

Gas
Transmission

Building skills today for a net zero future

The session will start at 13.32 to
allow people to finish previous
meetings

national**grid**



[Slido.com](https://www.slido.com)

#NGG5

Welcome and Opening

Thank you for joining us today

Please feedback via SLIDO

Slido.com
#NGG5



Who will be speaking today?

**Neil
Atkinson**
CEO
IGEM



Sandra Kerr OBE
Race, gender and
disability business and
policy advisor BiTC



Stephen Barrett
Director of strategic
accounts
EU Skills



Logistics

Should last for approximately about 80 min

Questions and polls via slido #NGG5

All callers will be placed on mute

We will circulate the slides and a recording of this webinar

“How do we attract the diverse talent needed for the gas industry to achieve a Net Zero energy future?”

Is reputation a key challenge to building the skills needed for a Net Zero future?

Yes

Somewhat

No

Please explain your answer



Institution of Gas Engineers & Managers

Industry Reputation

“How do we attract the diverse talent needed for the gas industry to achieve a Net Zero energy future?”

Neil Atkinson

CEO - IGEM

www.igem.org.uk

Reputation

NOUN

‘the beliefs or opinions that are generally held about someone or something’

Reputation is based on perceptions

- the aggregate perception of all stakeholders
- it is comparative; can be positive or negative
- it is stable and enduring

Intangible and difficult to measure!

Corporate Reputation

“A stakeholder’s overall evaluation over time.

This evaluation is based on the stakeholder’s direct experiences with the company, any form of communication and symbolism that provides information about the firm’s actions and/or a comparison with the actions of other leading rivals.” Gotsi and Wilson

Takes time – or a step change event – to change significantly!

Corporate Reputation & Skills

General agreement that corporate reputations contribute significantly to the long run **competitive advantages** of organisations

- Employees stay longer and work harder for companies that are liked
- Individuals prefer to work in firms having good reputations

These advantages will lead to positive consequences for the business

Corporate (sector) Identity

The construed external image of the firm. It's what insiders (employees) believe outsiders think about the organisation. *(Dutton, Dukerich, and Harquail, 1994).*

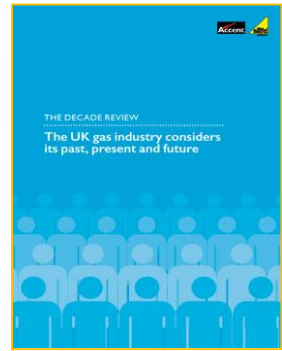
The set of values and principles employees and managers associate with a company *(Fombrun, 1996).*

What employees feel and think about their organisation. It focuses on questions relating to organizational culture. It gives a business its distinctiveness *(Balmer, 2001)*

Need act externally - not navel gaze!

The Decade Review

what the gas industry thinks...



The Marketplace

- Engineers say increased competition is putting downward pressure on prices (their wages).
- Stakeholders, including manufacturers, building contractors, training organisations and energy supply companies, are finding competition challenging, along with pressure from increasingly demanding customers.

Training, Skills and Competence

- Continue to be divisive topics, with widespread perception that training standards are falling.
- Role of the ACS as fast-track way to enter the industry as a gas engineer is concerning to both engineers and industry organisations.
- Larger companies say they have difficulty recruiting competent and experienced engineers and often need to provide further training.
- For smaller businesses, cost of training combined with lost income from the days spent on training and assessment is problematic.
- Training bodies themselves say that the training and assessment they provide is thorough, although acknowledge that some less-than-adequate training pathways and/or providers are producing less-competent engineers.

Safety

- Most participants believe the gas industry is safer than ever.
- Concerns that training and installation standards are falling



Gas industry is considered robust but faces **challenges about the standard of engineer competence** and training.

Engineers and stakeholders say the single most important thing the industry must do to meet their future needs is improve training and re-assessment. **This includes raising standards, attracting a new generation of engineers, and helping engineers learn and adapt to new fuels and technologies.**

An **ageing, engineer {male} workforce** combined with the emergence of short courses for those looking to start working as a gas engineer quickly, worries some about the future impact on safety and quality standards.

Engineer training and competence needs continue to be a high priority.

