

# **Liverpool Bay CCS T&S Project**

## ***Procurement packages***

*June 2022*

# Agenda

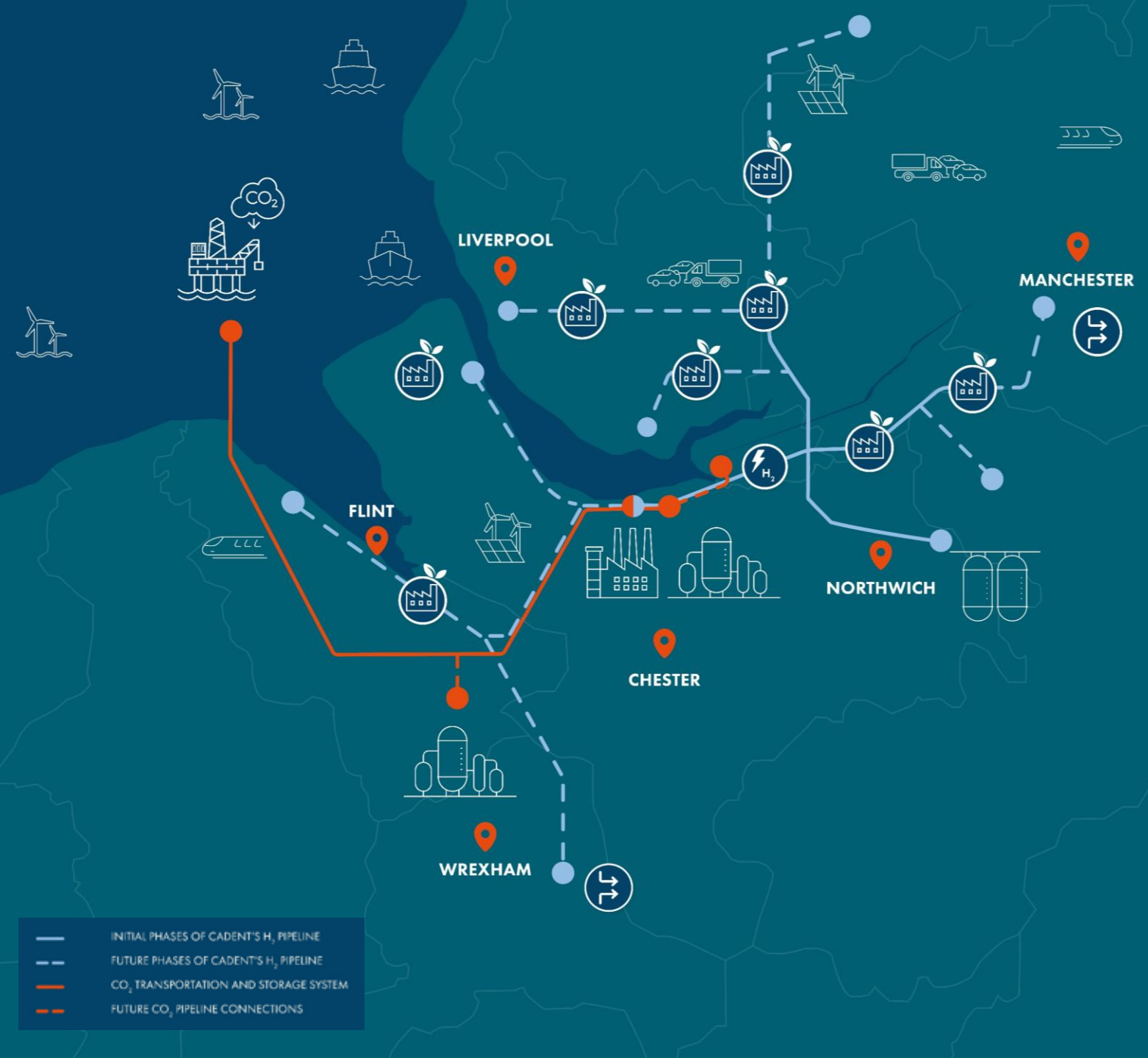
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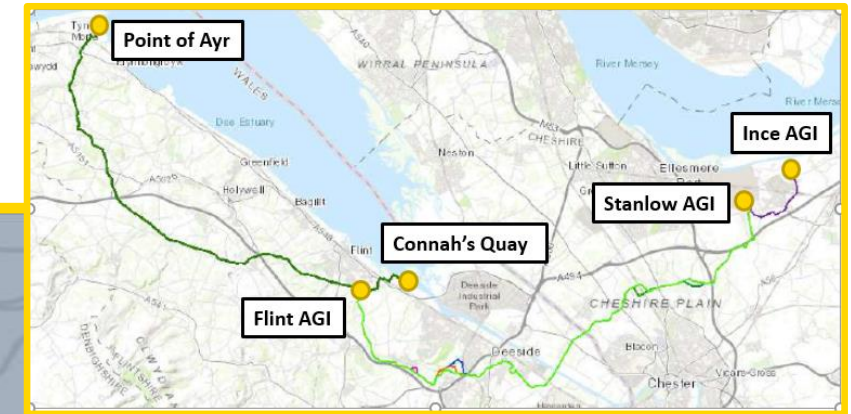
# 1 Project overview

