Energy UK

The voice of the energy industry

Review of policies to drive commercial and industrial decarbonisation

Summary January 2025

In 2024 Energy UK worked with business and energy trade associations and organisations to review policies that drive the decarbonisation of commercial and industrial businesses. The following trade associations and organisations have provided input into the review, but don't all support or endorse all the policy recommendations below. Some provided input into the commercial review or the industrial review only, depending on the scope of their organisation.

- Aldersgate Group
- British Chambers of Commerce (BCC)
- British Glass
- British Retail Consortium (BRC)
- Chemical Industries Association (CIA)
- Confederation of British Industry (CBI)
- Electrify Industry
- Energy Intensive User Group (EIUG)
- The Food and Drink Federation (FDF)
- Heat Pump Association (HPA)
- Industrial Decarbonisation Research and Innovation Centre (IDRIC)
- Industry Wales
- Make UK
- Mineral Products Association
- Solar Energy UK
- Thermal Storage UK
- UK Green Building Council (UKGBC)
- UK Hospitality
- UK Steel

The review assessed how well current policies drive investment in technologies that enable businesses to manage energy costs and reduce carbon emissions, and identified a number of policy gaps. It then considered what new policies may be required and international policy in this area.

Key findings

- Electricity network connection changes are required for electrification of processes and space heating. Long delays and high and inconsistent pricing for connection charges between different Distribution Network Operators

(DNOs) create challenges. There is a need for further reforms to standardise connections processes and charges and improve transparency, as well as penalties for poor performance by network operators and incentives to progress connections. Businesses providing key social, economic or environmental benefits and those that provide flexibility and system benefits should be prioritised in the connections reform process in line with the Government's emerging industrial and decarbonisation strategies.

- Electricity network connection changes are required for electrification of processes and space heating. However, long delays and high and inconsistent pricing for connection charges between DNOs create challenges. There is a need for further reforms to standardise connections processes and charges and improve transparency, in addition to penalties for poor performance by network operators and incentives to progress connections. Businesses providing key social, economic or environmental benefits and those that provide flexibility and system benefits should be prioritised in the connections reform process in line with the Government's emerging industrial and decarbonisation strategies.
- Additional support for Energy Intensive Industries (EIIs) subject to the risk of carbon leakage may be required given that wholesale and network policy costs are higher than international competitors.
- Since the Targeted Charging Review (TCR), residual network charges on businesses have climbed steeply, damaging the profitability and international competitiveness of industrial and commercial developments as well as undermining the case for the electrification of businesses. Stakeholders question whether the TCR has delivered on its objectives. Ofgem therefore now needs to fulfil its commitment to evaluate the impacts of the TCR given the significant rises in network charges faced by many companies and much higher costs they now pay compared to international competitors.[1] It also needs to introduce incentives for Demand Side Response (DSR) to capture the consumer benefit of avoiding inefficient over-investment in network capacity, something essential for the delivery of a cost-effective energy system in the coming years and something that was promised during the TCR process but has never materialised.
- New approaches should be considered that reduce network charges for end users that are reducing energy system and network costs. For example, businesses could be allowed to write down their residual charges if they can display how their flexibility actions reduce the need for network buildout. Essential projects for Net Zero or economic growth should be considered,

[1] The TCR caused a tripling of network charges for EIIs, where UK steelmakers faced charges of £30/MWh (compared to £9-10/MWh before TCR). French and German steelmakers faced network charges of £1-2/MWh.

under strict conditions, as exempt from residual charges if they are unable to shift their consumption flexibly.

- Electricity needs to be made cheaper in comparison to gas to help make electrification economical. A clear starting point is to remove costs that are added onto electricity, especially legacy renewable schemes such as the Renewables Obligation and Feed-in Tariff. Energy UK is currently developing proposals for the non-domestic sector to build on our work looking at the domestic sector.[2] Ideally costs would be moved into general taxation in a way that is fiscally sustainable and protects customers.
- Even with a reduction in the amount of policy costs on electricity there is then likely to be a need for electrification support. CapEx and OpEx support requirements will vary between sectors and types of companies. Some smaller companies may struggle to find CapEx and find it hard to apply to the Industrial Energy Transformation Fund (IETF). Other larger companies, particularly those who are internationally owned, may need less support with CapEx, depending on the level of total funding available and competition between different countries for investment. The amount of OpEx support will also vary depending on the process involved, eg those with access to waste heat that can be upgraded through a heat pump may need less support than others.
- Current support for low carbon space heating is focused on the domestic sector and is limited to supporting SMEs as they tend to set a heating capacity limit of 45kWth. Support needs to be expanded to help businesses install energy efficiency measures and decarbonise space heating.
- The focus of an electrification business model should be on process heat and electrification of manufacturing (space heat should be covered by expanded domestic/SME policy where possible).
- Longer-term, a move to a more technology-neutral approach that covers hydrogen, Carbon Capture Usage and Storage (CCUS) and electrification such as a Carbon Contract for Difference (CCfD) being used in Germany or the Sustainable energy production subsidy (SDE++) scheme in the Netherlands should be considered to enable the most cost-effective technology to be deployed.
- The role of long-term contracts between businesses and new low-carbon generation under Corporate Power Purchase Agreements (CPPAs) has been considered separately (see Annex 3).

