Green Gas TASKFORCE

Green Gas Day 2025 and 2026 workplan

Birmingham – 9 October 2025

Charles McAllister

Who we are

Generator Partners

grissan RENEWABLE ENERGY

ENGIE

ecotricity

centrica

futurebiogas

BIOGEN

VIDA bioenergy

ceres energy

BIO CAPITAL

GENERATE UPCYCLE

Kanadevia INOVA

cng

SEVERN TRENT Green Power

Network Partners

SGN Your gas. Our network.

Cadent Your Gas Network

Northern Gas Networks

WALES&WEST UTILITIES

national gas

Association Partners

IGEM Institution of Gas Engineers & Managers

fen future energy networks

REA RENEWABLE ENERGY ASSOCIATION

ADBA

The Role for Green Gas

Key benefits of biomethane

Proven Technology

Fleet of **130 plants with 11 TWh** of connected capacity

Scalable

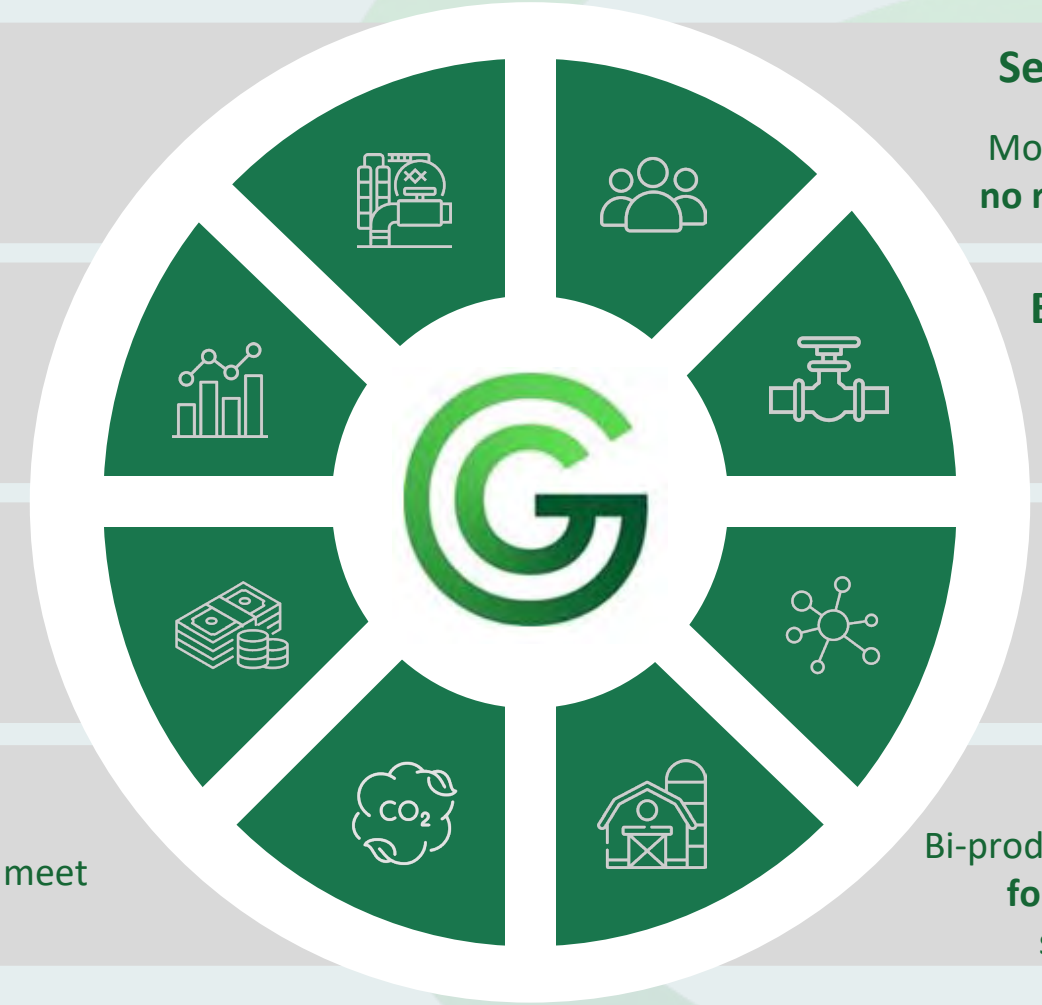
Sufficient feedstock available to deliver **>120 TWh by 2050**