# The **HyNet** North West Project – a “Track 1” Project

- Low-carbon hydrogen production plants, with CO<sub>2</sub> capture.
- A hydrogen distribution network, delivering hydrogen to industrial consumers.
- Hydrogen buffer storage in underground salt caverns.
- Facilities to capture CO<sub>2</sub> emissions from new & existing industry.
- CO<sub>2</sub> transport and storage infrastructure, delivering CO<sub>2</sub> to safe, permanent storage in Liverpool Bay.



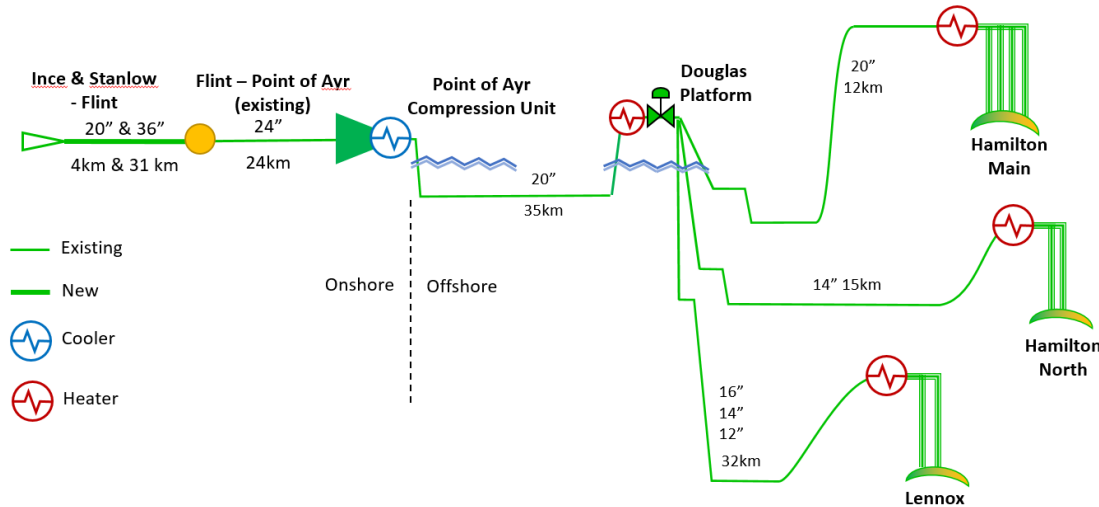
# Eni's Liverpool Bay T&S project



- **New-build onshore pipeline from emitters to Flint**
- **Repurposed existing onshore natural gas pipeline from Connah's Quay to Point of Ayr**
- **Redevelopment at Point of Ayr**
- **Repurposing and life extension of existing offshore structures and pipelines**
- **New power cable from Point of Ayr to Douglas platform and WHPs**
- **Drilling**



# Selected Concept and work package overview



## Scope will be executed via four main Work Packages:

- **WP1 – Drilling package – not covered at this event**
- **WP2 – Offshore Decommissioning, CCS & Cable Installation EPC Package**
- **WP3 – Onshore Decommissioning and CCS EPC Package at Point of Ayr**
- **WP4 – Onshore pipelines contract**

### **WP2 – EPC Package including:**

- Detail Engineering
- Offshore decommissioning to enable CCS project
- CCS design, supply and installation offshore
- Power and fibre optic cable installation between Point of Ayr and offshore platforms
- **Potential additional non-CCS related decommissioning offshore**

### **WP3 – EPC Package including:**

- Detail Engineering
- Onshore decommissioning at Point of Ayr to enable CCS project
- CCS design, supply and installation at Point of Ayr for “free-flow mode” start-up project
- **Non-CCS related decommissioning**
- Addition of compression and cooling at Point of Ayr

