

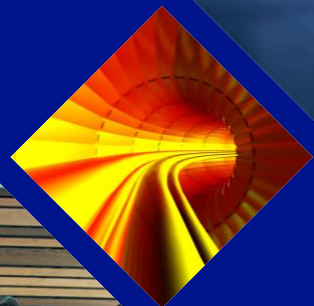
**Gas System
Operator**

Future of Gas Forum: Developing a Gas Markets Plan together

16 May 2019

**Amba Hotel Charing Cross
London**

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Agenda: Future of Gas Forum

Time	Agenda item	Speaker
09:30	Registration	
10:00	Overview of agenda Introduction to the Gas Markets Plan	John Twomey, Markets Development Manager National Grid System Operator
10:15	Update on the Gas Markets Plan	Neil Rowley, Gas Markets Development Manager National Grid Gas System Operator
10:30	A Policy Perspective	Dave Buttery, Deputy Director, Energy Security Department for Business, Energy & Industrial Strategy (BEIS)
10:50	What is Happening in the EU?	Malcolm Arthur, Business Area Manager – Market European Network of Transmission System Operators for Gas (ENTSOG)
11:20	Panel discussion and Q&A: What does the next decade of policy development mean for the future of the gas market?	Dave Buttery, Deputy Director, Energy Security BEIS Malcolm Arthur, Business Area Manager – Market ENTSOG Dipali Raniga, Frameworks & Policy Development Manager National Grid System Operator
11:30	Coffee break	

Agenda: Future of Gas Forum

Time	Agenda item	Speaker
12:00	Breakout groups: Gas market frameworks – planning for change	Introduced by Neil Rowley, Gas Markets Development Manager National Grid Gas System Operator
13:00	Lunch	
13:45	Plenary and discussion	Introduced by Dipali Raniga, Frameworks & Policy Development Manager National Grid System Operator with guest speakers
14:30	Next steps and feedback	Neil Rowley, Gas Markets Development Manager National Grid Gas System Operator
14:45	Close	

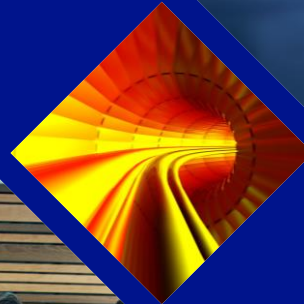
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Introduction to the Gas Markets Plan (GMaP)

**John Twomey
Markets Development Manager**

National Grid System Operator

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Welcome! We hope you had a good journey.
Where have you travelled from today?



The Future of Gas

Is there a role for gas? What might that role be? What might be needed to deliver that future?

Decarbonisation of Heat



Decarbonisation of Transport



Decarbonisation of Industry



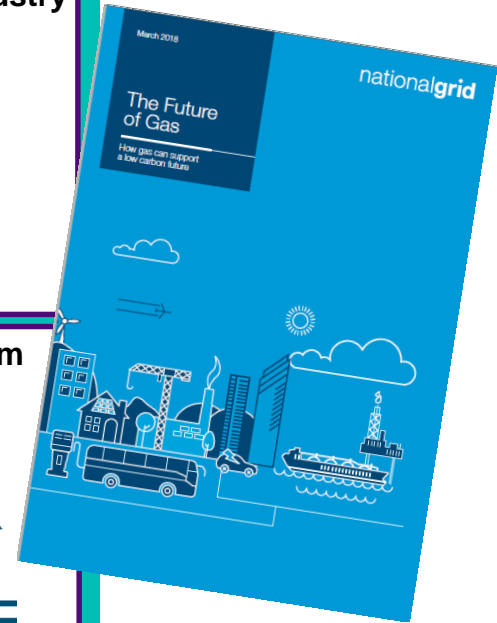
Future Networks & Markets



Carbon Capture Usage & Storage



Whole Energy System

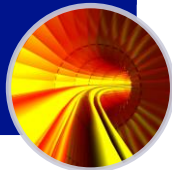


The objectives of the Gas Markets Plan

We committed to work with stakeholders to deliver a long-term market change plan, to support whatever future we find ourselves in

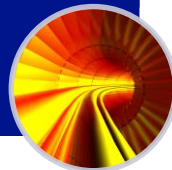
- Stakeholders collectively putting consumers at the heart of decisions about facilitating whatever the future of gas looks like

