

UK'S ECONOMIC RECOVERY FROM COVID-19

The Energy Institute (EI) welcomes the opportunity to submit the following insights and analyses to the Department for Business, Energy & Industrial Strategy regarding measures needed to support the UK's economic recovery from COVID-19, with a particular focus on green recovery and net zero.

About the Energy Institute

The EI is the chartered professional membership body bringing global energy expertise together.

We're a unique network with insight spanning the world of energy, from conventional oil and gas to the most innovative renewable and energy efficient technologies.

The global energy industry, the people working in it and wider society all benefit from the EI's work.

We gather and share essential knowledge about energy, provide the skills that are helping us all use it more wisely, and develop the good practice needed to keep it safe and secure.

We articulate the voice of energy experts, taking the know-how of around 20,000 members and 200 companies from 120 countries to the heart of the public debate.

And we're an independent, not-for-profit, safe space for evidence-based collaboration, an honest broker between industry, academia and policy makers.

Method

This submission is based on views of EI members collected via the *Energy Barometer*¹, an annual survey of a representative sample of the EI's professional and pre-professional members in the UK. This year's *Energy Barometer* report was published on 8 July 2020².

The 2020 *Energy Barometer* survey was sent to 732 EI members in the UK, of which a total of 355 completed the survey online in March 2020. The sample size was chosen to give results that are within a 5% margin of error and at a confidence level of 95% when compared to surveying the EI's entire UK membership. Consisting of three EI member grades: Fellow (N=104), Member (N=164) and Associate Member (N=87), the sample was representative of the diverse range of seniority levels as well as the sectors and disciplines of the EI's members in the UK. An additional survey on the impacts of the COVID-19 pandemic on the UK energy industry was sent to the same group of EI members in late May and completed by 184 respondents; these results are also incorporated in this submission.

	Top 2020 respondent sectors (members may be in more than one sector)	% of respondents
1	Natural gas and oil	34
2	Renewable technology	24
3	Energy transformation, heat and power generation	23
4	Buildings	22
5	Energy demand management and utilisation	22

¹ For more information about this project, please visit www.energyinst.org/barometer

² For the 2020 *Energy Barometer* report, please visit www.energyinst.org/barometer/2020

Background

Over the weeks that the 2020 *Energy Barometer* survey was open, the disease COVID-19 spread around the world, creating a global health crisis with millions of people infected and tens of thousands losing their lives. The UK went into lockdown, with the subsequent drop in business, trade and free movement depressing the economy. Unsurprisingly, the COVID-19 pandemic was identified in the survey as one of the biggest challenges facing the energy industry this year.

While the challenge of the COVID-19 crisis should not be understated, EI members send a clear message that the UK should not lose sight of the longer-term climate crisis. EI members are dissatisfied with the UK’s current policy agenda for lowering greenhouse gas emissions; almost 90% across industry areas believe the UK will fall short of its net zero target given the UK’s current emissions reduction policies, and only 13% believe the Government is currently doing enough to meet the 2050 target.

EI members are split on whether COVID-19 will hasten the transition to net zero (38%) or hinder it (33%). Some members worry that the impacts of the pandemic on the economy mean that there will be less investment available for new low-carbon energy projects. Others believe that a recovery package aligned with net zero could offer an important opportunity to accelerate the transition.

Regarding measures to support the UK’s economic recovery from COVID-19, EI members overwhelmingly agree with the principles of the Committee on Climate Change drawn from their recent letter to the Prime Minister (6th May 2020)³. Please see the table below for further detail.