[2] Energy UK (2024), Policy solutions: Taking immediate action to make bills affordable this winter

Key findings – commercial

- SMEs lack technical knowledge and capital and require tailored support to help them reduce energy bills and cut carbon. This should include free audits and better access to capital building on national schemes such as the Business Energy Scotland scheme and local schemes that help businesses cut running costs such as the Mayor's Business Climate Challenge in London.[3] Business Energy Scotland, run by Energy Saving Trust provides a free technical survey and report on options to cut carbon and save money through investing in energy-efficient systems, equipment,building fabric improvements and renewable heat technologies. Interest-free loans up to £100k are available and cashback grants of up to £30k. The scheme has helped participating businesses cut energy bills by up to 60% and carbon emissions by 90%.[4]
- Schemes such as the Boiler Upgrade Scheme need to work for SMEs. Small non-domestic applications <45kWth are in scope of the Boiler Upgrade Scheme. However, there is a lack of communication from the Government to the non-domestic sector about the current scheme. Suitable applications could be identified via energy bills or the Energy Performance Certificate (EPC) register. Another barrier to SME uptake is the requirement to own the building, making it difficult for tenants to decarbonise their heating system. Landlords are less likely to take it up because they don't benefit from any resulting energy bill savings.
- Clarity is urgently needed on buildings policies, eg consultation on the technical requirements for the Future Buildings Standard (FBS), clarity on non-domestic Minimum Energy Efficiency Standards (MEES), amendments to non-domestic permitted development rights and development of consistent local guidance to drive investment in low-carbon buildings and make installing low-carbon technology easier.
- Clarity is also needed on next steps on the phase-out of fossil fuel heating in both domestic and SME sectors to drive the heat pump market, although dates will need to be reassessed given how much time has passed since the previous Government consultation.
- Reform of non-domestic EPCs is needed alongside introduction of the previously proposed performance-based policy framework so that landlords, tenants and investors get accurate information on both the quality and actual energy and carbon performance of buildings.
- There needs to be a wider use of local authority powers to enforce energy efficiency standards and heat decarbonisation through planning and zoning requirements, eg the London Plan push for zero-carbon developments, with stricter energy and sustainability requirements.

[3] Greater London Authority (2024), The Mayor's Business Climate Challenge
[4] Energy Saving Trust (2024), Business Energy Scotland Case Studies

Key findings – industry

- There is a need to rationalise reporting across multiple schemes (Climate Change Agreements (CCA), UK Emission Trading Scheme (ETS) and Streamlined Energy and Carbon Reporting (SECR) etc and consider removing the Energy Saving Opportunity Scheme (ESOS), as it is not providing much value; larger sites have greater knowledge of processes and carbon-reduction opportunities.
- There is a need for more clarity on not only hydrogen infrastructure but future electricity network capacity, CCUS infrastructure, and how to transport process-CO_2 emissions from dispersed sites.
- Carbon pricing can create an important signal to reduce emissions cost-effectively and drive industrial decarbonisation, yet the unequal application of carbon pricing globally limits its ability to achieve this. As the UK applies carbon pricing via the UK Emission Trading Scheme and carbon price support mechanism, effective carbon leakage mitigation measures (such as the UK Carbon Border Adjustment Mechanism (CBAM)) become vital to avoid decarbonisation by deindustrialisation. Current carbon price volatility and uncertainty of the effectiveness of the UK CBAM make it hard to base investment on future and volatile carbon prices. Linking the UK and EU carbon markets would minimise competitive distortions due to different carbon prices (and avoid potential impacts from separate UK and EU carbon border adjustment mechanisms) and reduce price volatility. However, on its own, carbon pricing may not result in sufficient investment in decarbonisation, especially where pay-back periods are high and businesses are using nascent technology or are reliant on wider infrastructure.
- The IETF scheme is fairly technology neutral; covers both feasibility studies and deployment of technology; is available for sites in all locations and promotes learning through monitoring and knowledge sharing. However, it is complex and administratively heavy; funding windows may not align with business investment cycles/plans; and it requires match-funding – making it particularly difficult for SMEs to benefit. Funding per application is also limited so it does not cover more strategic investments. Funding time periods are also a barrier and need to be extended, with more clarity given on the availability of future funding so businesses can plan ahead. The IETF only covers CapEx and doesn't cover OpEx. Support that focuses on this aspect, rather than capital costs of the technology alone, might work better for widespread deployment of low-carbon technologies and offer better value for money. There may be a way of supporting industry that fits better with their needs, eg more generous tax breaks or an OpEx-based electrification business model.
- An electrification business model could be based on a Carbon Contract for Difference (CCfD) model as used in Germany or the SDE++ scheme in the