Consumer value



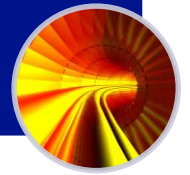
- Facilitating broad stakeholder discussion – educating and debating across industry to gain consensus on the commercial, technical or regulatory changes required

Providing clarity when the future is uncertain

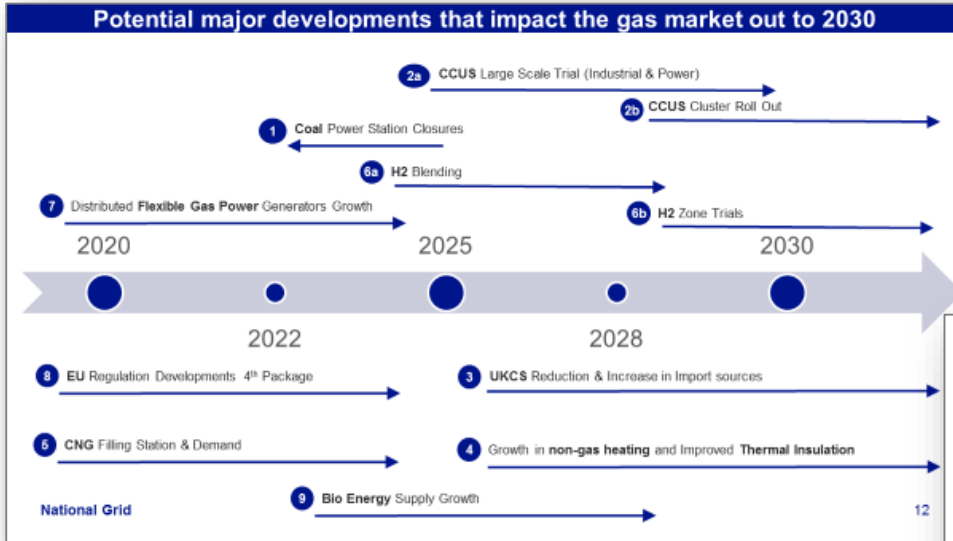


- Sector-wide agreement on the challenges and the right things to do at the right times will allow the SO to facilitate the future market efficiently for consumers

Agile market facilitation



Test the concept Workshop: March 2019



- ~20 stakeholders across industry
- Presentations and outputs on futureofgas.uk

What do you think?

Thoughts on the Power Responsive style model?

What would you value from a gas stakeholder forum?

Anything you wouldn't want the forum to cover?

How would you like to keep in touch on GMaP?

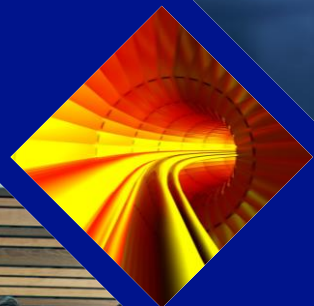
GMaP: Helping to identify the evolving pathway for gas and drive action on the right commercial and network changes at the right time.

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Update on the Gas Markets Plan (GMaP)