Affordable

£174bn cost reduction in meeting Net Zero 2050

Carbon Negative

GGR at £50-120/tCO2 & ability to meet **share of UK GGR target**



Seamless Customer Transition

Molecularly identical to methane and **no requirement to change appliances**

Established Route to Market

280k km of gas network; **£26B** of assets paid by consumers

Multiple Use Cases

Versatile to decarbonise I&C, Transport & Domestic Heat

Cross Sector Benefits

Bi-product **digestate acts as replacement for fertiliser, enhances soil health** & secures biogenic carbon in the soil

5 Policy Priorities

1. Government should set a national target for Biomethane

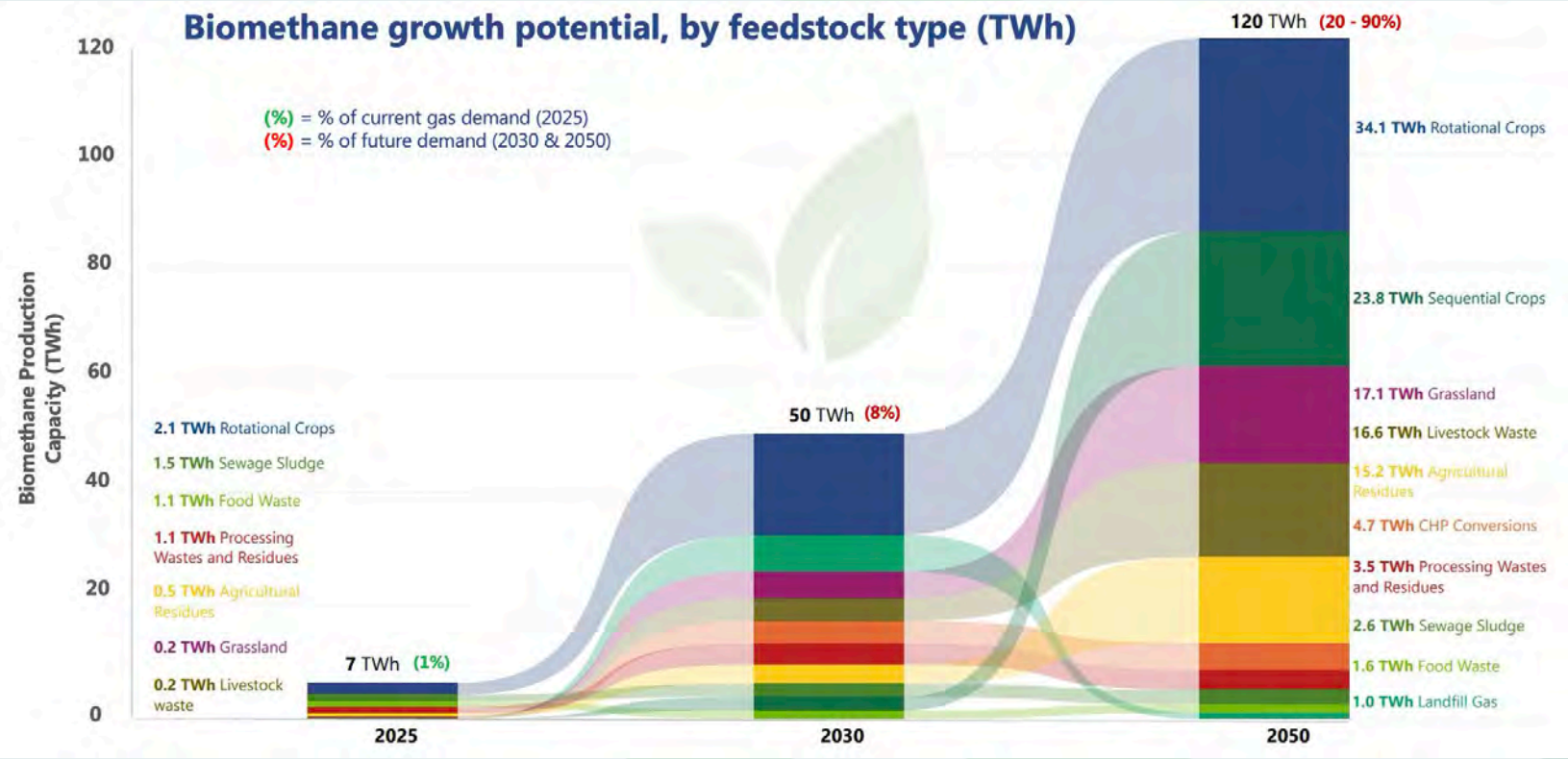
2. Government should dedicate resource to rapidly secure biomethane's zero-rating on the UK Emissions Trading Scheme.