Public Attitudes

BEIS Omnibus Tracker June 2020



Department for
Business, Energy
& Industrial Strategy

Trust in consumer organisations

- Trust levels lowest for energy suppliers.
- 48% did not trust them very much or did not trust them at all

Shopping around & Switching

- most likely to have shopped around: car (41%), home (33%) insurance and energy (28%).
- 28% most likely to have switched energy provider

Net Zero

- 63% Awareness of the concept of Net Zero

Climate change

- 81% either very concerned (35%) or fairly concerned (46%) about climate change.

Renewables

- 80% Support renewable energy 80%.

Changing Perceptions green jobs that 'make a difference'



Engineering Brand Monitor - General Public (parents)
How desirable do you believe a career {in Engineering} for your children/a young person:

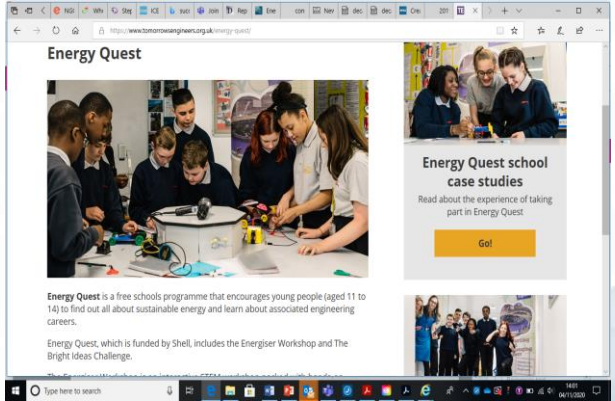
% Desirability

Undesirable	11%
Quite	30%
Very	38%



Tomorrow's
Engineers | **CODE**

“Many thousands of engineers will be needed in new jobs in infrastructure, decarbonisation and maintenance projects to upgrade our hospitals, schools and road network, make public buildings greener and help the UK achieve its aspirations of achieving Net Zero by 2050.
“With young people trying to navigate a post-pandemic, post-Brexit education and training landscape, we believe that now more than ever, they will need support in building their insights into different careers which is why events like Tomorrow's Engineers Week are so vital.”



Is reputation a key challenge to building the skills needed for a Net Zero future?

Yes

Somewhat

No

Please explain your answer

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Inclusion & Diversity

Sandra Kerr
CBE

nationalgrid



Is inclusion and diversity a key challenge to building the skills needed for a Net Zero future?

Yes

Somewhat

No

Please explain your answer

**Do you think enough is being done to
build the pipeline of talent?**

Yes

Somewhat

No

Please explain your answer



‘PIPELINE OF TALENT’
Steve Barrett – Director of Strategic Accounts

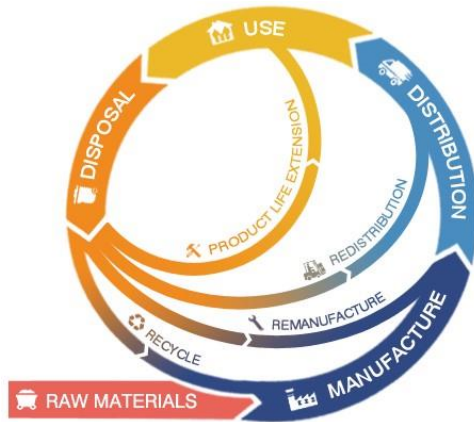
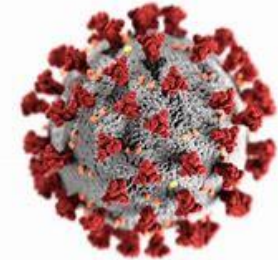


**ENERGY &
UTILITY SKILLS**

The skills challenge today



Novel Coronavirus
(COVID-19)