**Neil Rowley
Gas Market Development Manager**

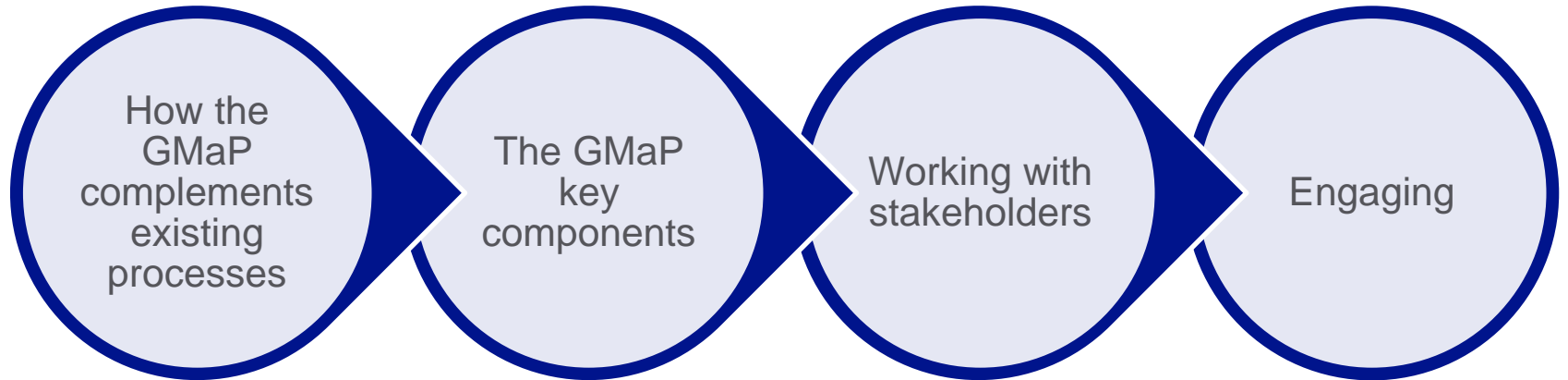
National Grid Gas System Operator



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Developing the Gas Markets Plan



Long term & short term

What will be the role of gas in the future?

How will we decarbonise?

Long term drivers

How to maintain security of supply?

What is the cheapest solution?

What is the immediate action?

What incremental changes are needed?

Maximising the efficiency of the gas industry

Short term actions

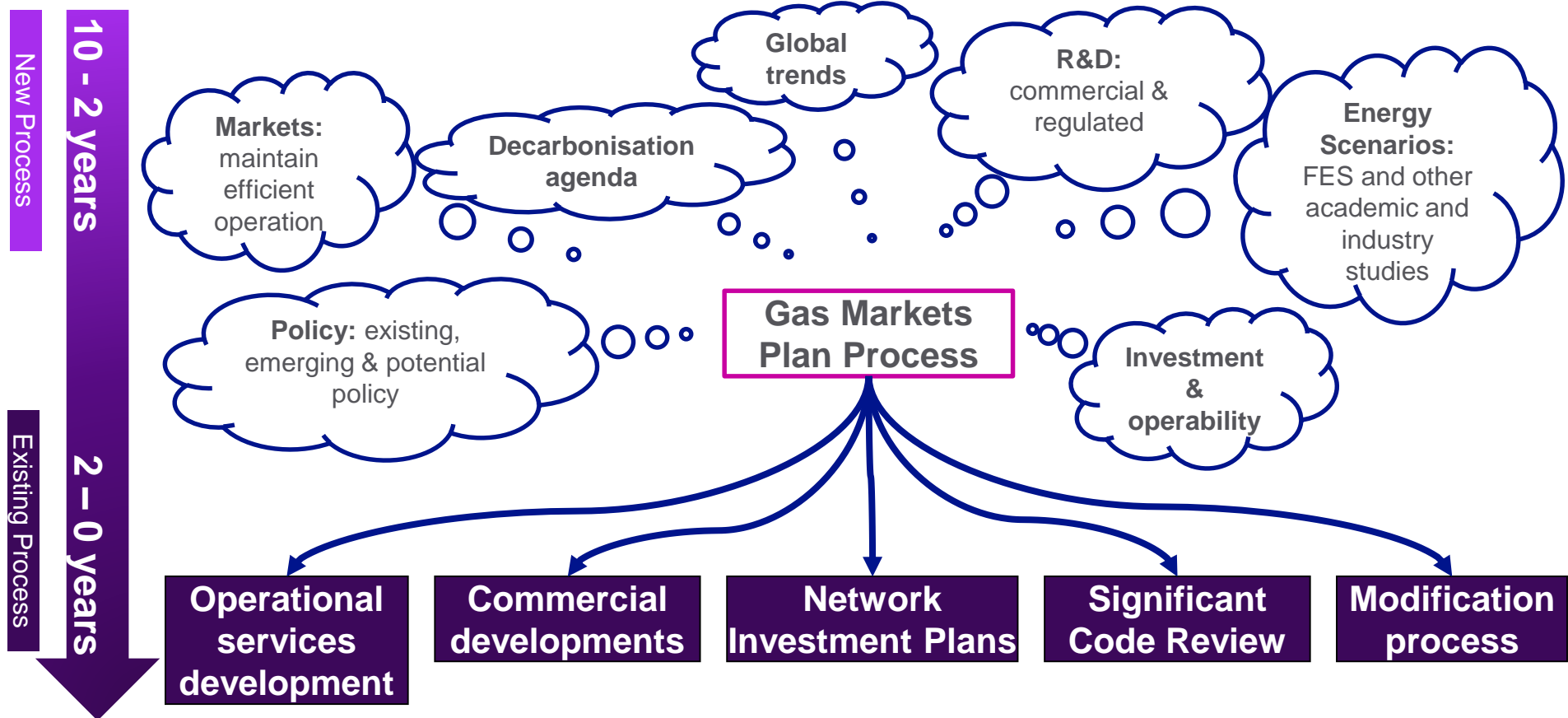
What is the economic benefit today?

