

## **Decarbonisation Working Group**

*17<sup>th</sup> September 2019*



**1 Introductions (10:30 – 10:40)** *(Pete Wightman, Head of Gas Distribution)*

Summary of previous meeting and the progress of actions.

**2 Net Zero (10:40 – 11:05)**

- Discussion on Ofgem's published letter regarding net zero.

**3 Heat policy reopener (11:05 – 11:40)**

- Ofgem to set out policy developments heat reopener could respond to.

**4 Environment Report (11:40 – 12:15)**

- Ofgem to present details of environment report.

**5 Any other business (12:15 – 12:30)**

- Actions for completion will be circulated by Ofgem.
- Date of next meeting: **TBC**

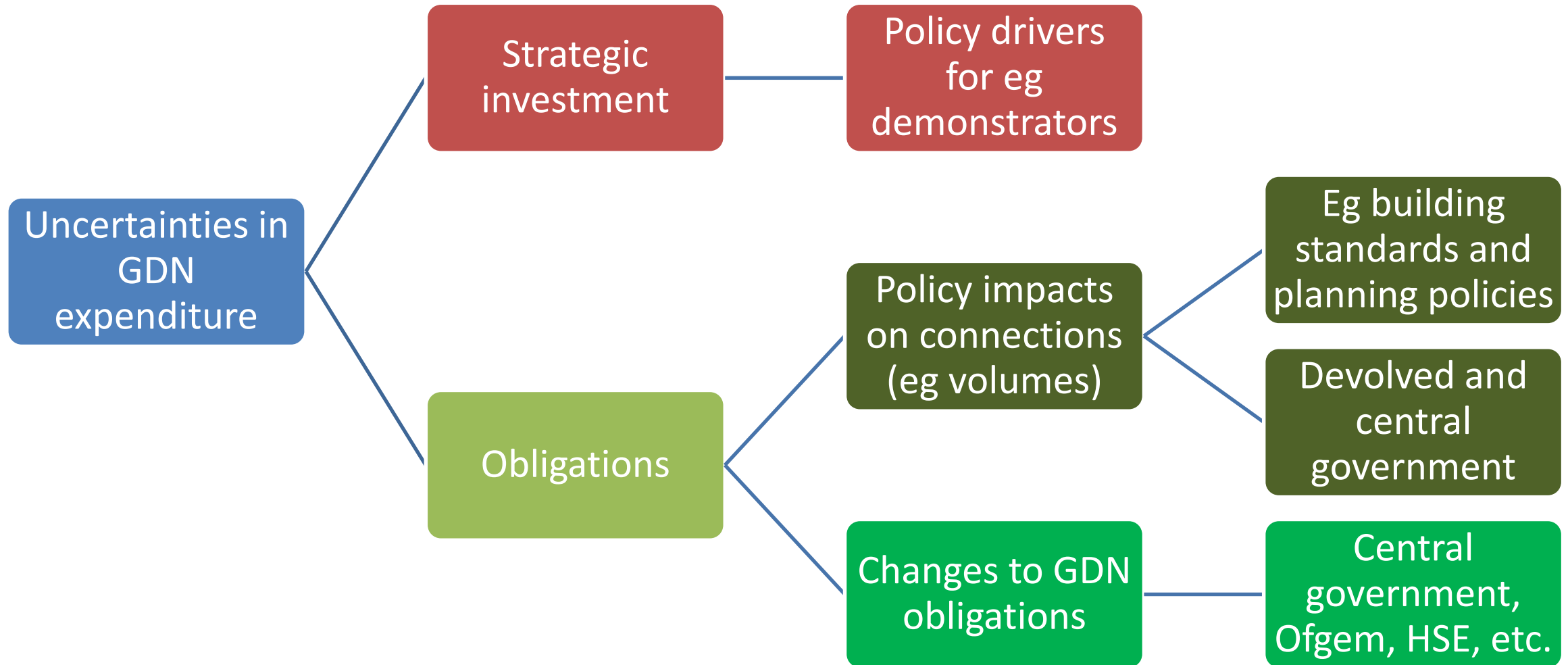
## Net zero



## Heat policy reopener



- 3.62 We will create a symmetrical 'Heat Policy re-opener' uncertainty mechanism to respond to policy-driven requirements for some, or all, GDNs to change their spending significantly during RIIO-GD2 to support a transition to low carbon heat.
- 3.63 We recognise there are a variety of potential heat decarbonisation policy developments that may warrant re-opening certain cost allowances in the price control. [There are potential government policies] that could mean we need to use a re-opener to reconsider the outputs we set for companies in addition to cost allowances.
- 3.65 We will work with GDNs and stakeholders to [...] ensure the price control can respond to significant developments across a suitably broad range of heat decarbonisation policy options. Working with stakeholders, we will specify as precisely as possible the activities and expenditures that will be in the scope of the re-opener.



