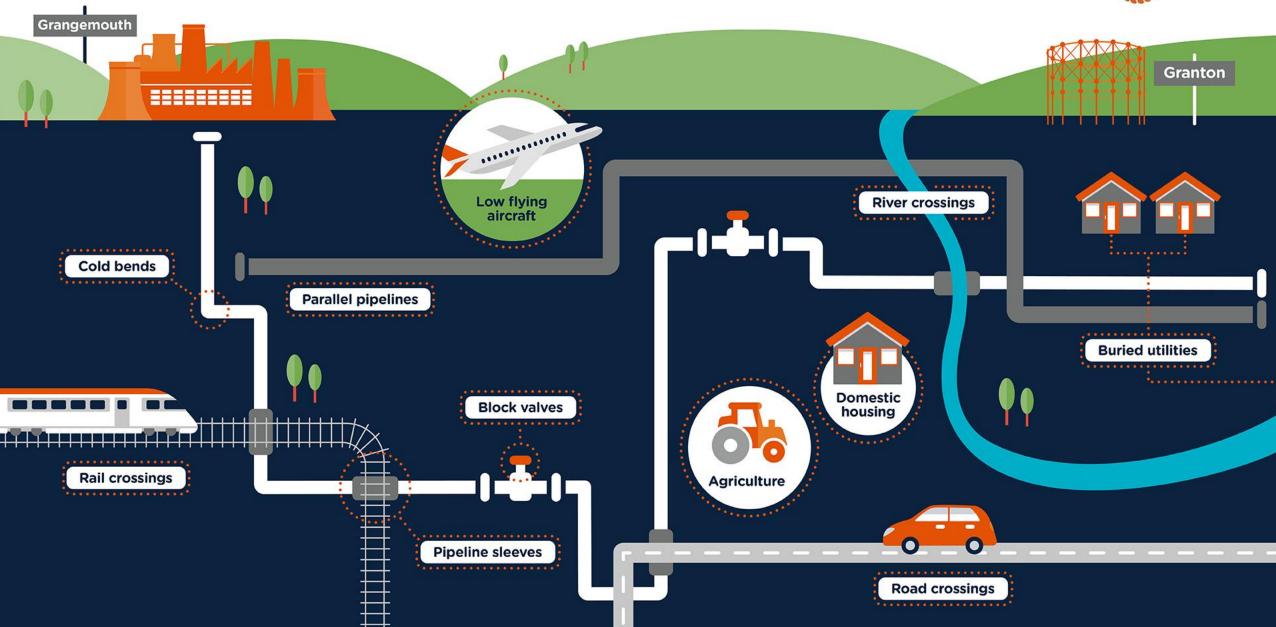


Outcome	Location	Length	Timeline
Repurposing Blueprint	GB Wide project	3,000km (SGN) 11,600km (GB)	2022 - 2026
Grangemouth to Granton live trial	Grangemouth - Granton	30km	2022 - 2025



# Why Grangemouth to Granton?









## **Element 4**

Live trial

## **Element 2**

**Element 1** 

Live trial design and construction

Lab testing

**Element 3** Offsite testing



## **Element 5**

**QRA** and safety



#### **Element 6**

Knowledge dissemination

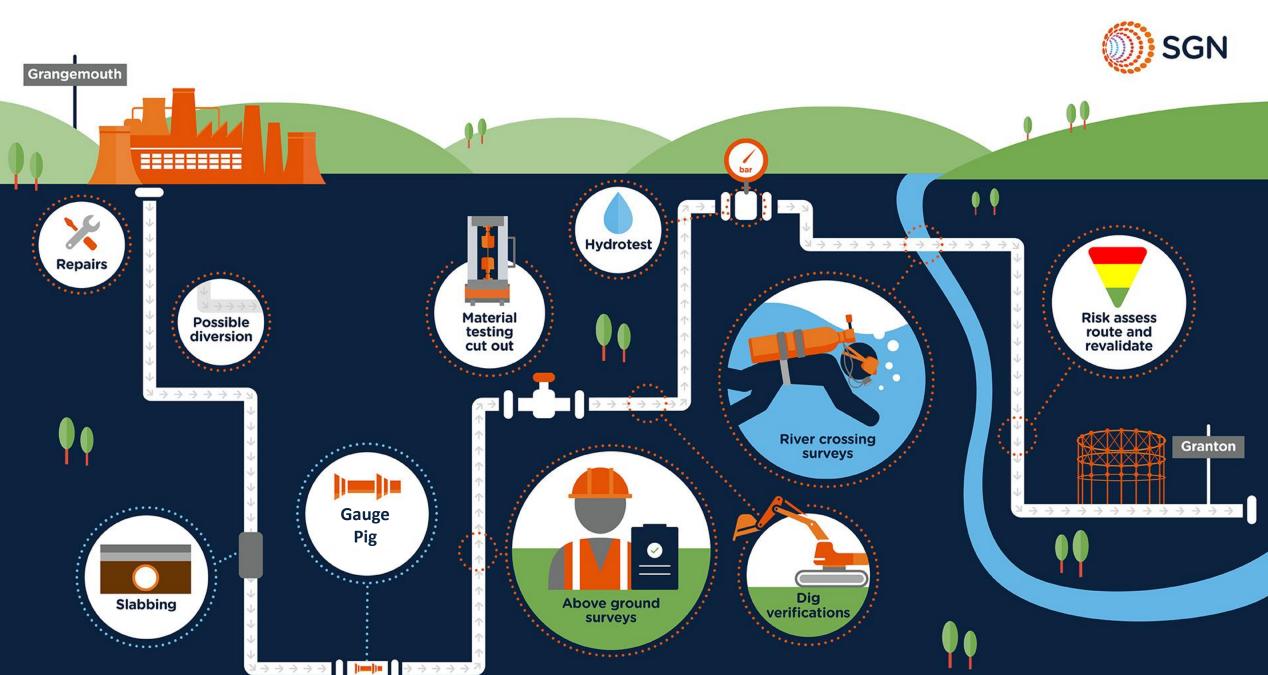


**Blueprint and** cost assessment











# LTS Futures Research and Development