Supporting power generation

Managing season energy demand

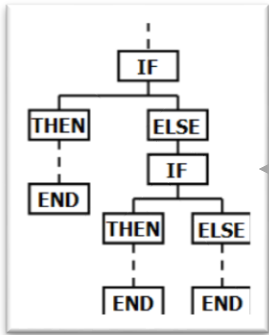
Delivering heat

How GMaP complements existing processes



GMaP key components

Potential changes



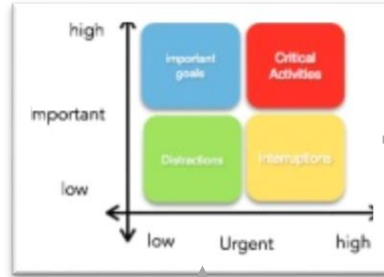
Uncertainty



Industry collaboration

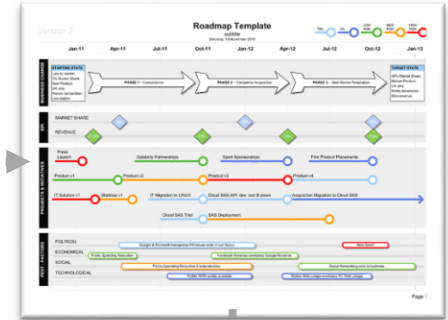


Prioritisation



Importance of timing

The plan



Working with industry and stakeholders to make it happen

What are we seeking?

- **To facilitate the future gas market efficiently for consumers and to support the low carbon transition**
- Sector-wide agreement on the challenges and opportunities
- To proactively consider the pipeline of potential market change, to identify the right things to do at the right times even in light of uncertainty

How do we do this?

- **Collaborate:** Work with industry and stakeholders to discuss and agree signposts for change and their impacts
- **Plan:** Identify the right projects to proactively prepare for future market for whatever the future of gas may be
- **Act:** deliver projects in collaboration with industry to prepare for change and manage uncertainty

How we will be engaging

- Open, collaborative stakeholder forum to proactively develop a long-term plan for gas industry change
- Complement existing gas market change processes
- Increase participation of new and existing stakeholders in market change to develop the gas market
- Focused to deliver the energy transition in the consumer interest

COLLABORATE :
FoG Forum



- Senior level cross-industry and stakeholder expert group. NG Chair.
- Develop and define priorities for GMaP (2-10 years) and associated outputs.
- Deliver future market for consumers and support the energy transition through specific, agreed projects
- Agreeing triggers to change and impacts on the market frameworks on which the industry should focus in the forthcoming year to maximise consumer value.

PLAN :
Senior Steering Group



- A 2-10 year plan for market change
- Led by National Grid Gas System Operator
- Backed by industry & stakeholders (through Steering Group and FoG Forum)
- Specific projects delivered in collaboration with stakeholders
- Regularly reporting to the FoG Forum

ACT :
Create and deliver the GMaP



Today we launch the call for nominations to join our
Future of Gas Forum Steering Group – see futureofgas.uk

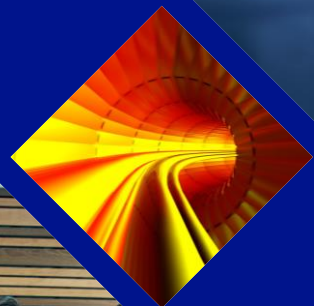
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Panel discussion and Q&A:

**What does the next decade of
policy development mean for
the future of the gas market?**

**Dipali Raniga, National Grid SO
Dave Buttery, BEIS
Malcolm Arthur, ENTSOG**

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Panel discussion and Q&A:

What is your question about what the next decade of policy development means for the future of the gas market?

How will the EU Sustainable Finance Taxonomy process impact Gas activity in the EU and UK?

