Regulation

Wednesday 5th July 2023

We will start at 10.32 to allow participants to finish previous meetings and join the call

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Welcome and Opening

Thank you for joining us today

- We hope you find today's session informative and enjoyable
- Slido.com will be used for feedback and Q&A
- What you tell us will help us shape our future priorities

Martin Cook
Chief Commercial Director

Logistics

- Should last around 60 minutes
- Questions and Polls via slido.com using #NGT4
- All attendees on mute and cameras off
- Slides and recording will be circulated

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Who will be speaking?

Neil Rowley
Head of Regulatory Performance

Steve Rowe
Head of Regulatory Price Control T3

Joy Kentish
Future Regulatory Frameworks Manager

Lauren Chater
Customer and Stakeholder Specialist

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Agenda

1. RIIO2 – Uncertainty Mechanisms update
2. RIIO-T3
3. Common Planning Pathway
4. Questions

Uncertainty Mechanism Update

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Uncertainty Mechanisms | Summary & Headlines

- **RIIO-T2**: Significant number of Uncertainty Mechanisms (UM), ~ 18
- **UM**: Tool to manage uncertainty – Need | Solution | Cost
- The **intention**: of a UM is to bring a greater level of detail on the need case & cost case
- There have been **10 submission** to date, themes include:

Theme	Projects
Emissions Legislation – Compressors	*Next Slides*
NetZero	Project Union | 3 Methane Reduction projects
Asset Health	Compressor Cab | St Fergus & Bacton Investments
Customer Driven Capacity	Western Gas Networks
Cyber Security	Cyber resilience improvement across the NTS
Information Technology	4 IT projects, Example: Enhanced Asset Design

- We have had **Final Determinations** on 2 submissions:
  - Emission Legislation Driven Compressors – Wormington
  - NetZero – Project Union

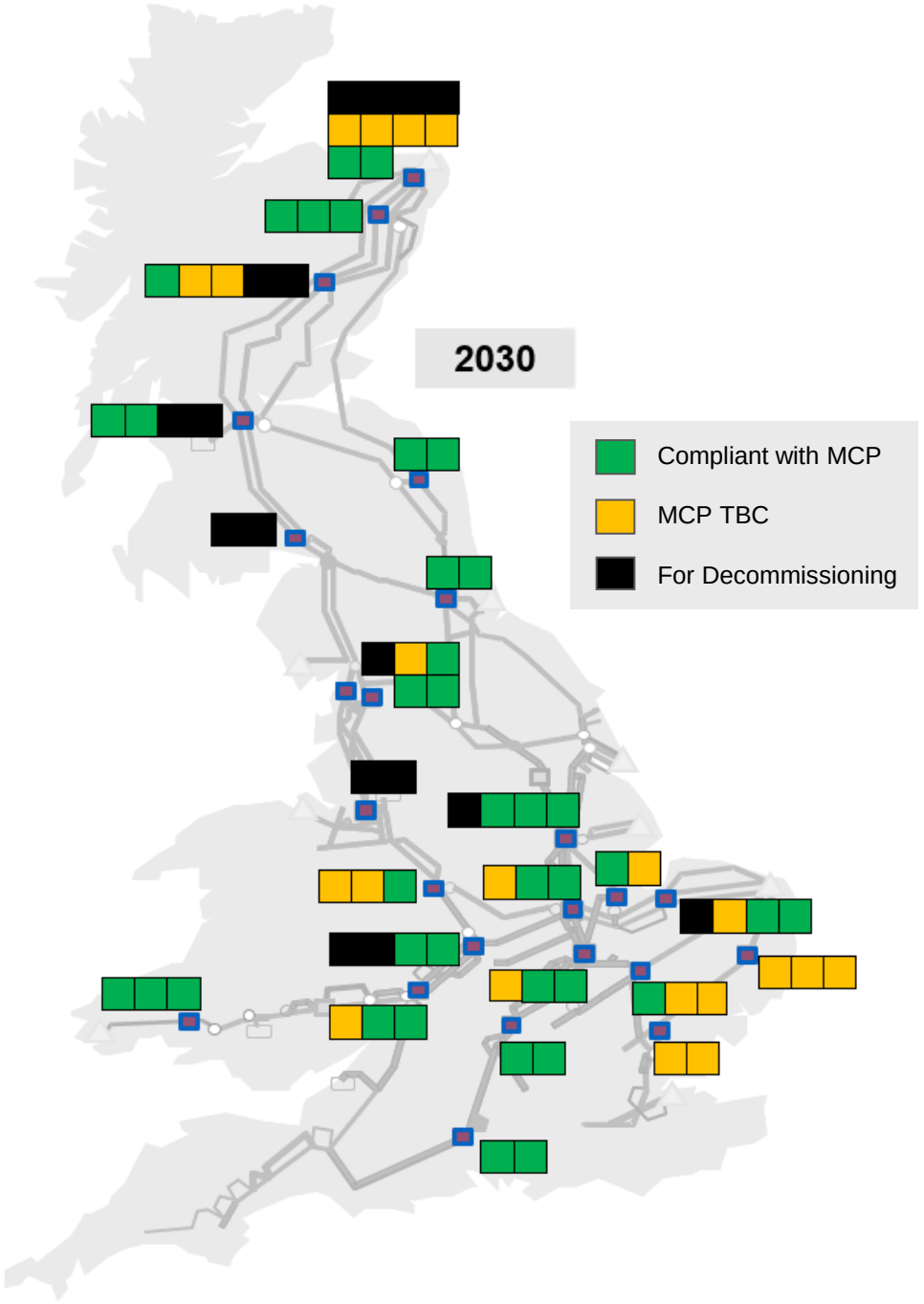
Emission Legislation Driven | Compressors