### **WP4 – EPC Package including:**

- New build pipeline Ince to Stanlow and Stanlow to Flint
- Above Ground Installations and Block Valve Stations
- New Block Valve Stations on existing Flint to Point of Ayr pipeline
- Abandonment of existing pipeline Flint to Connah’s Quay

## 2 Procurement packages



# General Scope Overview for EPC packages

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## Contractor responsibility:

### **1. Decommissioning scope, where included**

- *Detailed engineering*
- *Decommissioning, removal and disposal*

### **2. CCS Development**

- *Adoption of the FEED designs*
- *Detailed engineering and overall engineering design responsibility*
- *Procurement. Long Lead Items are being identified by Eni UK and where necessary will be free-issued or novated to Contractors*
- *Fabrication, transport to site*
- *Onshore construction / Offshore installation as appropriate*
- *Commissioning (up to ready to accept CO2)*
- *Preservation, where appropriate*
- *Commissioning assistance for introduction of CO2*





# WP2 Offshore Decommissioning & CCS development

## Douglas Hub Platform

- Decommissioning engineering – redundant equipment removal
- Offshore decommissioning, removal & disposal for CCS
- Detailed design, supply, installation and commissioning of CCS module, approximate weight **800t**.

## Wellhead Platforms (Lennox, Hamilton Main, Hamilton North)

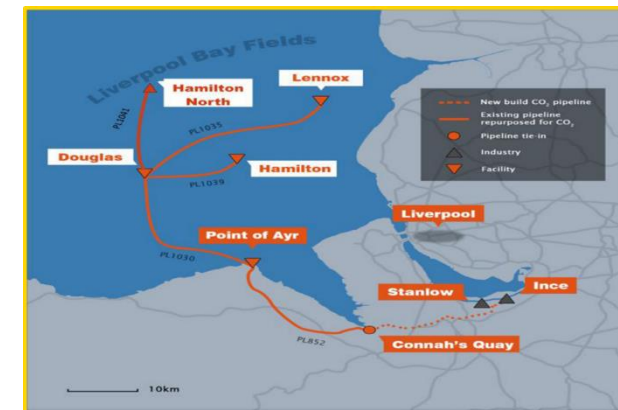
- Decommissioning engineering – full topsides removal
- Offshore decommissioning, removal & disposal for CCS
- Design, supply, installation and commissioning of CCS modules, approximate weight **600t – 1000t each**.

## Optional decommissioning (Owner Option)

- Douglas WHP
- Douglas accommodation
- Conwy WHP
- Offshore storage installation
- Pipeline and subsea

## Offshore cabling

- Electrical power cabling
- Point of Ayr to Douglas ~34km, twin cables
- Between platforms >60km



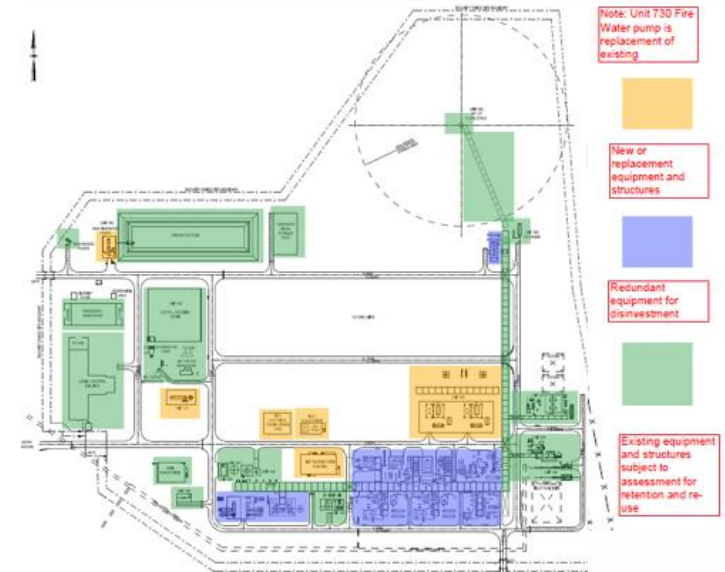
# WP3 Onshore Decommissioning and CCS development at Point of Ayr