3. The Green Gas Support Scheme should be extended to ensure consistent delivery of new biomethane plants through to 2030, along with a plan for a replacement scheme.

4. Create a functional market for Greenhouse Gas Removals from biogas upgrading and biomethane combustion and valorise digestate as a like for like replacement for fertiliser imports.

5. Recognition from Government and other important stakeholders of the strategic importance of our gas infrastructure as an enabler of decarbonisation, economic growth and energy security

Report 1: What is the potential for Biomethane in GB?



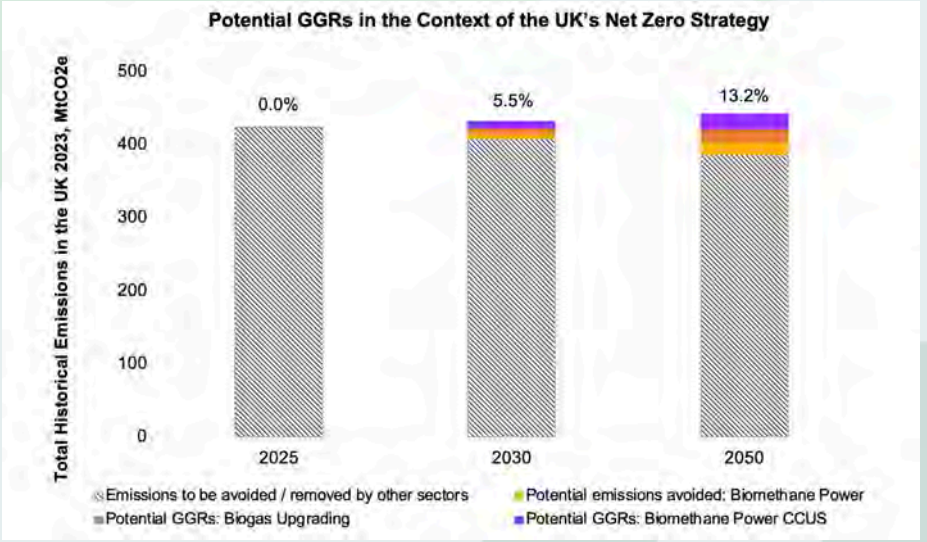
- Alder BioInsights was commissioned by the Taskforce to assess the amount of feedstock available in GB, and concluded that there are sufficient volumes available to generate 50 TWh by 2030 and 120 TWh by 2050. **Feedstock is not a limiting factor to biomethane growth**.
- Increases in GB biomethane generation will improve energy security and decarbonise a range of end users
- Increased biomethane generation is an enabler of a more resilient future, with additional benefits such as; supporting British farmers, reducing agricultural runoff and water pollution, increasing soil health and improving carbon retention.