- **Medium Combustion Plant Directive:**
  - Compliance by 2030
  - Impacts Gas Turbines between 1-50MW
  - Not >150mg/m^3 Nitrogen Oxide

  - **Our challenge**: Meeting Environmental Legislations whilst ensuring sufficient network Capability and Resilience to a range of possible circumstance

- **Requirements**: 11 Sites | 24 Compressors to be determined on

- **Options**:
  - **Decommission**
  - **Derogate** to 500hrs / annum
  - **Retrofit** abatement technology – Availability TBC
  - **New** compliance unit

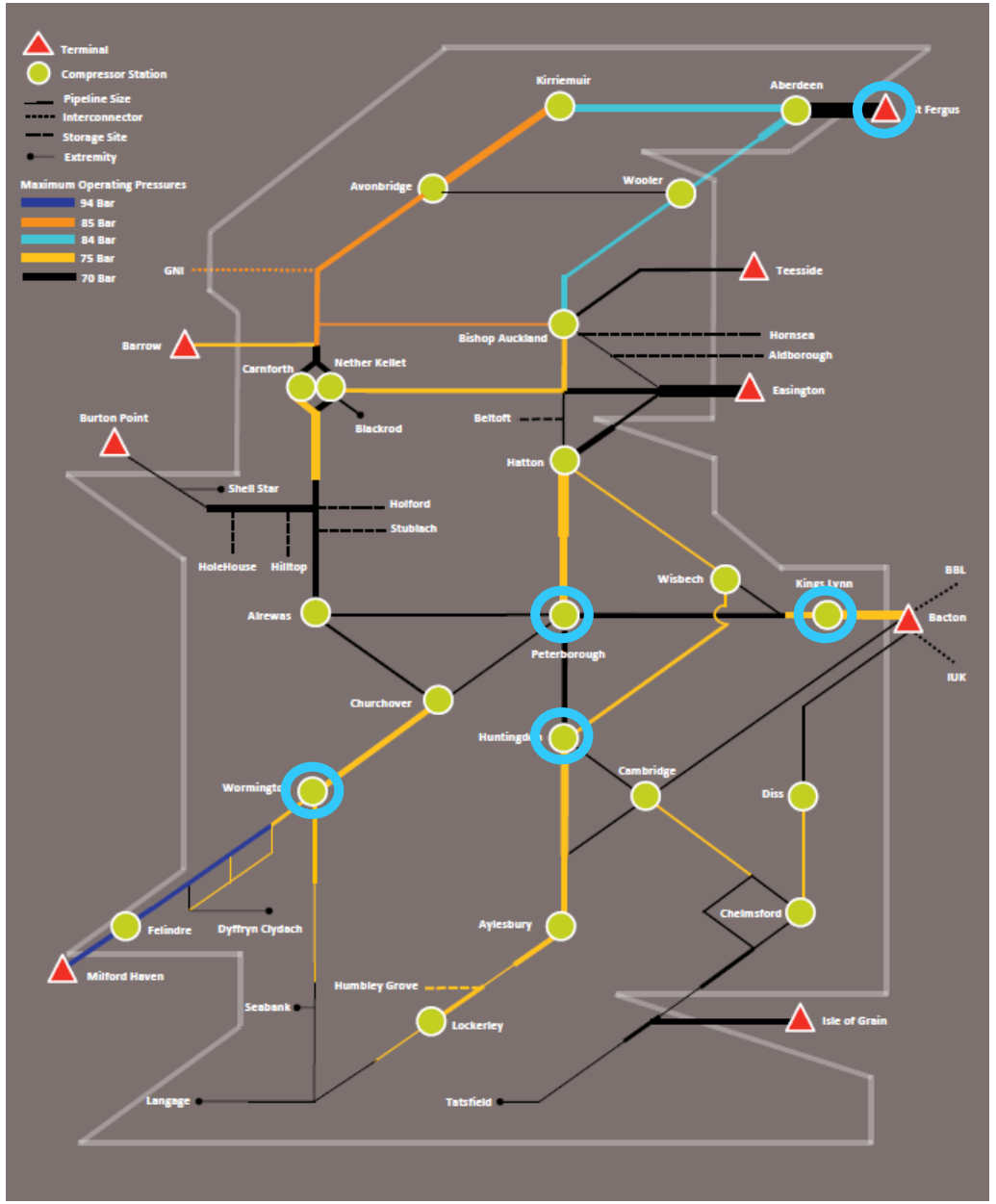


Priority Sites | First Round

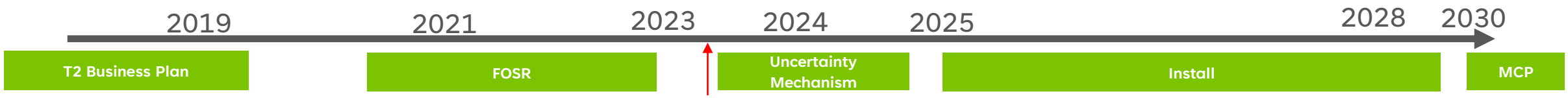
- **First sites**: 5 sites focusing on 12 compressors
- **Strategic Importance:** key sites to support meeting gas supply and demand
- **Remaining sites – Next Price Control:**
  - Kirriemuir | Diss | Cambridge | Chelmsford | Wisbech | Alrewas

Site	Status	Current Solution
Wormington	Final Determination	1 new + 1 retained
