



# The net zero race

The role of DEI in the  
roadmap to a net zero future

nationalgrid

POWERful WOMEN

## National Grid

An energy and infrastructure leader across UK and the US that is committed to building a better and smarter energy future for the 80 million people we serve. Our goal is to deliver cleaner, safer, and more affordable energy today, and to promote the innovations that will help achieve a net zero future for this generation and the next. National Grid lies at the heart of a transforming energy system and plays a vital role in connecting millions of people to the energy they use, safely, reliably and efficiently. As one of the largest investor-owned energy companies in the world, National Grid is at the centre of a clean, fair and affordable energy future, where tackling climate change and reaching net zero is a key priority.

## POWERful Women

A professional initiative working for a gender-balanced, diverse and inclusive energy sector. Our target is for women to hold at least 40% of middle management and leadership roles in the UK energy sector by 2030. We look to achieve our targets through challenging, supporting and connecting women, companies and the energy sector. POWERful Women can enable the change required to deliver net zero by supporting organisations with actions and activities that improve diversity and inclusion. Our ways of working and the support we offer are set out under our three strategic pillars (see appendix 1).

## Energy Leaders' Coalition (ELC)

Comprises 18 CEOs and organisational leaders from the UK's energy sector who have made a public declaration to improve gender diversity in their companies and in the sector as a whole. Each industry leader must contribute to the evolution of DEI in their business to transform the UK's energy sector to meet the net zero challenge.

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## Sponsorship and Authors

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## Net zero

Net zero refers to the balance between the amount of greenhouse gas that's produced and the amount that's removed from the atmosphere. When the emission we add is no more than what we take away, we reach net zero and have no further negative impact on our environment. It can be achieved through a combination of emission reduction and removals.

## DEI

### Diversity

The key characteristics that make an individual unique – for example, race, age, gender, religion, education, socio-economic status, sexual orientation.

### Equity

The act of acknowledging and amending inequality to level the playing field for all.

### Inclusion

The practice of ensuring that every individual feels a sense of belonging, and is free to be themselves, safe to say what they think and speak their mind.



# Foreword

## **Delivering a net zero future by 2050 is a momentous challenge**

It will require a fundamental transformation of our societies to transition to a clean decarbonised energy future that will revolutionise the way we work and live.

## **Equally, the transition to a diverse, equitable and inclusive society is also a vital venture**

It needs a historic change in the way we have learned to live together in our societies.

**This report, developed by National Grid and POWERful Women, sets out to examine whether there is symbiosis or opposition in achieving these two agendas: the diversity, equity and inclusion (DEI) and the net zero agenda.**

## **The insights and conclusions in this paper are based on research that includes:**

- 20+ top executive interviews across leading energy companies, government, regulator and investors
- A qualitative survey of industry professionals across 10+ companies and organisations
- Substantive desktop research of over 50 articles, books and papers on net zero and Diversity, Equity and Inclusion.

# Executive summary

**There is no question, the challenges ahead to deliver a net zero and diverse, equitable and inclusive future are material and will require a fundamental transformation.**

The decade ahead is a critical one. Achieving a net zero future requires us to overcome multiple challenges. At the heart of it all are people and we must ensure the solutions to address net zero are equitable and fair, representing all elements of society.

This research has mapped the key and well-documented net zero challenges and tested where stronger diversity, equity and inclusion would be an enabler or hindrance in overcoming those.

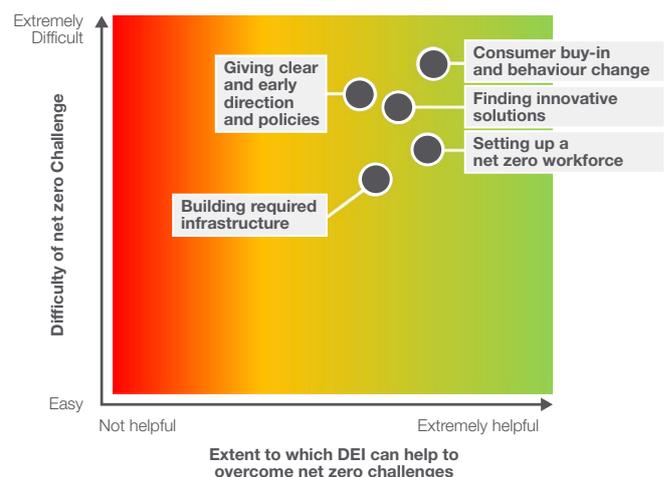
The results of our expert interviews, survey of professionals across the energy sector and literature review substantiate that diverse organisations that foster inclusion and provide equitable outcomes can help address and overcome some of the critical challenges in delivering a net zero future.