The Government should...	% of EI members who agree/strongly agree
Ensure that costs of the recovery and acting on climate change do not burden those who are least able to pay	87%
Capitalise on changed social norms during the pandemic to create long-term changes that benefit well-being and reduce emissions	83%
Make support for emissions-intensive sectors contingent on them taking real, lasting action on climate change	80%
Prioritise climate-related investments to support economic recovery and jobs	79%
Replace lost or threatened jobs of today by those created by the new, resilient, low-carbon economy	74%
Design a future UK carbon pricing mechanism to ensure an appropriate price for carbon, even in times of external shocks	72%

³ Link to the referenced letter: <https://www.theccc.org.uk/publication/letter-building-a-resilient-recovery-from-the-covid-19-crisis-to-prime-minister-boris-johnson/>

Green Recovery and Net Zero

Question 1: Which areas of infrastructure investment should we prioritise for early action to drive economic recovery and support delivery of net zero? (e.g. building energy efficiency and heat, low carbon power, energy systems, electric vehicle infrastructure)

- 1.1. EI members were asked what their top policy priorities would be to ‘build back better and greener’ after the COVID-19 pandemic. Improvements to energy efficiency of existing housing stock, and development of infrastructure to reduce transport energy demand (e.g. cycling and walking routes, remote access to work and services) came out on top, each chosen by almost half of EI members.
- 1.2. Energy efficiency will undoubtedly play a crucial role in the UK’s recovery from COVID-19 while supporting delivery of net zero. For the past four years of the *Energy Barometer*, energy efficiency has been the top choice for meeting a shortfall in emissions reduction at least cost.
- 1.3. Energy efficiency also contributes to meeting other societal aims, primarily alleviation of fuel poverty. In the 2019 survey, ‘increased funding for energy efficiency improvements’ and ‘more stringent minimum efficiency standards’ were cited as some of the best ways that the UK Government could ensure that the low carbon transition helps to alleviate fuel poverty.
- 1.4. This year, EI members were asked to cast a critical eye over the past decade and identify the biggest missed opportunities in terms of lowering greenhouse gas emissions. Closing these gaps may be all the more important as part of an economic recovery from COVID-19 that supports net zero. Lack of progress in energy efficiency was named the greatest missed opportunity of the past decade, once again highlighting the importance of action in this area.
- 1.5. Other missed opportunities included renewables – suggesting that despite their success, even more could be done – and a lack of development of new nuclear power and carbon capture, usage and storage (CCUS). While CCUS and nuclear power are viewed as high investment risks due to policy uncertainty in the *Barometer* survey, energy efficiency is considered low risk; this is a particularly significant ‘no-regrets’ option that has been consistently neglected.
- 1.6. EI members were also asked to recommend the most important first steps which must be taken by government in the next decade in order for three hard-to-decarbonise sectors to successfully transition to net zero: aviation, road freight and domestic heating. These sectors may require particular attention from policymakers as they consider early action in infrastructure investment:
 - 1.6.1. For aviation, respondents believe the first step should be to increase funding for research and development into low-carbon biofuels and synthetic fuels. Of near equal urgency is encouraging greater usage of other modes of transport (for both people and goods) by lowering costs.
 - 1.6.2. For road freight, EI members recommend shifting freight demand from road to rail, as well as incentivising the development of hydrogen heavy goods vehicles (HGVs), both of which would require corresponding infrastructure upgrades.
 - 1.6.3. For home heating, incentivising energy efficiency improvements for existing housing stock was the preferred first step, followed closely by incentivising low-carbon heating technology such as heat pumps and hydrogen-ready boilers.

Question 2: What action should we take to align investment in the UK and globally with net zero? (e.g. incentives for investment in net zero-aligned infrastructure, to reduce exposure to unsustainable investments and sectors)

- 2.1 Lessons from the past decade can help inform actions to take now to align investment with net zero. The *Energy Barometer* survey asked respondents about the greatest successes of the past ten years in terms of lowering greenhouse gas emissions. The growing proportion of electricity provided by renewables stood out as the greatest success, chosen by more than half of respondents. Around one third of respondents chose the switch from coal to gas-based electricity generation as the greatest success.
- 2.2 When asked about the factors that enabled success in these areas, EI members were clear that progress correlated with long-term government policy which set a clear direction of travel for the sector. According to EI members, the most important factors which enabled the growth in renewables were falling costs of low-carbon technology and infrastructure, followed closely by direct financial support for specific technologies. On the other hand, the key enabler for the switch from coal to gas was the introduction of mandatory standards and regulations.
- 2.3 In terms of aligning investment with net zero globally, the UK can capitalise on its position as a climate leader on the international stage. Nearly half of EI members believe that leading by example should be the number one priority for the UK to maintain its status as a climate leader. Setting a good example will be all the more important with the UK set to host the UN COP26 climate conference in November 2021. EI members believe that the most important outcome of that conference will be commitment by parties to more ambitious nationally determined contributions (NDCs), as mandated in the 2015 Paris Agreement.