St Fergus	Ofgem Preferred Option Consultation	3 new + 1 retained (500hrs)*
Kings Lynn	Ofgem Preferred Option Consultation	1 retained (500hrs)*
Peterborough	Ofgem Preferred Option Consultation	1 retained* at each site (500hrs)*
Huntingdon		

* DLE retrofit is acknowledged as a potential option should it come available



Process & Further Information



- **NGT Submit**: Developed the Final Option Selection Report
- **Ofgem Review**: Review NGT submission & determine ‘Minded to Position’
- **Stakeholders Views**: Ofgem publish consultation with ‘Minded to Position’ | Stakeholders with views & evidence of relevance are invited to respond
- **Final Determination**: Ofgem review submitted responses and determine final position – expected Nov 23
- **Cost Reopener**: 2024 / 2025 cost reopeners based on final determination due

RIIO-T3 Business plan

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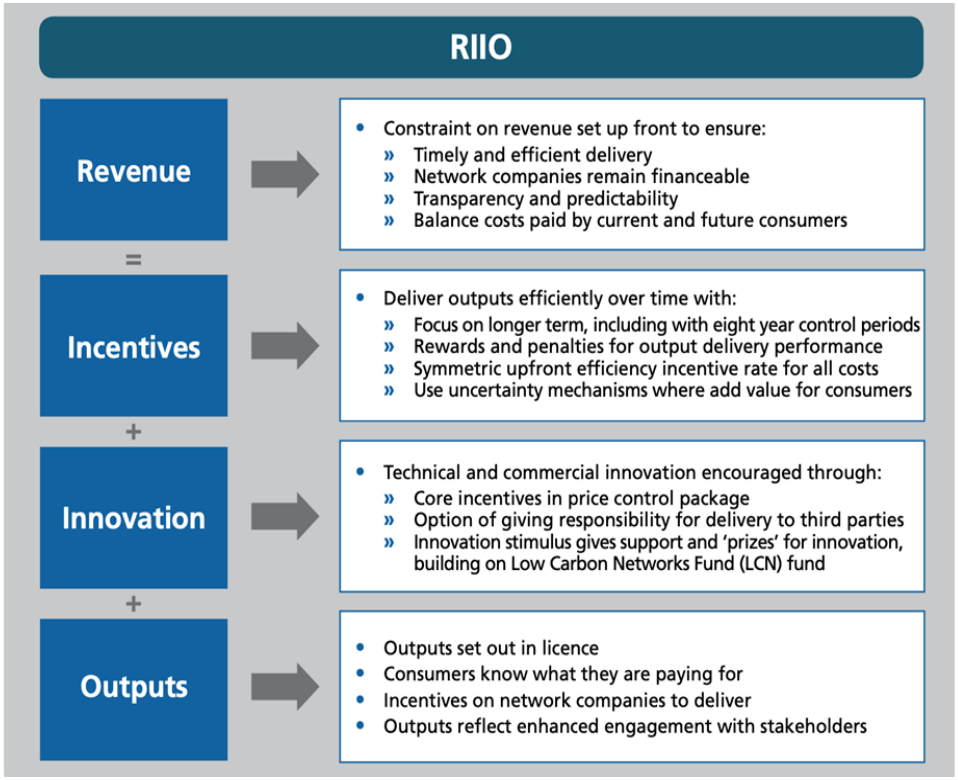
Background - RIIO framework