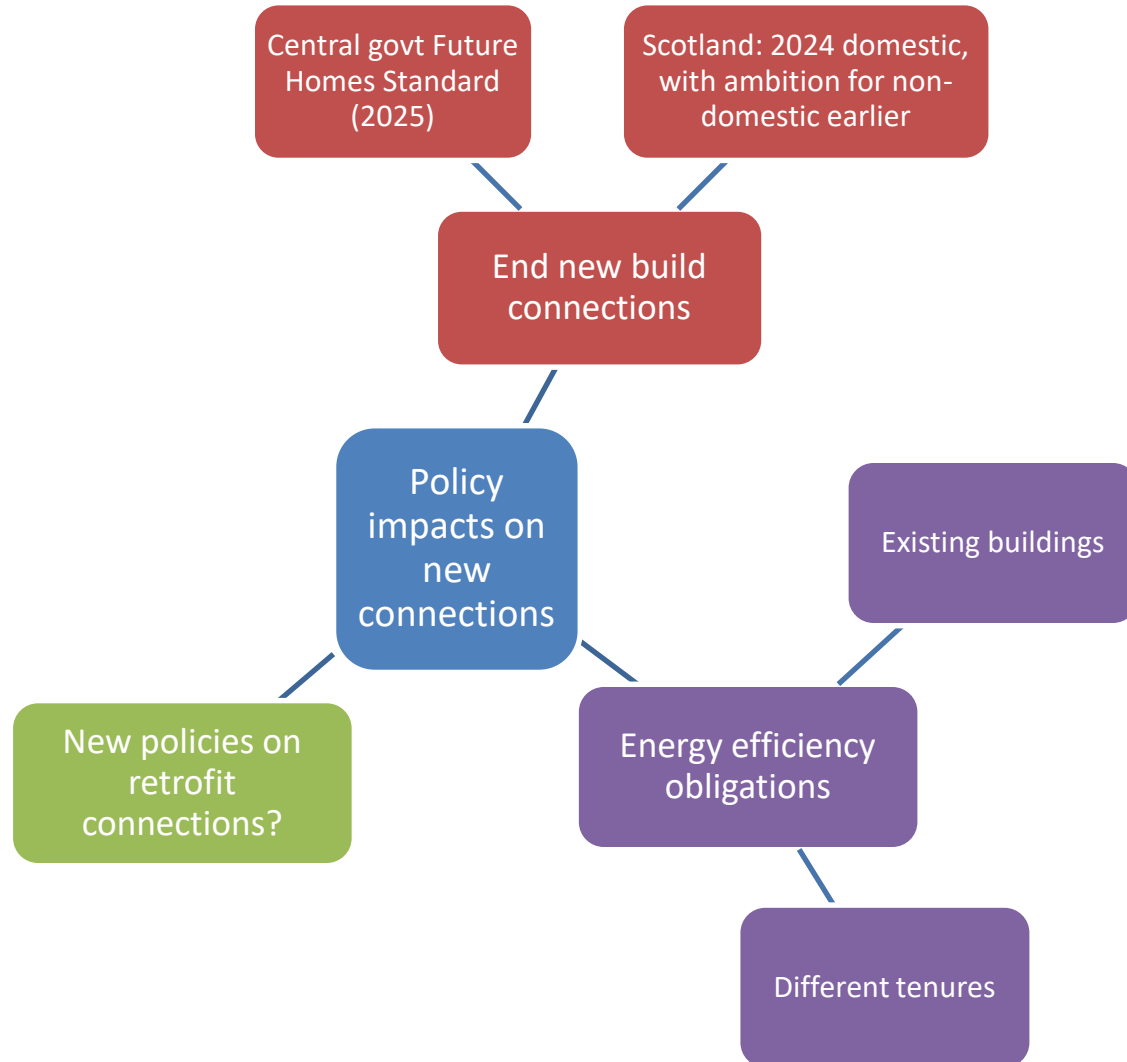
# **Scope of today's discussion**

- Aim to discuss changes related to common GDN obligations
  - Capture the range of consequences arising from potential heat policy developments
  - Identify evidence needs to understand materiality
- Questions of strategic investment are separate
  - Investments/projects potentially company specific
    - Alternative mechanisms may be more suitable, such as proposals for bespoke uncertainty mechanisms
- In May SSMD we decided to include
  - FPNES reopener to retain the flexibility to stop the scheme, if appropriate, in response to developments in government policy
  - HSE policy reopener to respond in the event changes materially affect repex

We are continuing to develop these uncertainty mechanisms in parallel with the heat policy reopener