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**At a time when we need to move faster towards a clean energy transition, it’s crucial the energy industry has the right mix of mindsets and perspectives to overcome the challenges in the years to come, and also leverage opportunities along the way.**  
**Cordi O’Hara**  
 President of Electricity Distribution  
 National Grid  
 ”

This approach can help to ...

- **...enable the industry to find innovative solutions.**  
**Why?** Because DEI will challenge group think, bring diversity of thought, ideas and experience, move from traditional thinking and provide new solutions.
- **...achieve consumer buy-in and behaviour change.**  
**Why?** Because when the industry represents the diversity of people it serves, it can better take account of customers’ voices, design equitable solutions and bring the society and consumers along in this change journey.
- **...build a net zero workforce.** **Why?** Because DEI drives a broader, more diverse and more inclusive talent pool where new skills and capabilities are brought in, cultivated and retained.

The role of diversity, equity and inclusion in overcoming these three challenges are explored further in the sections that follow. Respondents also believed DEI partially supports two additional challenges: giving clear direction and building the required infrastructure, but these are not further investigated in this report.



**The research did not identify any aspects where DEI would be detrimental to achieving the net zero agenda.**

# 1 DEI enables finding innovative solutions

## Innovation is critical to achieving a pathway to net zero

The IEA estimates that more than a third of the emissions reductions required to reach net zero will stem from technologies that are not yet available today<sup>1</sup>. Innovation will be key to delivering the electrification of transport, industry and buildings, capturing carbon at scale, and shifting towards alternative sustainable biofuels. The fundamental technology development process must be revolutionised with fast paced innovation.

## DEI is a proven enabler of innovation, as highlighted by numerous studies

A BCG study of 1,700 companies identified a strong positive correlation between diversity of management teams and innovation success<sup>2</sup>. The report shows that organisations with greater gender diversity (8 out of every 20 managers were female), such as Amazon and Netflix, saw disruptive innovation, in which a new product, service, or business model fully replaces the version that existed before and generated about 34% of their revenues from innovative products and services. A follow-up study highlighted that companies with above-average diversity in their management teams reported innovation revenue 20% higher than companies with below-average leadership diversity<sup>3</sup>. A 2020 study by Bloomberg showed that companies with higher gender diversity had larger intangible assets (e.g., patents, copyrights, trademarks) and R&D expenses substantiating a link between diversity and innovation<sup>4</sup>. Finally, studies show companies that score better in terms of diversity tend to have better financial results<sup>5</sup>.

## The challenge of group think in energy is recognised as a key challenge to identifying the solutions of tomorrow

The more different the characteristics are of team members, the more varied perspectives they will bring to the table. Supported with an inclusive culture that ensures individuals feel safe to be themselves, express their opinions and challenge peers and leaders, innovation will flourish. Leaders and managers ultimately play a critical role in establishing an inclusive culture and encouraging openness, ensuring equity and supporting innovation.

## To win the race to net zero by 2050, the level of innovation needed across the industry is unprecedented

It will be supported by organisations with stronger diversity, equity and inclusion practices which could identify transformative approaches, business models and new ways of working. Across our study, 62% of respondents believe that DEI can help to overcome innovation challenges to reach net zero. 83% of respondents agree or strongly agree to the statement “DEI results in better, more innovative solutions to problems”. Diversity is a proven enabler of innovation and as such, a critical part of delivering the technology, systems and ideas needed to enable net zero.

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**A diverse and inclusive workforce delivers strength from difference – different viewpoints and ways of thinking.**

**John Evans**  
CEO  
Subsea 7

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**Group think is incredibly present in the energy industry: we need to think outside of energy conventional wisdom.**

**Mark Copley**  
CEO  
EFET

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## 2 DEI achieves consumer buy-in and behaviour change

### Consumer buy-in and behaviour changes are key to reaching net zero

“Behavioural changes which affect the way people use energy are an important part of the toolkit for reaching net zero emissions by 2050”<sup>6</sup>. The UK’s Committee on Climate Change highlights that “progress has come largely from things that have not involved consumers changing their behaviour. Net zero will require major progress in all sectors and behavioural shifts play a much greater role”<sup>7</sup>.