Ahead of each regulatory period, we submit a detailed Business Plan to Ofgem



Ofgem is currently consulting on how it regulates networks and drives performance for existing and future consumers. Decision due Autumn 2023

The gas network will perform a **critical role in ensuring secure energy needs**

Achieving net zero will require a **smart combination of all network assets, gas and electricity** alike

We are building our RIIO-T3 plan and considering how it is compatible with a Hydrogen future

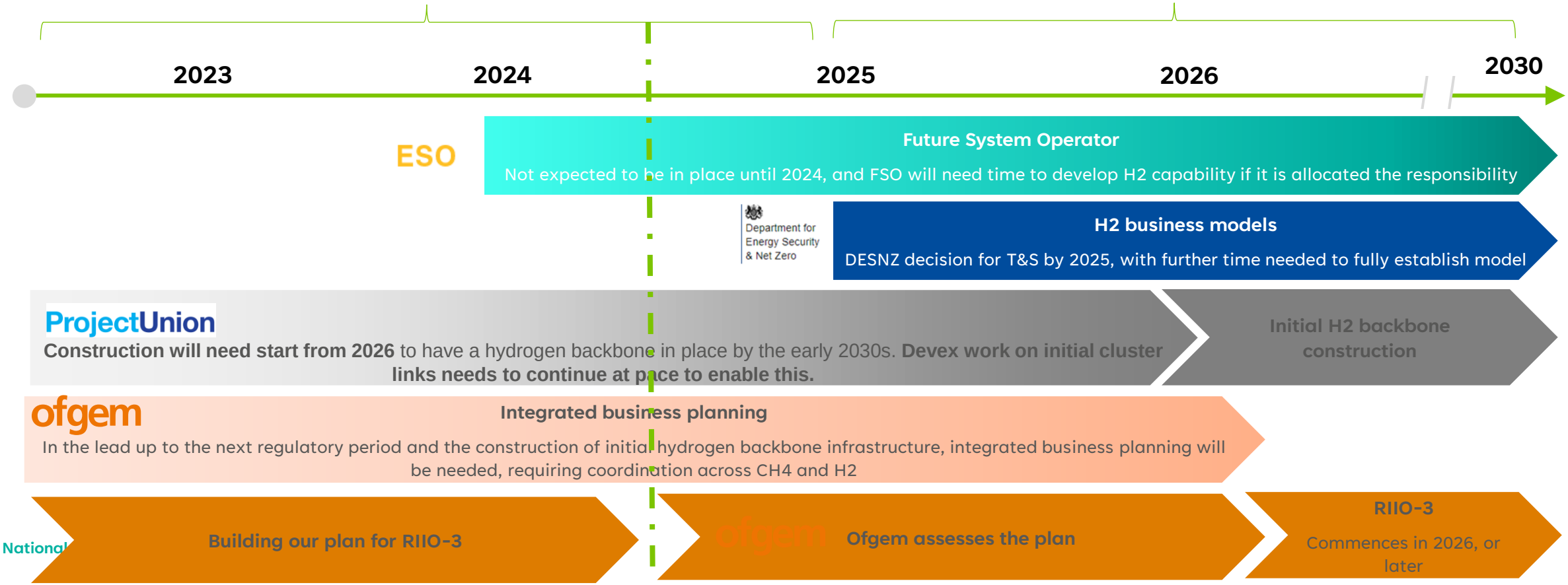
Practicality of building our plan for the next regulatory period

The timeline presents a number of challenges when considering developments across the natural gas and hydrogen landscape