Report 2: The GGR potential from Biomethane

- Biomethane's production and consumption represents a unique 'double chance' to capture and permanently remove carbon dioxide from the atmosphere. The Government's current approach to CCUS policy precludes Non-Pipeline Transport of CO2.

GGRs Potential by year	2025	2030	2050
Biomethane GGRs potential ($MtCO_2$) [1]	-	15.7	37.7
Engineered removals (the CCC's Seventh Carbon Budget [3]) ($MtCO_2$) [1,2]	-	2.6	35.8
Engineered removals target (GGR: business model [2]) ($MtCO_2$)	-	5.0	75 - 81

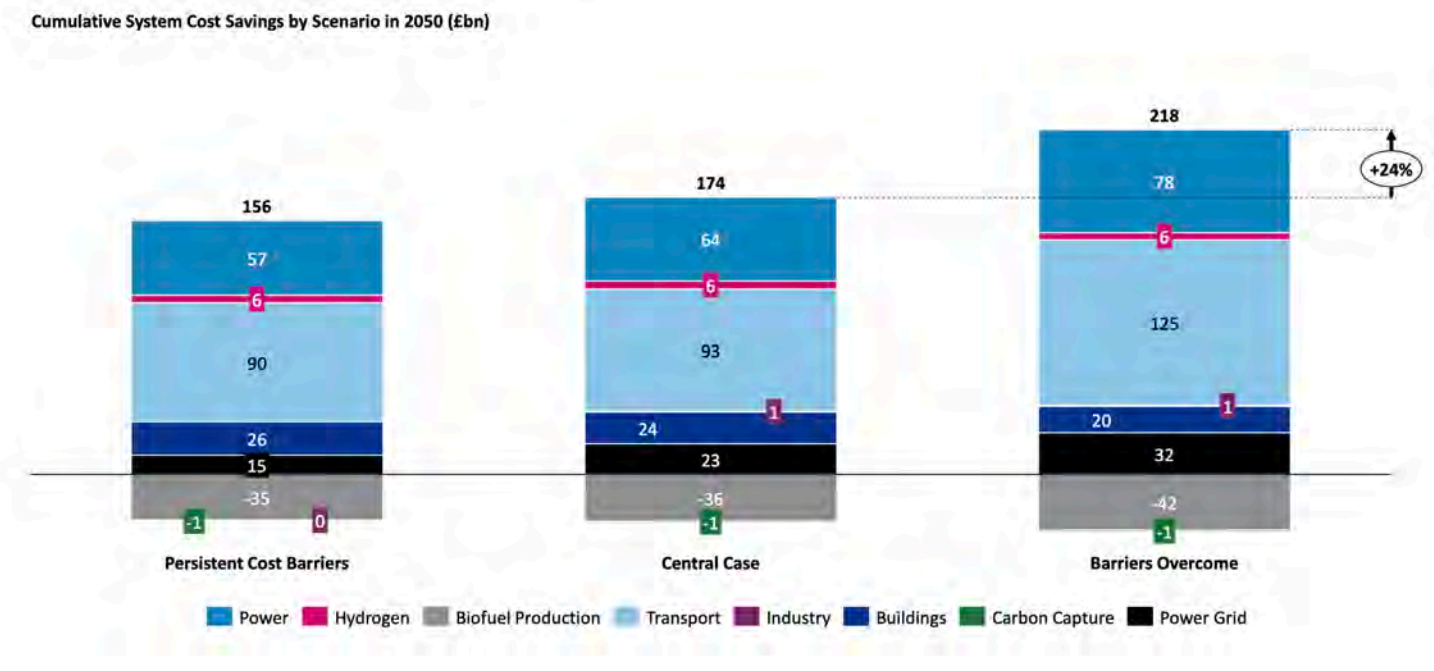
Notes: [1] Both biomethane from Alder BioInsights report [1] and other bioenergy sources listed in the CCC's Seventh Carbon Budget [3] account for various types of crops, therefore, further evaluation should consider the adequacy of the feedstock and the sustainability of land use. [2] This includes DACCS and BECCS: BECCS Power, BECCS Energy from Waste, BECCS other (including hydrogen and low carbon fuels) [3].