# **Domestic connections**



- Multiple potential policies impacting number of new connections
  - Across devolved and central government
- Expenditure needs arise due to obligations on GDNs
  - Eg 10m rule in SLC 4B
  - *Ex ante* allowance in GD1
  - Obligations and volumes could both change in response to heat policies
  - Materiality ~£50m/year

- In response to the potential complexity of uncertainties in this area it may be appropriate to allow costs for domestic connections as a volume driver rather than base revenue.
- Possible design
  - Unit rate (per-connection) for non-FPNES domestic new connections
  - Calibrated to reflect costs of meeting obligations (eg 10m rule Domestic Load Connection Allowance)
  - Heat policy reopener could recalibrate per-connection rate if obligations change
  - Would not apply to non-domestic connections due to low materiality
  - SQ sent to companies on 6/9/19 for information to help clarify cost drivers
- Advantage
  - Simple mechanism to respond to a range of heat decarbonisation policy uncertainties
  - Removes volume uncertainty which could be prevalent in RII02
- **Questions**
  - **Responses to this as a potential mechanism of handling policy-driven uncertainty in GDN costs for new connections?**
  - **What are the key design considerations (eg separate calibration for new build and existing buildings)?**

**Other GDN  
obligations  
potentially  
impacted by heat  
decarbonisation  
policy**

Policy development	Potential trigger	Potential impacts
Changes to gas chemical composition regulations	Changes under GS(M)R and/or GCOTER	New systems/procedures and monitoring equipment
Changes to entry connection charging	UNC modification	GDNs bear some of the costs of entry gas connections
New obligations to promote emissions reductions (eg SME energy efficiency)	UK government legislation	Costs to deliver new obligations
New obligations to prepare networks for transition (eg hydrogen, decommissioning)	UK government legislation	Costs to discharge obligations to prepare networks
Changes to obligations on GDNs to socialise domestic connection costs (eg Domestic Load Connection Allowance)	Licence change	Reduce connection costs (potentially per-connection costs if volume driver used for domestic connections)

- Scope of the heat policy reopener
  - Should the scope of triggers be restricted to these identified uncertainties?
  - Are there additional potential policy developments we have missed?
- Should our GD1 approach to materiality thresholds apply?
  - Threshold set as % of base revenue
  - Costs considered after application of the sharing factor
  - 1% for individual cost areas
  - 3% for combined cost areas

**Appendix:  
modified/new  
obligations driven  
by heat  
decarbonisation**

- What could change?
  - Regulation of gas composition sets limits both for combustion characteristics (GSMR) and energy density (GCOTER — ensures volume-based metering can register energy consumed)
  - Relaxing limits could:
    - Facilitate biomethane entry (including reducing need for propanation)
    - Enable hydrogen blending
    - Avoid potential need for nitrogen ballasting
- How could change come about
  - GS(M)R and GCOTER are implemented by HSE and Ofgem respectively
  - Some limits are prescribed in legislation
- Could change materially impact GDNs?
  - Potential need for new systems monitoring equipment.
- Uncertainty mechanism options
  - Reopener triggerable by companies or Ofgem in response to material changes to GS(M)R or GCOTER



- What could change?
  - Cadent have launched a “Distributed Entry Gas Review of Commercial Arrangements”
- How would change come about
  - This could develop into a proposal to modify UNC
- Would change materially impact GDNs?
  - If connection charging arrangements change in such a way as to create new costs for GDNs, materiality would depend on:
    - The details of the new charging arrangements
    - The number and capacity of distributed gas entry connections
- Uncertainty mechanism options
  - Reopener triggerable by companies or Ofgem in response to UNC mod where impacts are material

- What could change?
  - BEIS [consultation](#) on support for SME energy efficiency suggested one route could be an obligation on network companies (cf Danish schemes)
- How would change come about
  - [Gas Act \(33BC\)](#) provides for SoS to impose emissions-reduction-promotion obligations on gas transporters
  - An order (ie secondary legislation) would be needed to effect change.
- Would change materially impact GDNs?
  - Materiality would depend on the nature of the obligation
- Uncertainty mechanism options
  - Reopener triggerable by companies or Ofgem in response to legislation creating new obligations on GDNs

- What could change?
  - Government could decide that (parts of) the gas network will
    1. be used to transport 100% hydrogen in future
    2. no longer be required in future
  - This could also lead to new requirements to prepare networks for transition
- How would change come about
  - Legislation could be introduced requiring companies to prepare networks
- Would change materially impact GDNs?
  - 1. and 2. are not mutually exclusive and could reduce or increase expenditure needs
- Uncertainty mechanism options
  - Reopener triggerable in response to legislation creating new obligations on GDNs

## Annual Environmental Report



In May SSMD we set out a cross-sector approach to environmental sustainability.