Key takeaways

Interim arrangements needed to facilitate coordinated business planning, decision making and investment in initial H2 transmission infrastructure, and the CH4 network

Under current timelines, an **enduring framework** (including operational FSO and BM and designated regulator for H2 transport) will not be in place until beyond 2025



Leading a Clean Energy Future for Everyone

Vision

Our business plan aligns with Ofgem's duties and is recognised as ambitious and delivering value

Build, own and operate The UK's Future Hydrogen Transmission Network

Deliver RIO-1 levels of network reliability to our customers and UK consumers & customers

Sustained regulatory funding to enable delivery of core strategic ambitions & shareholder expectations

Grow the business into other areas associated with our core business

Priorities / Golden Threads

Core Narrative

Stakeholder Priorities

Incentives

Innovation

Outputs

Managing uncertainty

Expenditure

Financing our plan

Supporting Information

Competence supporting information must be consistent with past performance & current narrative

Engineering Justification Paper / Evidence

Business plan data & narrative templates

Cost benefits analysis template e.g. CBA, ROA

Additional evidence i.e. consultant reports

Leading a Clean Energy Future for Everyone

Regulatory Framework

Performance related framework

Facilitates Hydrogen and transition to Net-Zero

Stakeholder Advocacy

Plan externally supported

Exceeds Ofgem expectations

Our People

Passionate about the plan

Delivered together

Business Plan

Delivers consumer value

Exceeds Ofgem's criteria

Ambitious plan