## Decommissioning

- Decommissioning engineering
- Site decommissioning, removal & disposal

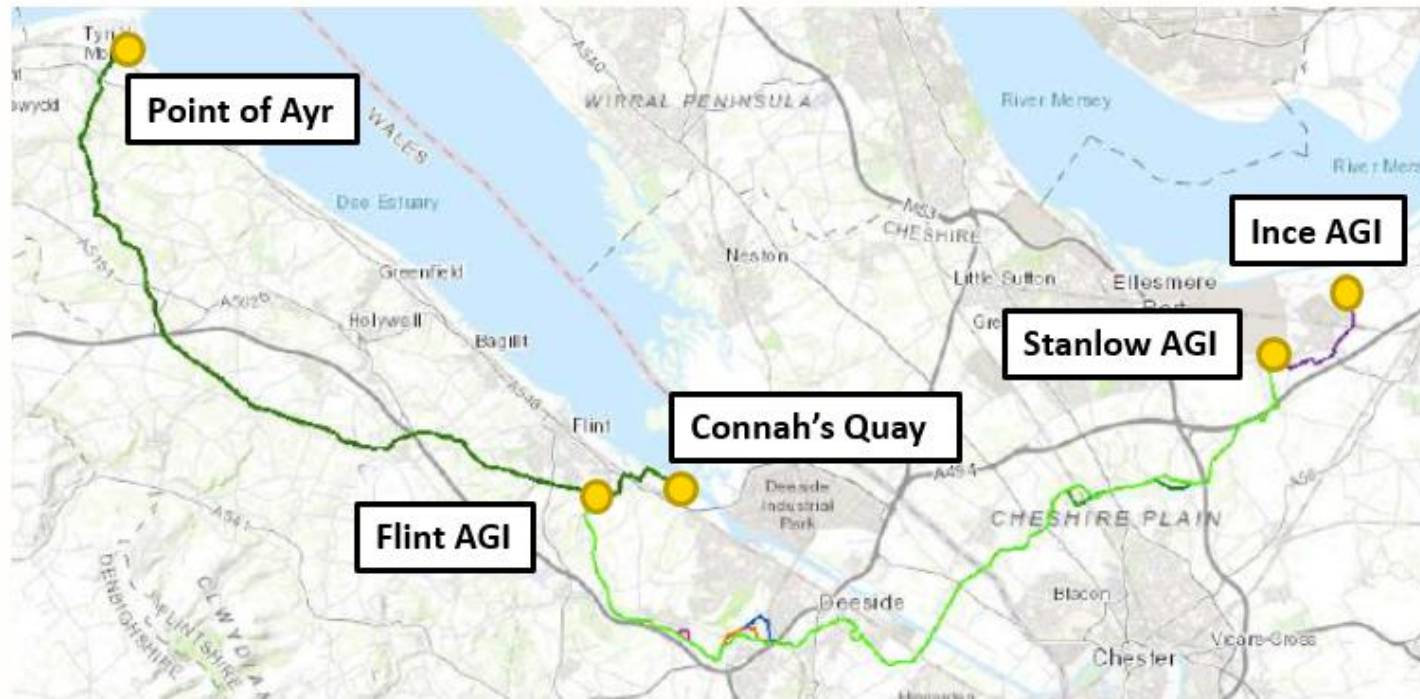
## CCS Development

- Detailed design, supply, construction and commissioning
- Initial “free-flow mode” CCS Scope includes:
  - Power supply infrastructure
  - Site power system
  - Utilities
  - Site control system and control centre for full T&S system
  - Civil and structural works
  - Pipeline and site piping works
- Expansion CCS Scope includes:
  - 3 x 50% CO<sub>2</sub> compressors
  - After-cooler system
  - Tie-ins to power, control and safety systems
  - Tie-ins to piping systems.
  - Any necessary utilities
  - Civil and structural works