Department
for Education

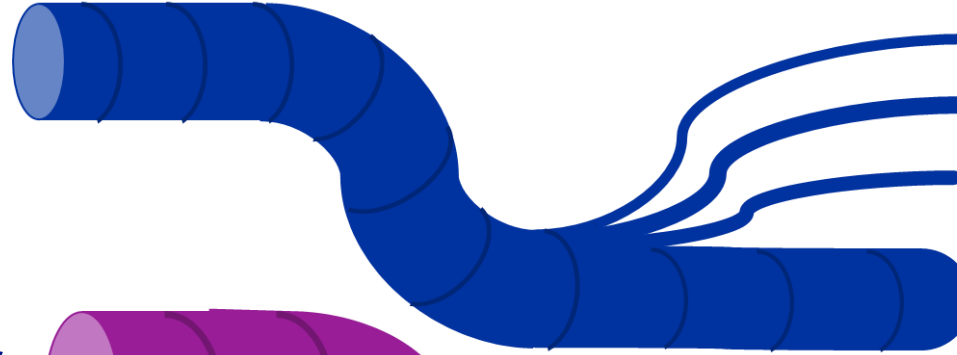
Known workforce demand 2021-2035 - Gas

	RIIO-2 (2021-2025)		RIIO-3 (2026-30)		RIIO-4 (2031-2034)	
	n	% of workforce	n	% of workforce	n	% of workforce
Total Workforce	7,492	18.9%	5,764	14.6%	9,151	23.2%
1 Managers, Directors And Senior Officials	1,215	33.7%	520	14.4%	871	24.2%
2 Professional Occupations	1,190	19.8%	680	11.3%	1,282	21.4%
3 Associate Professional And Technical Occupations	640	14.2%	620	13.8%	845	18.8%
4 Administrative And Secretarial Occupations	446	14.6%	459	15.4%	602	20.5%
5 Skilled Trades Occupations	2,328	18.9%	2,008	16.3%	2,375	19.3%
6 Sales And Customer Service Occupations	211	11.2%	337	18.4%	326	18.1%
7 Process, Plant And Machine Operatives	1,082	24.6%	760	17.3%	942	21.4%
8 Elementary Occupations	380	10.0%	380	10.0%	1,900	50.0%

*Estimated people requirement for the Gas Networks industry demand (this is their contribution to the sector target of 277,000) – by occupation

Pipeline of new entrants: Supply

Apprenticeships
 Actual 2018/19 Intake
 across Gas Industry:
725



Gas Networks Construction Operations	24
Gas Network Craftsperson	53
Gas Network Team Leader	36

Gas Engineering Operative	612
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Sector-Relevant STEM subjects	655
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Other Relevant Subjects	10
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Computer Sciences	65
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Engineering	340
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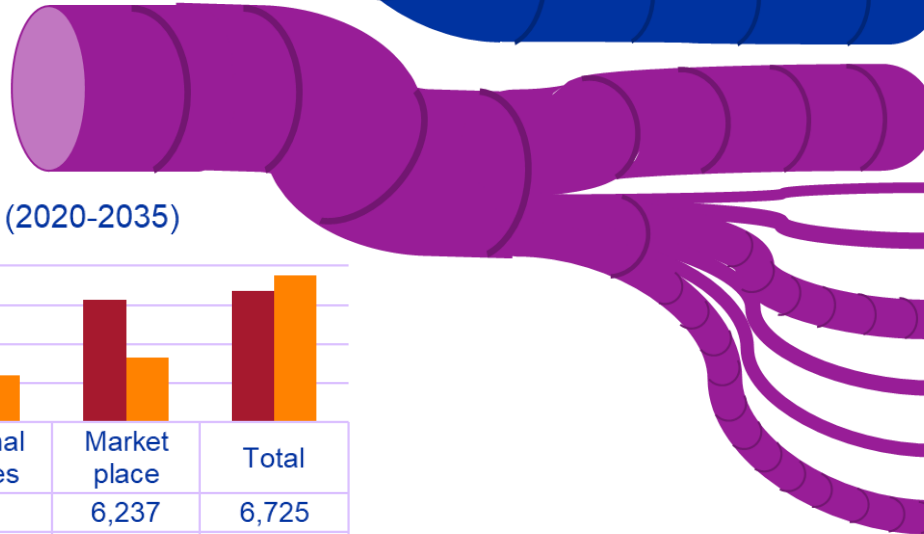
Mathematical Sciences	50
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Biological Sciences	20
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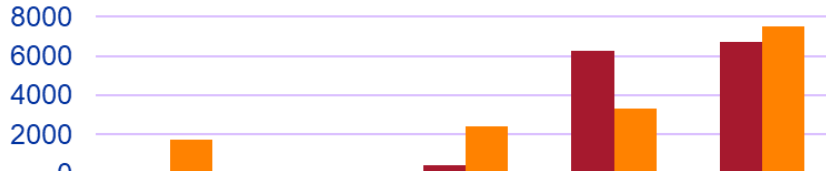
Physical Sciences	175
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Combined Energy &
 Utilities Graduate
 Entries 2019: **1505**



Resourcing Strategies RII02 (2020-2035)