Trusted Delivery

Underlying performance story

Robust and credible delivery plan

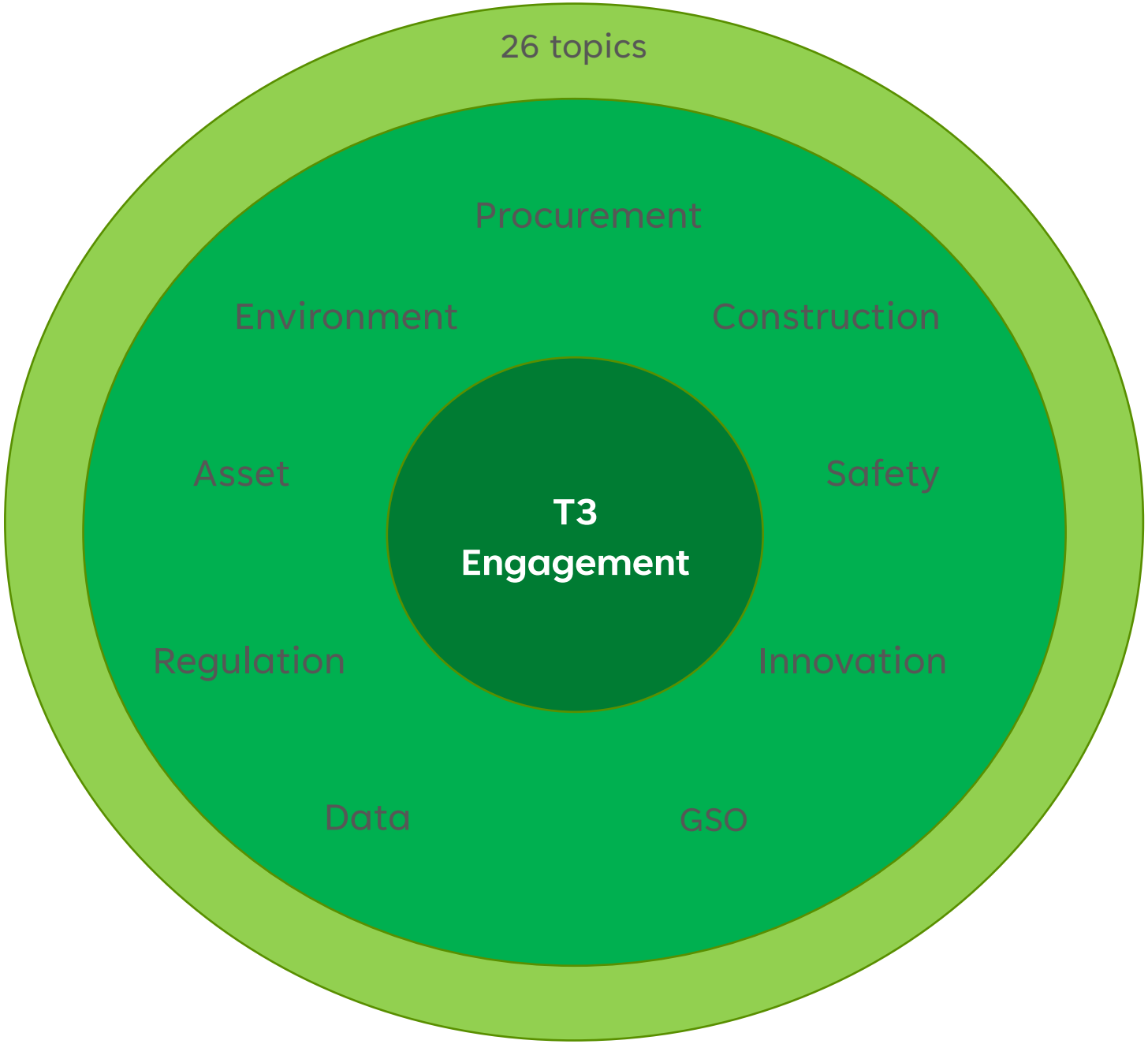
Financial Framework

Delivers a fair return

Critical Success Factors

Engagement topics

- Topics developed working across the business
- 9 Key areas for engagement – containing 26 topics
- Key stakeholders identified
- Engagement methods being planned across each topic



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Quick Poll

How would you like to be engaged/consulted as we progress through our RIIO-T3 plan build?

Common Planning Pathway

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Common Planning Pathway

Problem

We don't yet have a **common pathway** across the whole energy system on the journey to achieve **Net Zero by 2050.**

Without it, we risk underbuilding and undermaintaining energy networks, which could be detrimental for GB energy security and UK PLC.

Difference

A **collaborative** project, designed to develop a **'no regrets'** planning route based on peak demand use across **gas, electricity** and **hydrogen**

Impact

The benefits of having the common planning pathway,

1. **Protects** society & it's energy needs
2. **Supports** an orderly transition to Net Zero including Hydrogen
3. **Enables** power networks to **operate efficiently** to fulfil their role in decarbonaisation at the lowest costs to consumers.

Outcome

Enable investment planning across whole system, which will be used to inform the **T3 business plan submission**

You told us that aligning a plan around whole system energy and common planning assumptions was of top priority, ahead of FSO.