### The energy transition impacts all of society differently and everyone needs to be brought along on the journey

Climate change tends to impact vulnerable groups and UN figures indicate that 80% of the people displaced by climate change are women<sup>8</sup>. It is important that the needs of these groups are considered to achieve their buy-in and ensure the transition is fair.

### Diversity in decision-making helps achieve consumer support for those decisions

More inclusive and participatory decision-making improves the quality of decision-making because it incorporates a wider range of perspectives and expertise. It also addresses the need for participatory justice (i.e. involving people in decision-making who will be affected by these decisions) which is known to strongly influence support among the public<sup>9</sup>. Climate Assembly UK highlights that involving diverse groups in decision-making improves decision quality and acceptability<sup>10</sup>.

### Most influential advocates for net zero are individuals that are perceived to ‘represent’ society – e.g., Greta Thunberg, David Attenborough

63 out of Apolitical’s<sup>11</sup> most influential 100 people in climate policy are from typically under-represented or minority groups in terms of gender, race and age. This number would likely increase further if all forms of diversity were taken into account.

### The energy industry can learn from best practices in the FMCG (Fast-Moving Consumer Goods) sector. Adoption of products and technologies is greater when diversity is included

A more diverse workforce can empathise with the full consumer group, allowing them to create fair and equitable solutions that are more likely to be perceived as legitimate and gain consumer acceptance<sup>12</sup>. For instance, Nestlé, a global FMCG organisation and a role model for diversity, states “Diversity and Inclusion are vital to our company as we work together to meet customer needs”<sup>13</sup>. 45% of people in management are female and Nestlé have pioneered inclusive design technology, which ensures that products and packaging meets the needs and demands of all customers no matter their circumstances, making them more accessible to all groups in society.

### Society has the power to veto net zero – or bring it to life

Organisations with stronger diversity, equity and inclusion practices will achieve stronger society and consumer buy-in. Our survey found that 75% of respondents believe that DEI can help to achieve consumer buy-in and behaviour change. 86% of respondents agree or strongly agree to the statement “DEI enables better representation of consumers and understanding their needs”. Having a representative workforce ensures the desires and concerns of all of society are considered during decision-making and messaging, which can help to achieve consumer buy-in and behaviour change required for our net zero future.

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**One thing that the energy industry is quite guilty of, is we think about the supply rather than the demand. Diversity can help reach net zero by allowing a better dialogue with our consumers and communities.**

**Nick Wayth**  
CEO  
Energy Institute

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# 3 DEI is needed to build a net zero workforce

## The energy sector is facing a critical skills gap to reach net zero

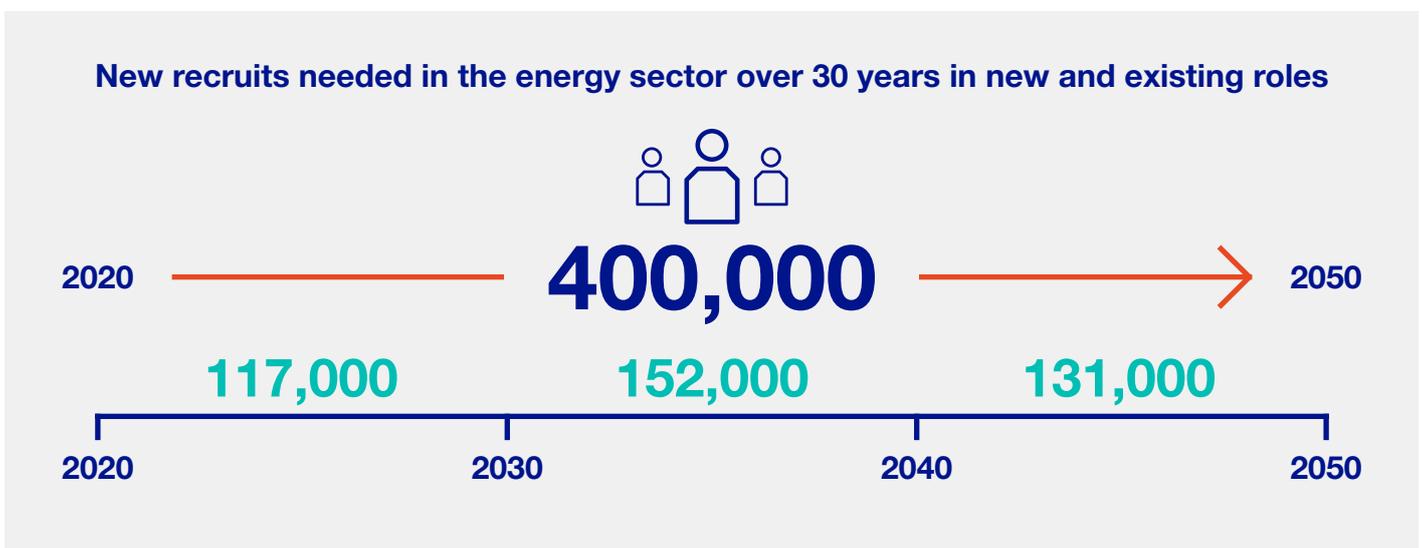
The drive to net zero is creating a fundamental shift within the energy sector, with different skills and capabilities required. Energy companies need to build highly skilled, experienced workforces with the relevant capabilities to deliver the required changes for net zero<sup>14</sup>.