Netherlands. The SDE++ scheme is not two-way so does not give government a payback if carbon prices are high; however, both schemes have different design pros and cons. Widening the CCUS business model to electrification projects might be an option but it would potentially reduce funding for CCUS projects that are needed for tackling industrial process emissions, and there are some issues with its design that might make this difficult.[5] Given barriers to network connection and issues with constraints, initial funding of a new electrification business model mechanism could be targeted at a particular geographic area. Funding would need to come out of general taxation until wholesale electricity prices are below a certain level, to prevent the mechanism making the economics of electrification worse for other electricity users.

- Current hydrogen and CCUS business models put lots of commercial risk on applicants, eg they place significant off-taker risk on developers. They will need to be improved and made more bankable to enable investment in these vital areas for industrial decarbonisation.

[5] For example, there is no obvious method to cap payments for electrification projects, would need to convert energy savings to carbon savings – would penalise electrification when electricity prices high and the scheme has been designed for large player and consortium unlikely to work for SMEs.

Annex 1: Recommendations on existing policies

The review considered the likely impact of current policy design on investment in different decarbonisaiton technologies (red = doesn't incentivise or may even disincentivise investment, amber = mixed or may slightly incentivise investment and green = incentivises investment). Key recommendations on existing policies are set out below.

Table 1: How well are current policies driving investment in low carbon technologies in business?

	Building energy efficiency measures	Industrial process energy efficiency measures	Electrification of processes, heat and steam generation and heat storage	Heat pumps	Electrical storage	Connection to low carbon heat networks	On-site and private wire renewables
Industrial Energy Transformation Fund							
Super charger							
Capital allowances and tax*							
Business rates*							
UK ETS							
Climate Change Agreements							
Phase out of fossil fuel heating (SMEs only)							
Electricity network connection							
Network charges							
EPCs							
Minimum Energy Efficiency Standards*							
Performance based ratings*							
Future Buildings Standard							
Clean Heat Market Mechanism*							
Energy Saving Opportunity Scheme							

* *Requires co-operation between landlord and tenant*

There are a number of additional policies not included in the review that may also have an impact including:

- The Public Sector Decarbonisation Scheme (PSDS) which provides funding for energy efficiency and heat decarbonisation projects in public sector buildings. Though not directly commercial, lessons from the PSDS can inform commercial building policies. More detailed case studies and learnings particularly from PSDS heat pump installations should be disseminated to assist the wider sector.

- The Industrial Emissions Directive 2010/75/EU requires minimum energy efficiency standards for new manufacturing equipment as they need to adhere to Best Available Technology (BAT) standards. A new UK BATS regime has been proposed by Defra who consulted on it in 2021. [6]
- The role of public sector procurement at all levels adopting the requirement from all suppliers to provide a Carbon Reduction Plan.
- The use of fossil fuels subsidies in relation to driving the shift to renewable energy sources.

Below we set out some of the key reforms identified during the review that should be considered.