DNV

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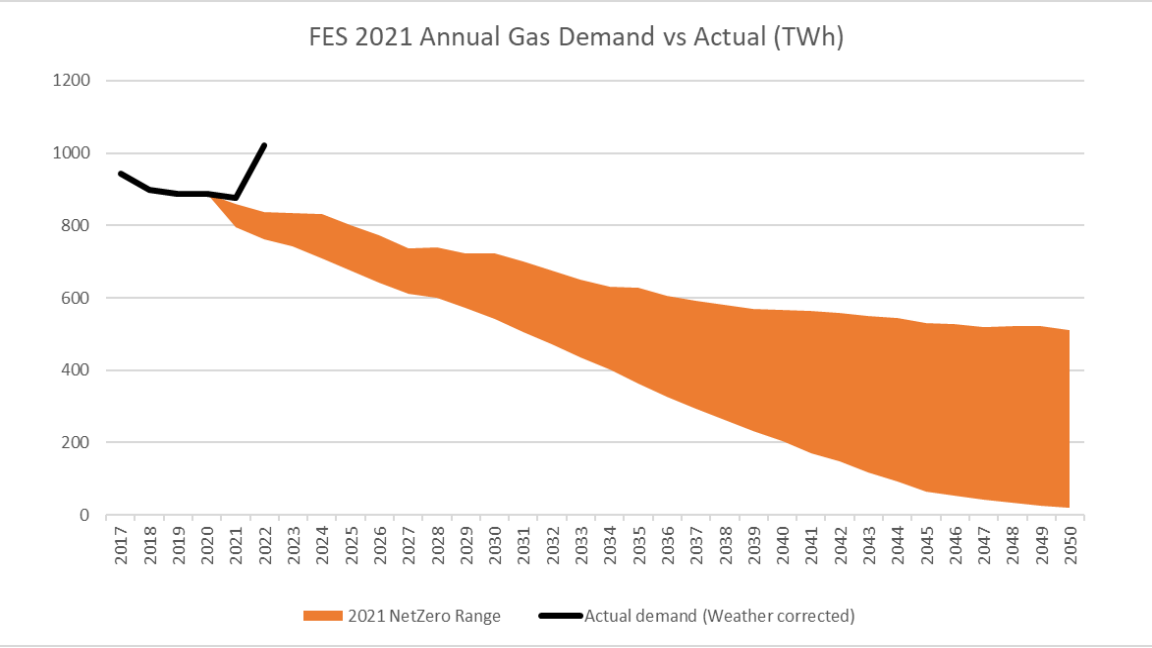
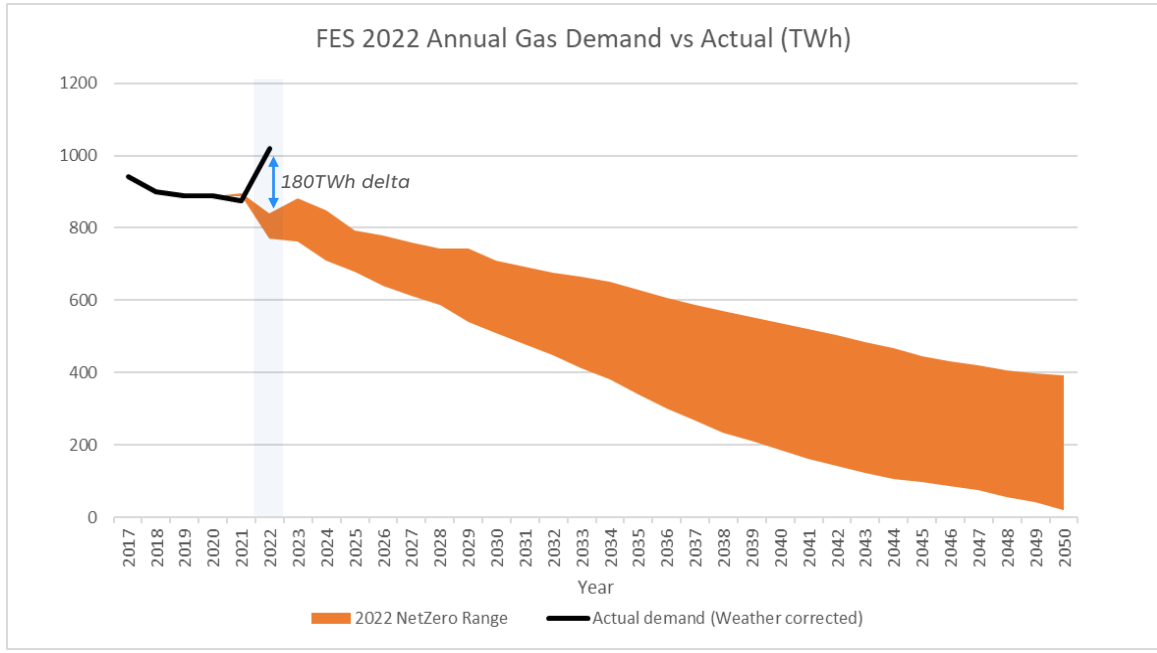
Why it is important?

- Considers all voices in the ‘Whole System’
- Prioritises system resilience and security of supply
- Reduced infrastructure costs, as peak demand across all vectors optimised in a whole system approach
- Provides a planning basis until FSO capability is in place

Actual Gas Demand vs FES Net Zero Scenario

- Actual annual demand (weather corrected) has been tracking well above all the FES Net Zero scenarios:





Planning based on FES 2022 NZ scenarios would have resulted in a potential ***180TWh*** *(~18%) shortfall in gas supply capability last year – equivalent to the typical annual gas consumption for* ***~15mn households****

Source: NGESO, Ofgem (*based on 12,000KWh annual gas consumption for medium household)