- Companies should act responsibly towards the environment when making decisions on investment and operational practices/activities
- Companies should demonstrate a high degree of transparency and public accountability for networks' environmental impacts
- Companies should play a full role in facilitating the low carbon energy transition by working constructively with customers, suppliers, partners and other stakeholders

## **Environmental Action Plan**

- Potential baseline funding and PCDs if well justified.
- Quality and ambition of the EAP as part of our assessment for the Business Plan Incentive.
- Our initial view of minimum level of ambition in Appendix 2 of Business Plan Guidance.

## **Annual Environmental Report**

- Setting out environmental impacts, progress in delivering EAP, and evolving role of network in low carbon transition
- A new licence condition requiring companies to work with stakeholders in development of the report

## **Output Delivery Incentives**

- Sector specific and potentially bespoke
- Material, measurable and controllable environmental impacts

- Ofgem will publish guidance for the AER alongside the licence condition.
- Emphasis on transparency: making visible
  - Environmental impacts
  - How these have changed over time
  - Companies' progress towards targets and PCDs
- Metrics designed to allow comparison across companies and sectors where appropriate
- Commentary to contextualise each year's performance

“3.77 Reporting biomethane outcomes data in the Annual Environmental Report will enhance the visibility of biomethane development. GDNs should explore with biomethane stakeholders what additional data can be made available in the Annual Environmental Report beyond the information reported under RIIO-GD1.” (SSMD GD Annex, May 2019)

- GD1 reporting:
  - Number of biomethane connection enquiries
  - Number and capacity of connection studies / connections.
- Example data proposed by Renewable Energy Association (consultation response published on Ofgem website) —

- What biomethane flow each network had by month by Local Distribution Zone (LDZ) since their first project. It would be useful for each network to put this in a table with domestic customer gas demand and total gas demand by LDZ, and show the ratio by month of biomethane/total gas demand and biomethane/domestic customer gas demand.
- The number of biomethane gas quality excursions the networks had to notify to HSE.
- How many examples of low CV gas entering the GDN they had, which have led to CV capping and what have the costs been as a result of these.
- Anonymous information on O<sub>2</sub> and H<sub>2</sub>S in the biomethane injected into the grid for all projects
- A list of all the NIA/NIC projects completed for biomethane with all the reports published.



- Is there additional biomethane outcomes data that GDNs hold which could be published?
- How should GDNs engage with biomethane stakeholders to explore what additional data could be usefully made available in the Annual Environmental Report?

# **Appendix: Business Plan Guidance**

## Appendix 2 – Environmental action plan initiatives

The following provides our initial views of the minimum level of ambition we would expect from the companies in their Business Plans. Where these initiatives, or equivalent, are not thought to be appropriate for their networks, companies should provide clear justification for why they believe this to be the case.

### *Business carbon footprint (BCF)*

- Adopt science-based target for company to reduce its scope 1 and 2 BCF by 20XX, without relying on international GHG offsetting
- Commit to efficient and economic actions to address controllable BCF in RIIO-2
- Identify metrics to track outcomes of implementing actions and overall progress towards science-based target
- Commit to reporting on scope 3 emissions

### *Transmission losses (ET only) and Shrinkage (gas only)*

- Develop and adopt strategy to contribute efficiently to fewer losses on network, including over the long term, than would otherwise be the case in the absence of strategy
- Report on key milestones of implementing losses reduction strategy
- Contribute to evidence base on proportion of losses that network companies can influence/control

### *Embedded carbon*

- Monitor and report on embedded carbon in new projects
- Collaborate with supply chain on addressing challenges to reduce embedded carbon in network
- Commit to establishing baseline and a target to reduce embedded carbon on new projects during RIIO-2

### *Supply chain*

- Adopt high standards of environmental management in supplier code, including requirements for public disclosure of metrics and cascading code to their suppliers that are material to company's inputs
- Adopt target of more than 80% of suppliers (by value) meeting code in RIIO-2
- Report on actual percentage of suppliers (by value) meeting code

### *Resource use and waste*

- Update procurement processes to embed Circular Economy principles
- Adopt a target for:
  - Zero waste to landfill by 20XX
  - Recycled and reused materials as a percentage of total materials by 20XX
  - Report on actual waste to landfill, recycling and reuse as a percentage of total

### *Biodiversity/natural capital*

- Adopt appropriate tool to assess net changes in natural capital from different options for new connections and network projects
- Adopt appropriate tool to monitor the provision of ecosystem services from network sites and report annually

**AOB**

**Our core purpose is to ensure that all consumers can get good value and service from the energy market. In support of this we favour market solutions where practical, incentive regulation for monopolies and an approach that seeks to enable innovation and beneficial change whilst protecting consumers.**

**We will ensure that Ofgem will operate as an efficient organisation, driven by skilled and empowered staff, that will act quickly, predictably and effectively in the consumer interest, based on independent and transparent insight into consumers' experiences and the operation of energy systems and markets.**