Industrial Energy Transformation Fund (IETF)

- Increasing budget, expanding scope of technologies to support wider range of low carbon technologies (where not commercially viable) and widening scope to new sites.
- Extending time periods to enable support for transformational projects.
- Removing requirements for match funding, reducing administrative burden and lowering threshold to enable wider take-up especially across SMEs.[7]
- Simplify application process and move to annual or more regular cycles of the Fund to better reflect internal financial decision making within companies. Some larger multi-national companies applying to the IETF have found it challenging to apply due to the short application window which makes it hard to get internal business approval in time.
- Greater funding to enable higher success rate of application and larger limits to individual awards to enable more strategic investments.
- Feasibility studies to include offsite infrastructure.
- Combine with electrification model to cover opex costs.

UK ETS

- Need to link the UK and EU ETS to create a larger, more liquid market, and resolve many of the trade issues created by CBAMs.
- Expansion of sector scope of the UK ETS to energy from waste, domestic maritime, greenhouse gas removals etc.
- Need to combine with support for investment in key areas.
- Carbon pricing should be combined with comprehensive measures to protect UK industry from the risk of carbon leakage, for example an effective UK CBAM.

[6] Defra (2021), 'Best Available Techniques'– A future regime within the UK
[7] Analysis by Federation of Small Business (FSB) suggest that SMEs face an average cost of £32k and only 10% of SMEs would spend >£100k. Threshold has only been brought down from £100k to £75k.

Business rates and tax reforms

- Build on the work done by the Energy Efficiency Task Force (EETF) work on aligning tax and incentives with the Net Zero pathway.
- Add plant and machinery required to set up CCUS and hydrogen infrastructure to the list of "excepted renewables plant" and machinery to the business green technology relief.
- Enhanced green super-deduction rate. The introduction of a capital allowance rate of at least 120% to support investment in electric vehicles and battery manufacture, grid improvements, low carbon power, heat pumps and retrofitting, biofuel refining and refuelling, infrastructure for deployment of hydrogen, and CCUS adoption by heavy industry.
- Green innovation credit for green technologies and processes. This would boost green research and development with an investment tax credit. The tax credit with a headline rate of 40% would unlock private sector R&D and innovation in CCUS, electric vehicles and battery technology, heat pump technology, biofuels and hydrogen production.
- Lower corporation tax rate. This would encourage commercialisation by offering a reduced tax rate for profits from green technology development. This involves reducing the rate from 25% to 10% on profits derived from development, manufacture and sale of batteries required for use in electric vehicles, and commercialisation and sale of heat pumps, biofuels, low carbon hydrogen and associated storage and transportation facilities, and CCUS to incentivise commercialisation of these technologies.

Climate Change Agreements

- Allow bubbling across multiple sites as current proposals for the new Phase will create significant administrative burdens for companies with multiple sites and may lead to inefficient investment.
- Continuing to rebalance the CCL by increasing trajectory of the gas CCL, or decreasing the electricity CCL (electricity and gas rates were equalised in 2024 and will increase slightly but remain the same as each other from April 2026 as confirmed in the budget).
- Ensure that private wire renewables are incorporated into target setting under Phase 3 of Climate Change Agreements.
- Rule changes to allow for more capital-intensive energy efficiency projects and electrification – eg longer target dates/carry over of excess progress towards targets. 6 year scheme should help but target periods still only 2 years and nothing on carry over.
- Ensure that as well as on-site renewables, private wire and CPPAs with new renewable projects qualify for zero emissions factors.
- Expansion of scope of CCAs eg retailers and low temperature manufacturing or to those who are decarbonising.

- Reform to incentivise EII consumers to electrify. Rather than meeting emissions targets or paying a fee in compensation, allowing a business to commit to electrifying their heating over the budget period.
- An awareness building campaign explaining the benefits CCAs to encourage companies to participate.

Clean heat market mechanism

- The Clean heat market mechanism only applies to smaller, MCS accredited heat pump products, i.e. those <45kWth. Therefore it will only drive smaller non-domestic applications. Government needs to consider how to include larger units in the scope of the scheme (while maintaining the necessary levels of quality and standards to ensure high quality installations and deliver positive outcomes for all customers).
- Pass the statutory instrument as soon as possible to create investment certainty for the supply chain to enable the scheme to go live in April 2025.
- Set out a longer-term pathway for increasing the proportion of heat pumps that reflects the significant rate of market growth needed.

Permitted development rights

- Bring in permitted development rights[8] for the installation of air source heat pumps in non-domestic applications in all areas of the UK (not just England) and in line with residential applications as per the Spring 2024 consultation:
    - No minimum distance on the installation of the heat pump from the property boundary.
    - The volume limit in cubic metres for an air source heat pump to be 1.5m^3.
    - Align Air Source Heat Pump (ASHP) permitted development rules in residential and non-domestic applications across the UK
    - Relax restrictions on the number of heat pumps that can be installed onto one building
- Limitation that any additional roof space created cannot exceed 50 m^3 should be removed to facilitate the installation of rooftop solar panels.