- Taskforce research by GHD Engineering demonstrates that biomethane shows the industry could deliver 38mtCO2e of negative emissions by 2050, with up to 65TWh of low-carbon, dispatchable power.

- With 25TWh of biomethane production in 2030 this could generate 3.6mtCO2e from biogas upgrading alone in a price range of £54-123tCO2. In combination with power CCUS a further 4mtCO2e could be removed in 2030. Assumed a single closed system, prioritising these removals could 'buy' a further 41TWh of natural gas combustion.

Report 3: The economic case for more green gas



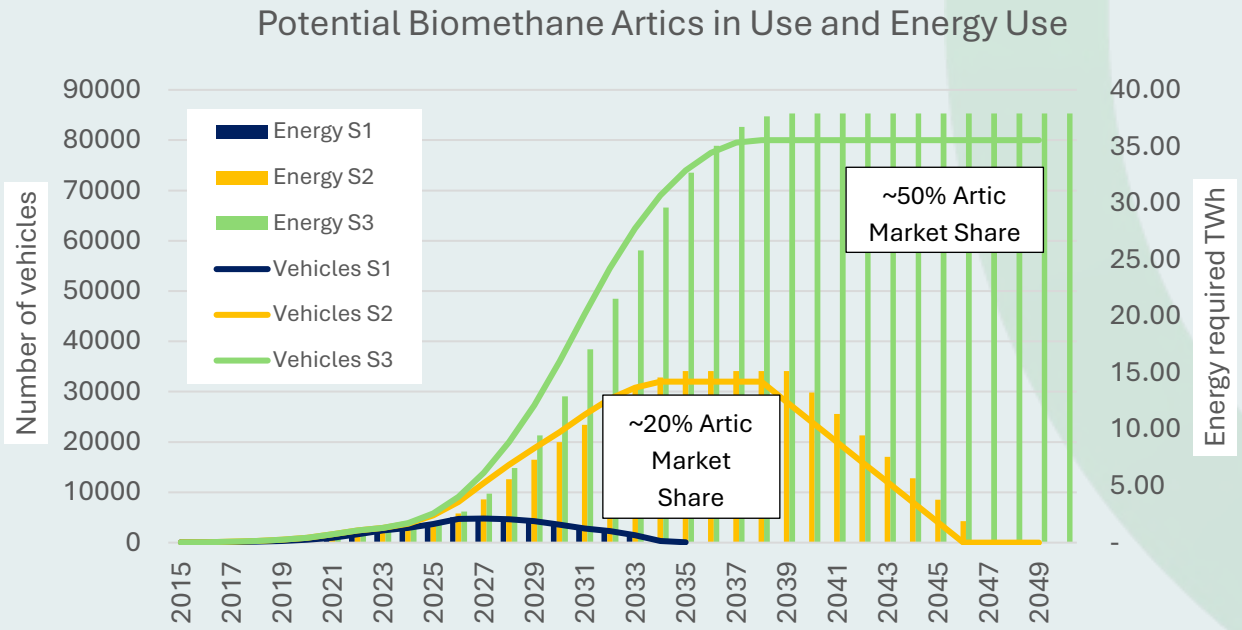
- The Taskforce commissioned Baringa to assess i) the opportunities for cost reduction in biomethane generation and ii) what the whole system reduction in the cost of Net Zero would be from greater use of biomethane.