Question 4: How can we more effectively support businesses across the economy in acting to access growing low carbon markets and support delivery of net zero? (e.g. innovation support, advice, regulatory barriers)

- 4.1 One of the most effective ways to support businesses across the economy in the journey to net zero is to help develop the workforce to provide the skills, expertise and diverse thinking required for its delivery. The energy industry workforce is central for the UK's transition to net zero. EI members believe the most effective route to building a future net zero workforce is to start early through STEM education at primary and secondary schools, followed by increasing energy-related vocational training (e.g. apprenticeships).
- 4.2 The EI is committed to improving workforce diversity. Alongside BEIS and a number of other organisations, the EI is a project partner of POWERful Women (PFW)⁴ which seeks to advance the professional growth and leadership development of women across the UK's energy sector.
- 4.3 Additionally, the *Barometer* survey revealed signs that the UK energy industry is already on board to support the delivery of net zero. Although the UK's new net zero target was signed into legislation less than a year ago at the time of the survey, 35% of EI members' own organisations have already incorporated it in their business strategy by publicly committing to a net zero target, and of these, around one third are already implementing an action plan.

⁴ Please visit powerfulwomen.org.uk for more information.

Question 5: How do we most effectively enable the UK's carbon intensive sectors to transition to low/zero emissions while maintaining competitiveness? (e.g. CCUS/hydrogen)

- 5.1. In reference to the recommendations of the Committee on Climate Change (CCC) for a resilient recovery from the COVID-19 crisis (please refer to the Background section for further detail), 80% of EI members believe that the Government should make support for emissions-intensive sectors contingent on them taking real, lasting action on climate change.
- 5.2. Given the technology's strategic importance to achieve deep decarbonisation, carbon capture, usage and storage (CCUS) is vital for enabling the UK's carbon intensive sectors to support the delivery of net zero. As a first step to ensure the commercial deployment of CCUS during the 2030s, EI members believe the UK government should fund pilot and demonstration projects. These projects should be carried out in both industrial clusters and power stations. A significant number of respondents also support mandating the use of CCUS on large emissions sources.
- 5.3. EI members were asked to indicate the timescales upon which they expect the impacts of COVID-19 on the UK energy industry to remain. Many of these impacts have been particularly relevant for the UK's carbon intensive sectors following a drop in transport and industrial activities. Very few EI members expect demand for oil and gas, passenger journeys (road, rail and flights), industrial activity or overall UK energy demand to rebound to beyond pre-pandemic levels; in fact over half foresee them remaining subdued for an extended period, even after government restrictions related to the pandemic have been lifted.
- 5.4. Enabling the UK's carbon intensive sectors to transition to low/zero emissions while maintaining competitiveness also depends highly on the public's buy-in of low-carbon products and services that may replace their current offerings. This year's *Barometer* takes a closer look at the role of individuals as well as the societal and behavioural changes that will be required as part of the transition to net zero. Several points are worth noting for consideration in the design of a recovery package that supports the delivery of net zero:
 - 5.4.1. A full two thirds of EI members perceive 'consumer and citizen pressure' as the leading factor driving the low carbon transition in the energy industry (besides emission reduction targets), up from 54% in 2019.
 - 5.4.2. EI members believe the most important actions Government can take to empower individuals to make the necessary changes towards net zero are 'investment in low carbon infrastructure' and 'making low carbon products and services less expensive', for instance via subsidies.
 - 5.4.3. EI members were asked what the most important action will be in the next decade to ensure that the transition to net zero does not leave vulnerable consumers worse-off. According to EI members, making low-carbon energy affordable should be the top priority, followed by 'clear policy and planning', and 'support for low carbon buildings', including energy efficiency and heating.