Research published by the Committee on Climate Change (CCC) in May 2023 revealed that net zero offers the potential for significant net employment creation in the UK, with estimates of between 135,000 and 725,000 net new jobs in low-carbon sectors such as buildings retrofit, renewable energy generation and electric vehicles. The CCC concludes that this will require active reskilling and upskilling of the workforce in key areas, with the need for government support<sup>15</sup>.

Research by National Grid estimates that the UK energy industry will need to recruit for ~400,000 jobs by 2050, of which 260,000 will be new roles and 140,000 will be replacing those who have left the workforce<sup>16</sup>. There are several factors contributing to this challenge: different capabilities are needed compared to today; one fifth of the workforce is expected to retire by 2030; there is a war for talent with other industries; and there is a narrow pipeline of young people pursuing STEM (science, technology, engineering and mathematics) qualifications<sup>17</sup>. To reach net zero the workforce needs more talent and a wider variety of skills.

## We also need to cultivate existing talent

As well as attracting new and diverse talent and skills, we should ensure that existing talented people are retained and progressed. Research by POWERful Women in 2022 revealed that many barriers to career progression still exist for women in middle management in the energy sector, risking a talent exodus at this critical time<sup>18</sup>. Companies can retain talented people and capture the skills for net zero through creating a supportive workplace culture and ensuring that policies (like flexible working and development programmes) are implemented effectively and fairly.



## The energy sector is currently missing out on a diverse workforce

Despite making up 48% of the global labour force, women only account for an estimated 32% of the global energy sector workforce and ethnic minorities only 22%<sup>19</sup>. POWERful Women highlights that at senior level, just 29% of all board seats and 16% of executive board roles across the UK energy sector were held by women in 2023, with more than one fifth (21%) of the top 80 energy companies still having all-male boards<sup>20</sup>. Further to this, minorities continue to be under-represented in critical STEM subjects, with women making up just 18% of first year engineering and technology undergraduates in the UK<sup>21</sup>.

National Grid and POWERful Women recognise that increasing the representation of women in the energy sector must play a critical role in building diversity. National Grid's 50/50 Women in Engineering programme is designed to increase the female engineering population and this, alongside other internal schemes, helps to break down the barriers to progression of female engineers and take a step towards building a more diverse net zero workforce.

## Leveraging more diverse talent pools will help to build a net zero workforce

The skills gap cannot be filled by simply pulling from the existing talent pool, the net must be cast wider<sup>22</sup>. The UK government has recently acknowledged that "a successful transition to net zero will depend on our ability to harness all possible talent"<sup>23</sup>. Broadening talent pools can help the industry access more people to fill the large number of jobs required. DEI can also help to fill the wider variety of skills needed. To reach net zero, engineering skills will need to be complemented with a wider skillset, including digital and AI, communication and change management. DEI increases the probability that the skills required will exist within the workforce<sup>24,25</sup>, as diverse talent brings a variety of experience, knowledge and skills.

## People from some underrepresented groups are particularly interested in supporting net zero

Rebranding energy careers as essential to net zero can help to attract more talent and more diverse talent. Research shows that on average, 57% of UK adults want to work for an organisation that contributes to net zero, but 83% of women want to help the UK reach its net zero target<sup>26</sup>. Further to this, climate change risk perception and concern are consistently higher among women than among men<sup>27</sup>.