- The results of this analysis concluded that the greatest opportunities for cost reduction lie in
  - The deployment of **larger plants**
  - **Valorisation of the bi-products** of biomethane generation (Bio-CO_2 and Digestate)
  - Reduction in the need for **enrichment**

- With generation levels in excess of 100 TWh by 2050, **the cost of achieving net zero is cut by between £156bn and £218bn, with a central forecast of £174bn**

Report 4: Biomethane as a solution to decarbonise HGVs

- The Taskforce commissioned the Low Carbon Truck Consultancy to assess the future opportunities for decarbonising the HGV market.
- The analysis showed that there are already 3,246 biomethane fuelled HGVs on the road today, with potential for scaling that up to 80,000
- The existing gas network infrastructure has the capacity to meet the high energy demands of the HGV sector. There are 33 bioCNG refilling stations on GB roads today, growing to 46 by 2027.



- Biomethane trucks are ready and available, and can deliver an 83% reduction in emissions vs diesel, whilst also being cheaper on a life cycle basis. When combined with CCS, digesters delivering biomethane to HGVs would be net negative emissions.
- The analysis has shown that biomethane trucks could meet 50% of the 6x2 HGV market share
- This would see an emission saving of 112 million tonnes CO_2e by 2050, or 206 million tonnes CO_2e if combined with CCS.

What difference has the GGT made?

Profile

- Increased profile of biomethane in Government and in energy sector
- There have been more references to biomethane in the House of Commons in 2025 than ever before
- Met with Chris Stark at GB Biomethane site
- Met with MPs from across political spectrum
- Positive and optimistic message at events

Policy:

- On the correct path to improvements in policy to allow growth in the sector
- ETS, GGSS and bi-products valorisation are the priority

Question for **Department for Energy Security and Net Zero**

Biomethane

To ask the Secretary of State for Energy Security and Net Zero, if he will make an assessment of the potential impact of different rules on the eligibility of biomethane to the (a) UK and (b) EU emissions trading scheme on costs to industry.

Asked 14 July 2025

The Government recognises biomethane as a practical and cost-effective way of contributing to net zero greenhouse gas emissions. The UK Emissions Trading Scheme (ETS) applies a zero emissions factor to combustion of biomethane where supplied directly to ETS installations. Where biomethane is injected into the gas grid, there is not currently a mechanism to ensure biomethane is accounted for separately.

The UK Government and the EU commission have committed to work towards establishing a link between carbon markets, with the details of a potential link subject to negotiations.