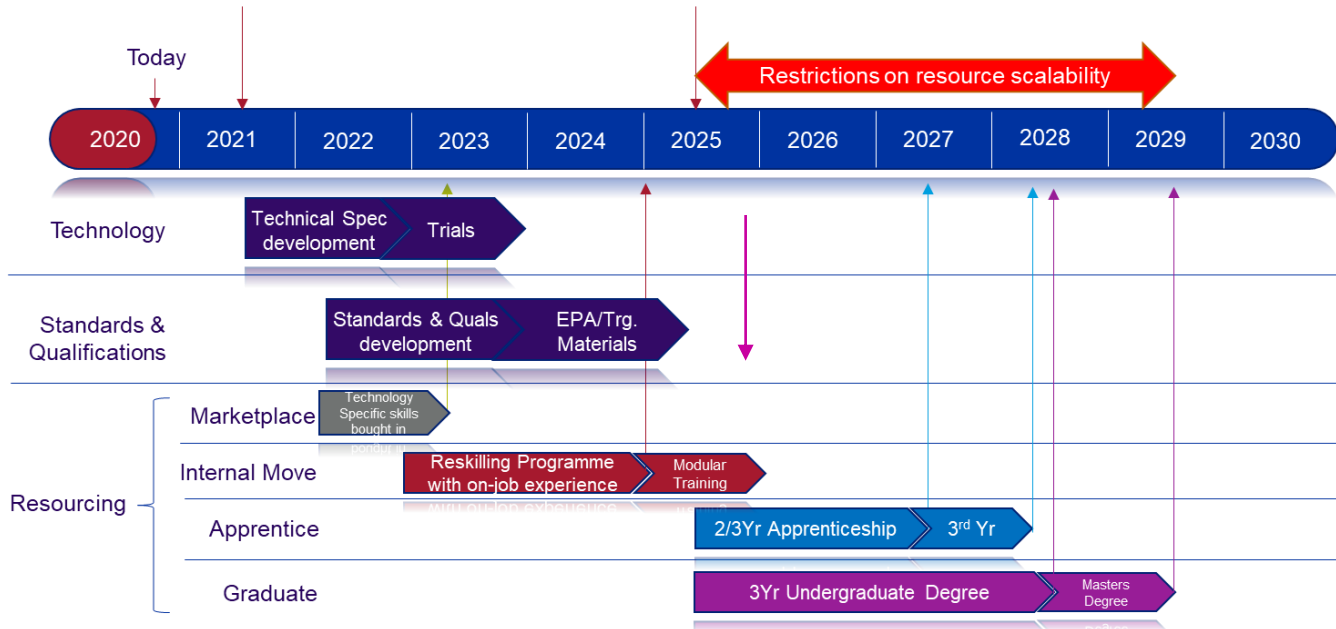


	Trainees	Graduates	Internal Moves	Market place	Total
Contractors	44	22	422	6,237	6,725
GDNs	1,723	75	2,397	3,296	7,492

Routes to competency and associated timelines

Energy White Paper Issued outlining road to net-zero including future energy technologies to be backed by government; BEIS Ofgem accelerate carbon taxes; etc...

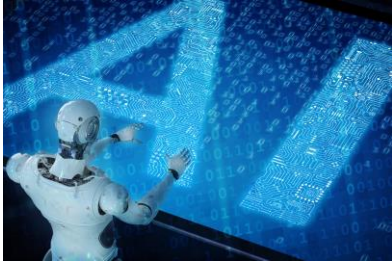
Capital programme ready to go live...



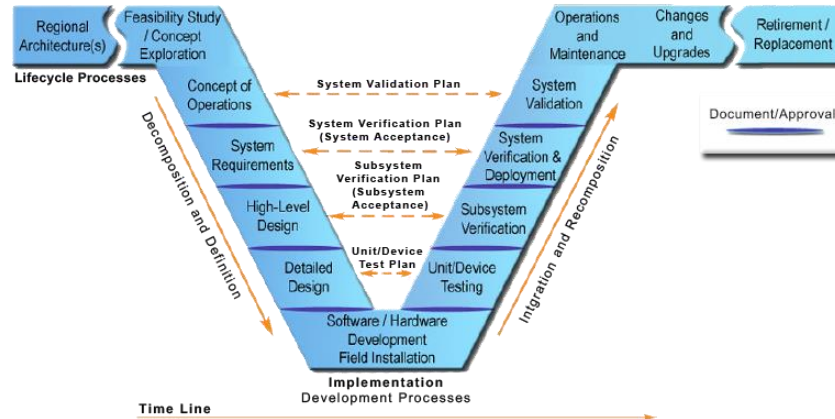
But what do those future roles look like?