How does the investment required to decarbonise the gas networks fit with the RII0 2 PCR and do NG see the regulator allowing the investment required now

Gas Storage decommissioning? Can it have a role in resiliency and security? If yes, what is the alternative if we decommission these facilities? Role of CCS?

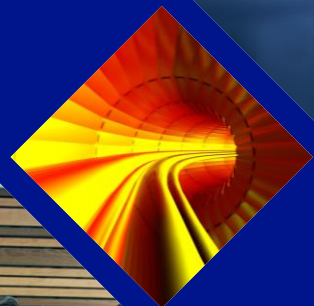
What do we need to do to maintain the gas assets so that the market has the optionality and flexibility to deal with the level of uncertainty into the future?

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Coffee break

11:30 – 12:00

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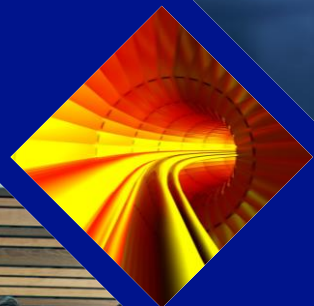


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Breakout Session

Get involved in shaping the Gas
Markets Plan

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About the breakout session

Aim:

- Explore discrete themes of change
- Discuss interactions & impacts on markets
- Build body of knowledge & material towards creating the GMaP

Task:

- In groups discuss the high level case studies provided (group pre-determined)
- Determine relevant commercial & regulatory impacts (who, when, incremental vs fundamental)
- Document discussions on A0 templates
- Feedback will be discussed after lunch

Case Studies to explore themes of change

No	Case Study	Characteristics
1	New gases	Hydrogen blending from Electrolysis Large scale production from Steam Methane Reforming with Carbon Capture Usage and Storage (CCUS)
2	Growing embedded supply & demand	Growth of biomethane and bioSNG supply sources Increased uptake of compressed natural gas vehicles
3	Evolving offshore supplies	UK Continental Shelf (UKCS) supplies decline Proportion of import supplies meeting demand increases
4	Changing within-day behaviour	Increasing flexible use of gas-fired power stations More commercially-driven gas supplies
5	Status quo	Steady progress of gas market without fundamental new technology changes

Logistics

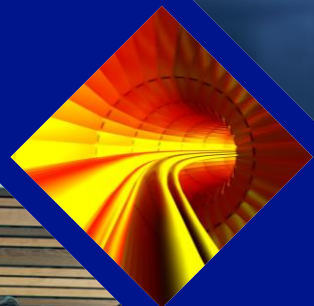
- **Groups defined – lists available**
- **Start: 12:05**
- **Switch: 12:35 (facilitator switches)**
- **Lunch: 13:00 (45mins)**
- **Groups**
 - (A) **Dipali:** *Session 1 New gases / Session 2 Changing within day behaviour*
 - (B) **Elaine:** *S1 Growing embedded supply & demand / S2 Evolving offshore supplies*
 - (C) **Bill:** *S1 Evolving offshore supplies / S2 Growing embedded supply & demand*
 - (D) **Imran:** *S1 Changing within day behaviour / S2 Status quo*
 - (E) **Neil:** *S1 Status quo / S2 New gases*

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Lunch

13:00 – 13:45

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Plenary and discussion

Introduced by Dipali Raniga

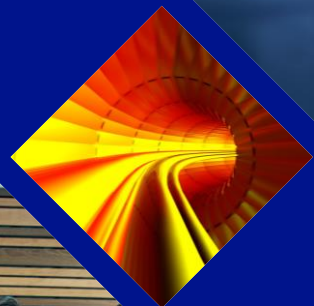
Kirsty Ingham | ESB

Julie Cox | Energy UK

Lorna Millington | Cadent

Jon Flitney | British Ceramics Confederation

Ian McCluskey | IGEM



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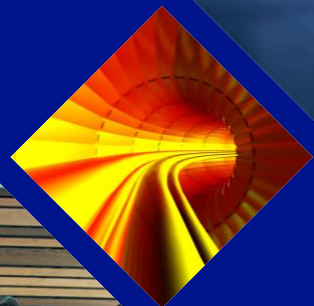
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Next steps and feedback