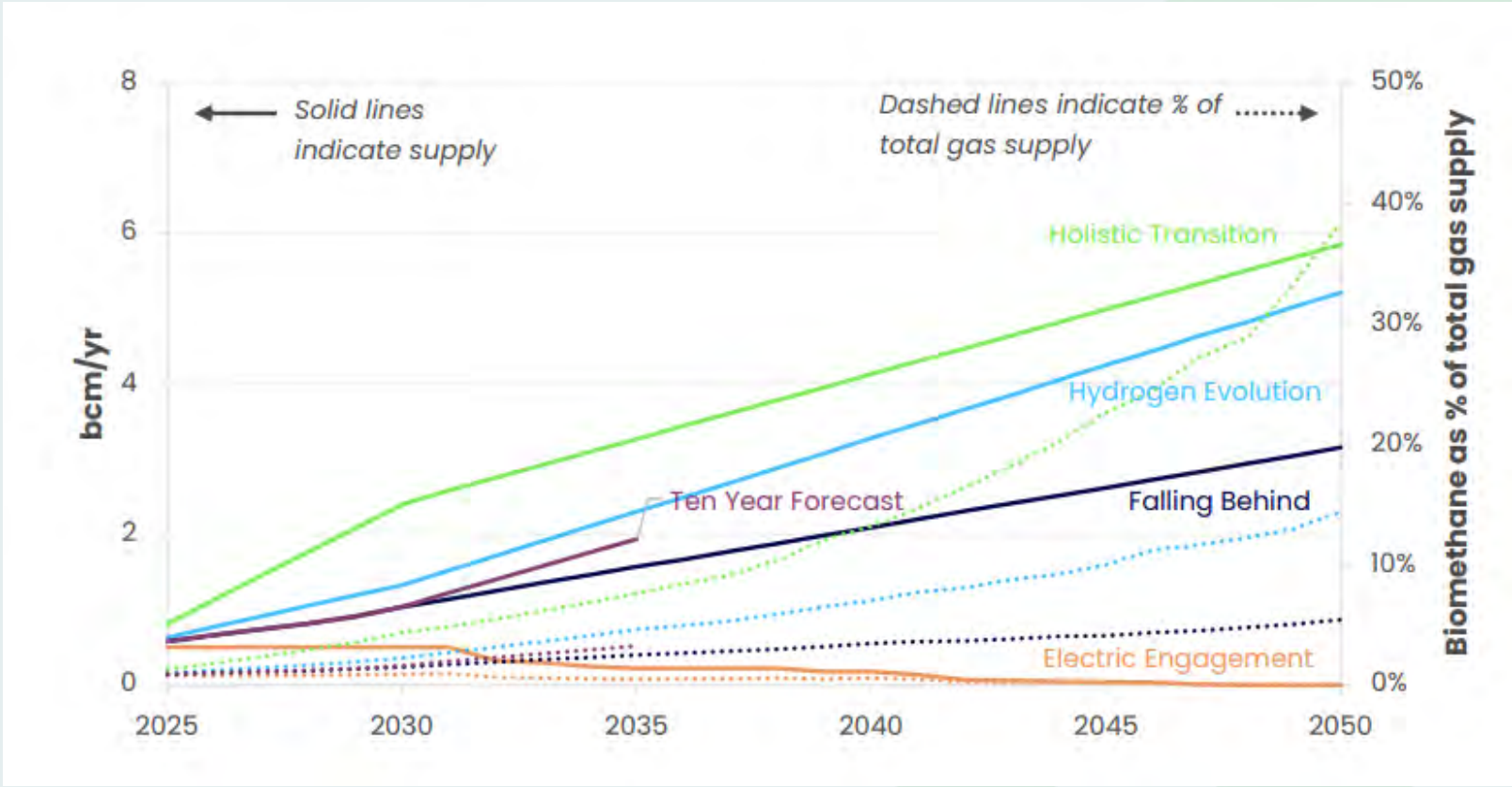
UtilityWeek

NESO calls for biomethane support scheme to turbocharge production

UtilityWeek

Green Gas: The hidden hero of Britain's decarbonisation story

Biomethane's Momentum Building



Clean Power 2030 Action Plan update

The Clean Power 2030 Action Plan outlined a range of 2GW to 7GW of low carbon dispatchable power capacity by 2030. Government also recognised that biomethane is currently used to decarbonise heating, but can be used flexibly across many different end-uses including industry, transport, and low carbon dispatchable power generation at gas-fired power plants.

2026 Workplan

1

Digestate (Q1 26)

With biomethane generation of 120 TWh in 2050, how much digestate could be produced?

2

Clean Heating Systems (Q4 2025)

What at the opportunities from a biomethane gas boiler with a heat pump in a clean hybrid heating system

3

How does a 250TWh work? (Q1 26)

What are the implications for the gas grid at lower demand levels?

4

E-methane& synthetic gases (Q1 26)

What other sources of gas could meet GB demand needs?

1

Political Engagement

- *Continue to build our network of supportive MPs in parliament*

2

Events

- *Taskforce/FEN Winter Warmer*
- *'One year on' event*
- *Summer Reception*
- *Party Conferences*
- *Green Gas Day*

3

Consultations

- ***Future Framework***
- *NPT CO_2*

4

Profile

- *Steady drumbeat of media engagement and interviews*