Technical engineering occupations, including quantity surveyors, as well as project managers, data scientists, cyber security.



The look ahead...



**Do you think enough is being done to
build the pipeline of talent?**

Yes

Somewhat

No

Please explain your answer



Summary and Next steps



Thank you for taking part in
today's discussion

Continue the conversation...

<https://www.linkedin.com/groups/8985734/>

Thank you for joining us today

Reducing methane emissions: opportunities and barriers	Thu 12 th Nov @ 11.00 – 12.00	Register here
Gas Markets Action Plan (GMaP)	Mon 16 th Nov @ 10.00 – 11.00	Register here
Mapping our hydrogen transition	Wed 18 th Nov @ 14.00 – 15.00	Register here
Net Zero construction 2025/26 roadmap	Thu 19 th Nov @ 10.00 – 11.00	Register here
Heating our homes in a Net Zero future	Fri 20 th Nov @ 9.00 – 10.00	Register here
Planning the network	Mon 23 rd Nov @ 14.00 – 15.00	Register here
HyNTS FutureGrid	Tue 1 st Dec @ 14.00 – 15.00	Register here

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Today's speakers

nationalgrid



Isabelle Haigh – Head of Plant Operations, Gas Transmission, NG



Isabelle studied Electrical and Electronic Engineering and joined National Grid in 1991, she has held various engineering roles. Early in her career she was the first female power system engineer in the Birmingham Grid Control and managed a programme to build a new control centre. Moving to more commercial roles, Isabelle has recently led National Grid's, Gas Transmission's Transformation programme; an agile business change programme. Currently Isabelle heads up Gas Transmission's Plant Operations that manages the pipelines, compressors and terminals that make up the National Gas Transmission system

In 2016, she was asked to be Woman's Sponsor for Gas Transmission and has led a programme of activities called 'what's stopping you' that promotes an equal work place, promotes people being able to bring their whole self to work and is pursuing changes to enable a STEM pipeline for women into National Grid

Today's speakers



Neil Atkinson - CEO, IGEM

Neil Atkinson MIGEM was appointed Chief Executive Officer (CEO) in May 2018. A Chartered Chemical Engineer, he has extensive experience within the Professional Engineering Institution sector. Prior to joining IGEM, Neil was Executive Director at IChemE, responsible for membership, qualifications and international development.

Stephen Barrett – Director of strategic accounts, EU Skills



Stephen joined the Energy & Utility Skills Group in 2017 as the Strategic Client Director. As an MBA with significant leadership experience, Stephen is a Chartered Manager and a Fellow of the Chartered Management Institute. Stephen has extensive commercial experience, having led on business development activity across the critical national infrastructure at Thales UK and energy and engineering sectors at Babcock International Group. With a solid understanding of the energy sector gained with Magnox Electric, Stephen has both generation and decommissioning experience, leading a vast array of Corporate HR projects, including organisational design, competency management and strategic change.

Today's speakers



Sandra Kerr OBE - Race, gender and disability business and policy advisor, BITC

Between 1990 and 2003, Sandra Kerr worked in the Cabinet Office advising on policies on race, gender, disability, and work-life balance across [Whitehall](#). Prior to this, Kerr worked in the [Department for Work and Pensions](#) delivering front-line services to 33,000 customers whilst also managing a team of 120 employees. Kerr also worked as a personal development and IT skills trainer.

After her time in the Cabinet Office, Kerr joined the [Business in the Community](#) Race Equality campaign as the National Campaign Director where she works with the race advisory board to set the agenda for issues around race and employment in the [United Kingdom](#) (UK). Between 2012 and 2016 Kerr chaired the Ethnic Minority Employment Stakeholder Group (EMESG), advising the Government on issues and employment barriers facing individuals from minority ethnic backgrounds. In 2014 Kerr chaired the Trustee Board for Elevation Networks, an award-winning charity for the development of leadership and employability of young persons.

In 2015, the [Royal Society](#) invited Sandra Kerr to become a member (2015-2021) of their Diversity Committee. In 2018, Sandra Kerr was named as one of the panellists comprising a Cabinet Office task-force to create a public leadership centre.