## WP4 - Pipelines



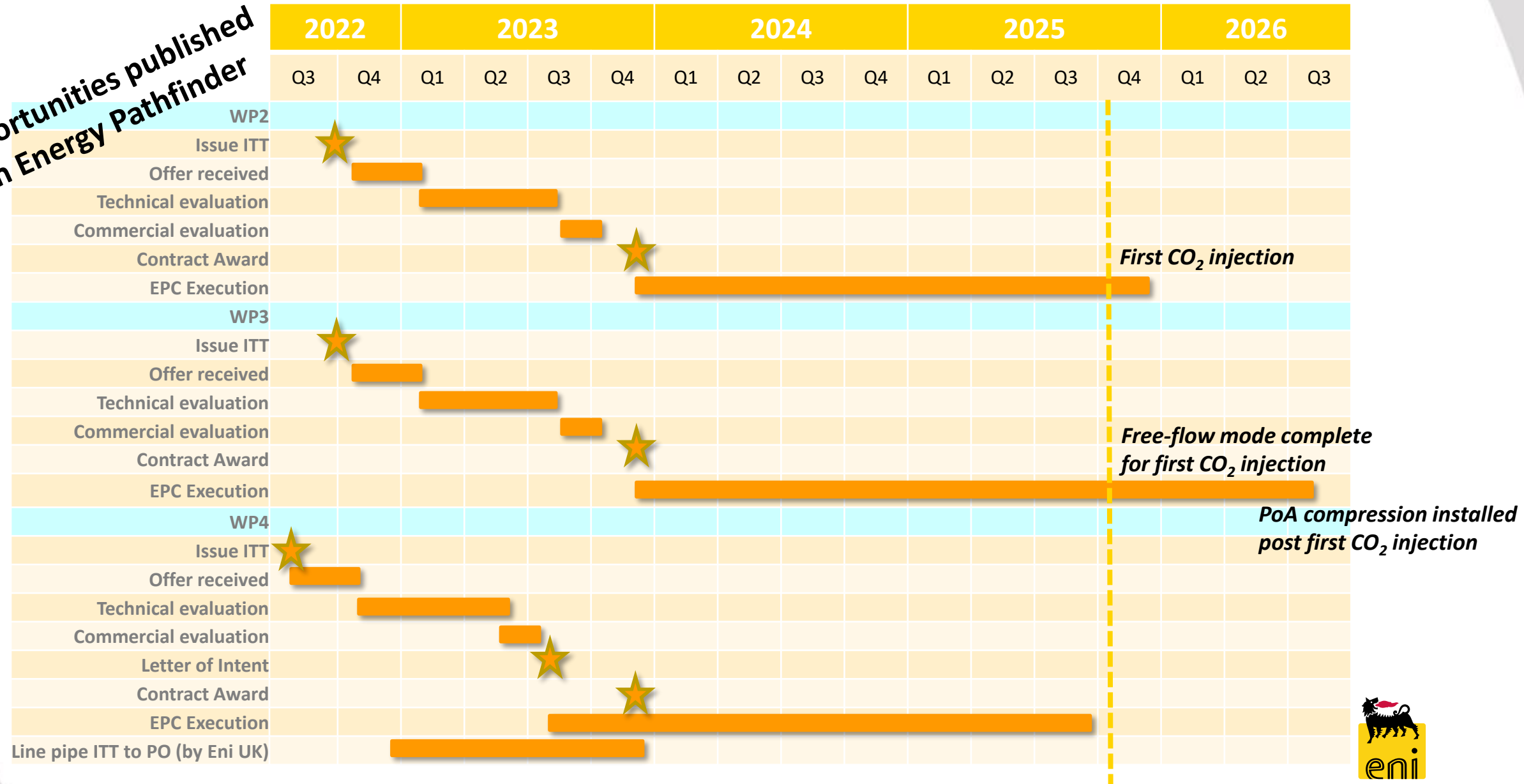
- Above Ground Installations at Ince, Stanlow (inside refinery), Northop Hall and Flint.
- 20" pipeline from Ince to Stanlow.
- 36" pipeline from Stanlow to Flint
- Four Block Valve Stations on 36" pipeline.
- 24" tie-in line from Flint AGI to existing 24" pipeline
- Three new Block Valve Stations on existing Flint to Point of Ayr pipeline
- Abandonment of existing pipeline section Flint to Connah's Quay
- *XX railway crossings*
- *YY major road crossings*
- *ZZ crossings of waterways, incl. River Dee.*
- *AA crossing of major pipelines*

	Existing 24"	New-build 36"	New-build 20"
Length (km)	24	31.1	4.1
Wall thickness (mm)	11.1 or 22.2	14.3 or 20.6	9.5 or 14.3
Material	CS X60	CS X60	CS X60

# 1 Tendering & execution schedule

# Tendering & execution schedule for WP2, WP3 and WP4

Opportunities published  
on Energy Pathfinder



# Tendering schedule for main items

	2022				2023			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Pipeline intelligent pigging	awarded							
Offshore data acquisition	awarded							
Completion equipment								
Conductor pipe								
Drilling services (several contracts)								
Logistics contracts (several contracts)								
Heaters (WP2)								
Line pipe (WP4)								
Valves (WP4)								
Offshore power cable (WP2)								
Emergency generator/pumps (WP2)								
Switchboards (WP2)								

# Local Content

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