## A fit for purpose, complete net zero workforce is required to reach climate targets

DEI can help to fill the skills gaps. Our survey found that ~73% of respondents believe that DEI can help to fill the net zero skills gap. 86% of respondents agree or strongly agree with the statement "DEI is required to have access to a variety of different skill sets".

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**We will just not hit the numbers of people we need for net zero if we don't diversify the talent pool.**

**Sian Jones**  
CEO  
Corella

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**Change can only be achieved by people, a just transition to net zero can only be delivered by a diverse workforce that better reflects the communities we serve.**

**Keith Anderson**  
CEO  
Scottish Power

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# 4 Recommendations

If one thing is clear from the research, it is that DEI is fundamental for net zero in three key areas:

**1 To enable the industry to find innovative solutions.**

**Why?** Because DEI will challenge group think, bring diversity of thought, ideas and experience, move from traditional thinking and provide new solutions.

**2 To help achieve consumer buy-in and behaviour change.**

**Why?** Because when the industry represents the diversity of people it serves, it can better take account of customers’ voices, design equitable solutions and bring society and consumers along in this change journey.

**3 To build a net zero workforce.** **Why?** Because DEI drives a broader, more diverse and more inclusive talent pool where new skills and capabilities are brought in, cultivated and retained.

**To make a step change every industry leader needs to act.**

**Below are some recommended questions leaders can ask to enhance DEI in their business and progress towards net zero.**

<p><b>Lead and role model importance of DEI from the top</b></p>	<ul style="list-style-type: none"> <li>• Is DEI core to the company strategy, values and purpose?</li> <li>• Do we have strong diversity at Board, executive and leadership levels?</li> <li>• Are we setting and reporting DEI targets transparently, internally and externally?</li> <li>• Are we measuring progress towards our targets effectively and do leaders and managers know what they are accountable for?</li> <li>• Are our internal workplace and diversity policies and initiatives having the desired effect? Are they being used and if not, why not?</li> <li>• Is DEI a priority for middle managers/key influencers – do they know what is expected of them through behavioural frameworks and objective setting?</li> <li>• Are we taking every opportunity to enhance DEI messaging through relatable story telling?</li> </ul>
<p><b>Inspire, attract and cultivate current and future talent</b></p>	<ul style="list-style-type: none"> <li>• Do we insist on inclusive recruitment practices to eliminate bias?</li> <li>• Are we bold enough with entry level talent? Do we challenge preconceptions around education level, school/college/university attended?</li> <li>• Is our employee value proposition right? Does it need a DEI refresh to be inclusive? And does it make a strong enough link to net zero?</li> <li>• Are we creative enough with our attraction channels? Are we investing enough resources and creativity in our school outreach?</li> <li>• Are we working to retain our best talent? Are we cultivating skills and providing opportunities to progress through development and workplace support?</li> </ul>
<p><b>Create and promote a safe and inclusive culture</b></p>	<ul style="list-style-type: none"> <li>• Does our working environment truly allow everyone to thrive?</li> <li>• Do we have an ‘inclusion standard’ or inclusion policy?</li> <li>• What more can we do to leverage Employee Resource Groups? Do we involve them in decisions?</li> <li>• Do we provide quality education on DEI topics: allyship, cultural intelligence, microaggressions?</li> <li>• Do we really know how people feel working here beyond annual survey results? Does our engagement contain indices on inclusion, belonging, ‘safe to say’?</li> <li>• Should we mandate ‘inclusive leadership’ upskilling for all managers? Do we have an effective a reverse mentoring programme?</li> </ul>

# 5 Appendix

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### POWERful Women's commitment



- Encourage collaboration and share best practices on the topics outlined in the recommendations (above)
- Build cross industry guidance and practical resources to improve diversity, equity, and inclusion
- Hold energy companies accountable on progress against their company DEI agendas, including through gathering and reporting data
- Support companies in aligning to the DEI/Net zero agenda, focussed on the Energy Leaders' Coalition
- Use network to influence government/regulators to agree and set industry targets/standards
- Create networking opportunities to educate on the net zero/DEI requirements
- Run online and in person events being deliberate around topics that support net zero/DEI progress
- Promote research through PFW network

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