**Neil Rowley,
Gas Market Development Manager |
National Grid Gas System Operator**

**John Twomey
Markets Development Manager |
National Grid System Operator**

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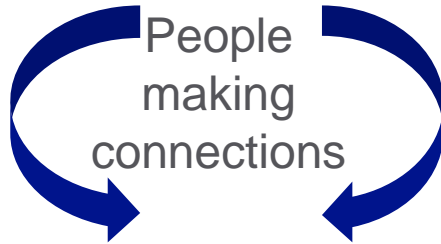
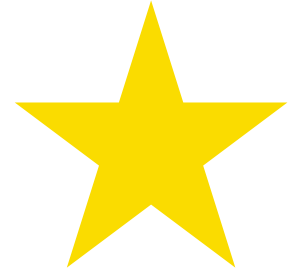


What have we heard today?

Good level of noise!
Great discussion
and input



Different ways
of thinking
about GMaP
issues



Progress ...

Next steps: what can you expect from here?

1. All input will be made available by 3 June 2019
2. Steering group ToR & invite for nominations out today
3. First Steering Group meeting early summer
4. FOG Forum / Steering Group & GMaP timeline developed early summer
5. GMaP draft 1 planned for mid summer
6. Early identification of a Project to run in the summer

Call for nominations to our Future of Gas Forum Steering Group now open... and thank you for attending!

Future of Gas Forum Steering Group

Terms of reference

1. Introduction

In November 2016, National Grid launched its Future of Gas (FOG) stakeholder engagement programme to gather evidence, discuss and test the role of gas in the UK's transition to a low carbon economy. The conclusions of that programme were published in March 2018, in [The Future of Gas: how gas can support a low carbon future](#).

Recognising the level of uncertainty and potential change in the gas industry in the coming decades, one commitment was to work with stakeholders to develop a long-term plan for gas industry change in Great Britain (GB).

Apply by 14th June

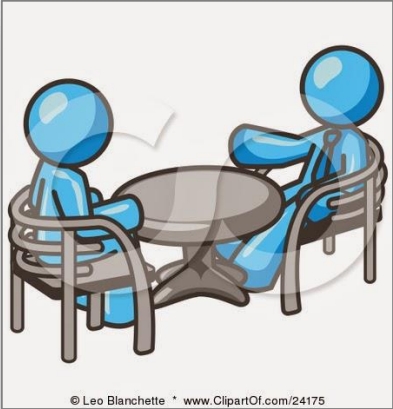
More details on [Futureofgas.uk](https://www.futureofgas.uk)



Carrying on the conversation

Subscribe to Future of Gas Website

<https://futureofgas.uk/>



Meet with us

Neil Rowley | Gas Market Development Manager (Gas) | Neil.Rowley@nationalgrid.com

Bill Goode | Senior Gas Market Development Lead, Future Markets (Gas) | Bill.Goode@nationalgrid.com

Imran Abdulla | Gas Market Development Lead (Gas) | Imran.Abdulla@nationalgrid.com

Dipali Raniga | Frameworks & Policy Development Manager, Future Markets (SO) | Dipali.Ranign@nationalgridso.com

Elaine Baker | Gas Policy Development Lead (Gas) | Elaine.Baker@nationalgrid.com

Thank you for being part of the Forum! We'd like your feedback. What went well? What could we do differently? Where would you prefer the next Forum to be held?

Focus group on power to gas would be useful

Really good but some more facts and figures on the costs and limitations of hydrogen in meeting low carbon targets.

Liked the case studies but the assumptions behind them could have been better defined

Good session. Fine in london

Good level of discussion

More detailed scenarios to work on

Focus on Gas Quality

Good engagement across relevant topics. Introductory presentations a bit long? The forms for group discussion did not add much value at this stage. London venue fine

Where's ofgem?

Thank you for being part of the Forum! We'd like your feedback. What went well? What could we do differently? Where would you prefer the next Forum to be held?

Good mix of people/stakeholders and understanding

Excellent venue.

Good to have a broad discussion like this - needs to funnel and focus going forward, potentially targeting participants to subjects

Some scenarios needed more time for discussion.

Discussion was well managed. Getting people to the same knowledge point Midlands

The beginning of a long and important journey

Really useful day the topics were relevant and need the focus given to them

Lots of opinions but little of it actually based on knowledge of having operated within the market.

Would have liked to have chosen which topics I was involved in in my discussion group

Good overall discussion, focus groups will be useful. Top grub!

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