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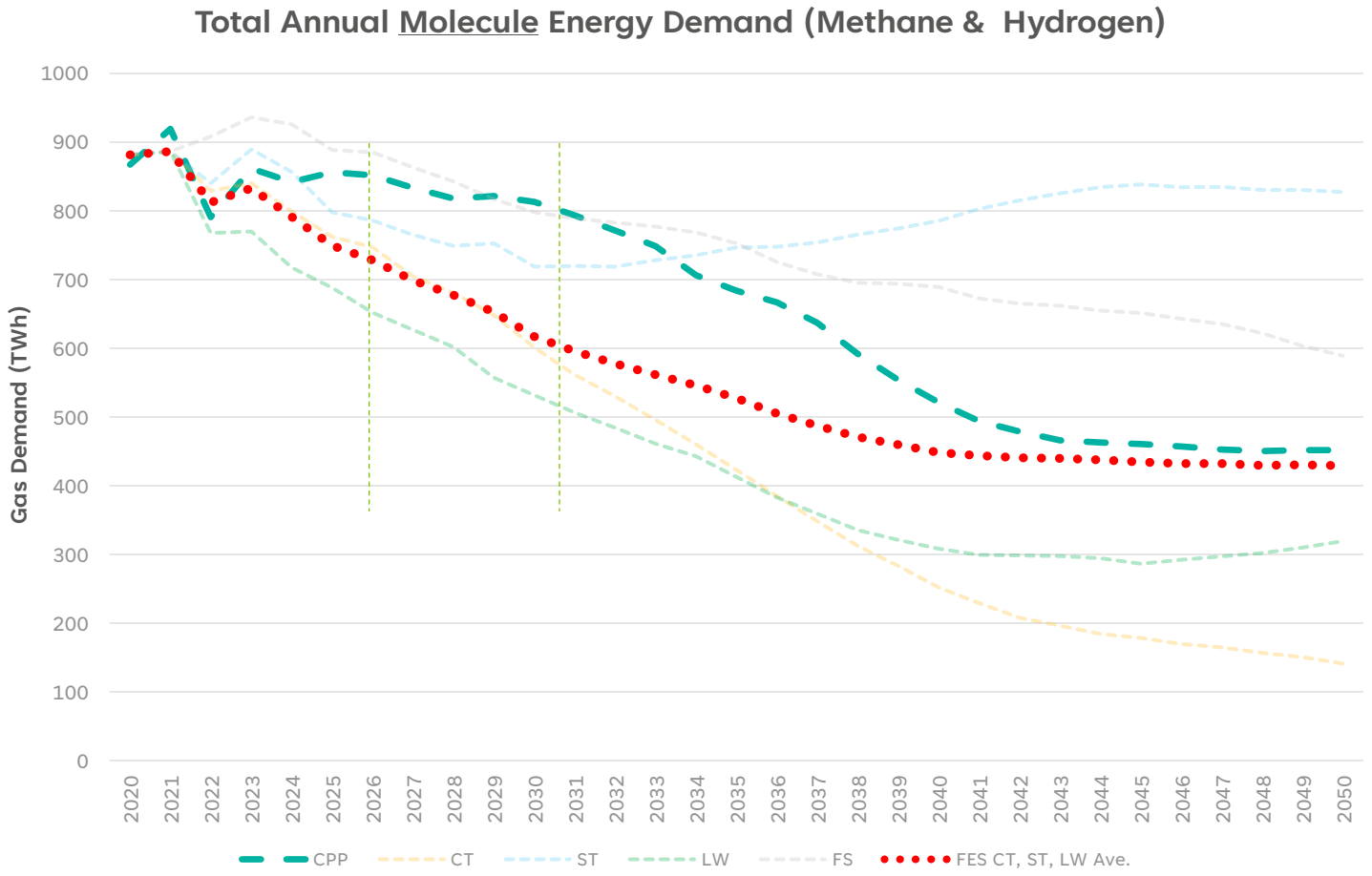
Comparing FES and CPP for overall molecule demand, including methane and hydrogen



- The Common Planning Pathway shows a **significantly higher overall gas demand** to 2030 than is projected by the Future Energy Scenarios (average of the net zero FES)
- **System inertia** means that the CPP projection *diverges* from FES ***early on*** before converging towards FES projections in 2040
- Planning based on the FES demand projections alone could result in ***under investment*** in the gas transmission network and presents a risk to **whole system resilience**

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Conclusions

Investment in the gas network is needed to ensure an energy secure transition to net zero

CPP shows higher overall gas demand to 2030 than FES (average)

Investment planning based on equally weighted FES scenarios risks underinvesting

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Next steps

Review and test final report from DNV

Iterate CPP, use to inform our investment planning until FSO established

Further discussion with stakeholders

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Quick Poll – Results

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Quick Poll

Do you have any thoughts on the summary findings?


Q&A
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What next?

You will receive the recording and materials from today's session

If you have any further questions or would like to discuss anything specific please get in touch:
engage@nationalgas.com

Feedback is important to us, therefore if you have not already taken part, we would like to put you forward for a survey

Further Webinars

Event Name		Date/Time	Hosts
Keynote Speech	Catch Up	28th June | 10:00	Martin Cook, Jake Tudge
Commercial Frameworks	Catch Up	29th June | 13:30	Ian Radley
Future of Gas	Catch Up	03rd July | 10:00	Danielle Stewart
Regulation	Current	05th July | 10:30	Martin Cook
Operating the Network	**Sign Up**	**06th July | 10:00**	**Ian Radley & Craig James**

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Thank you

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Quick Poll – Results

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Type your question here...