Connecting businesses to the electricity networks

- As the planning of the electricity networks moves towards spatial planning, consideration could be given to the treatment of key strategic businesses. Following the Dutch model, businesses seen to be providing key social, economic or even environmental benefits including carbon reduction could be

[8] The PDR consultation was seeking views on proposed changes to the permitted development right for the installation of air source heat pumps on domestic premises only, not about non-domestic. DESNZ (2024), Changes to various permitted development rights: consultation

given greater strategic priority in the network connections process. Connection reform for large demand connections (above 5 MW) could be informed through coordination of the Clean Power 2030 plan/the Strategic Spatial Energy Plan, the Industrial Strategy and the Industrial Decarbonisation Strategy.

- As businesses electrify their processes, flexibility from batteries and heat batteries will help to shift peak demand. This flexibility should be rewarded when seeking connection upgrades from DNOs by prioritising those businesses that offer services to make optimal use of the network.
- Allow businesses trying to connect to pursue wayleave hearings for their own connection, rather than relying on the DNO to fight their corner with local landowners and authorities for building their connection in legal disputes.
- In appropriate circumstances, shorter lease terms for electrical connections could present more agreeable terms to landowners, shortening the negotiating period to attain a voluntary wayleave/easement. The terms of lease for the electrical connection should, wherever possible, be matched to the terms of lease for the development.
- Permitted development rule allowing substation construction up to 29m^3 should be raised to 40m^3 given the expected increased need for reinforcement. This would accommodate solutions that package different electrical components into a single asset.
- Improve information sharing, including opening up data about the actual state of the network, including energy flows and available capacity, and about local development plans. Some networks have made some progress on this but much more progress across is needed. Standardisation of monitoring and data availability at distribution level is a critical enabler of this process, and to date has been slow to be delivered.
- Standardisation of processes and application forms, provision of clear materials and greater support for SMEs.
- Need for awareness raising of current initiatives underway across the business community.
- Need for ncreased resourcing for planning departments in local authorities.
- Standardise the processes and charges that distribution networks use for connecting customers.
- Provide statutory duties for the timescales that distribution networks must meet at each stage of a connection offer.

Network charges

- The TCR has not accounted for businesses that require large connections but do not make use of their capacity at peak hours and can provide flexibility services to the network, reducing the need to invest in reinforcement.
- As a result of the steep increase in TNUoS costs, it has been seen as a disincentive to invest for many EIIs to electrify their operations and may prevent investment in new facilities.
- A review should be conducted into businesses that require, often for safety reasons, large connections to the network but can reduce the overall need to invest in network reinforcement. Examples of these might include EIIs with on-site batteries or demand-side response. The incentive to perform this kind of flexibility was lost when TRIADs were effectively abolished under the TCR.
- However, in order to ensure network costs do not fall on unflexible consumers that are least able to bear network costs, at a time when they are expected to rise substantially, we cannot simply move back to the same incentives prior to the TCR. Nonetheless, Ofgem should agree with incentives that capture the consumer benefit of avoiding inefficient over-investment in network capacity.
- For example, businesses could, under a strictly Ofgem approved methodology, be able to write down part of their network charge based on how much network reinforcement cost they save through taking DSR actions.
- Of course, some businesses and types of technologies (like public EV chargers) won't be able to reliably flex their consumption.
- These businesses, if they are assessed by Government and Ofgem to be essential to Net Zero and economic growth, should be exempt from paying the full extent of their fixed charges mandated by the TCR or they should be allowed to pay network charges on a unit basis as per the pre-TCR period.

Energy Performance Certificates

- Compliance should be administered via independent assurance and oversight, with more punitive penalties for non-compliance, better training given to energy assessors and a review of the auditing process so that the accuracy of EPCs is improved.
- Combine the two assessment processes as they currently give two different ratings: using the Simplified Building Energy Model (SBEM) tends to get a lower value (as fewer assessors can do higher level 3 and the dynamic simulation model costs more).

- EPC methodology, assumptions (e.g. on carbon emissions) must automatically be updated at regular intervals to ensure consumers receive the most up to date and reliable information.
- Validity period of EPCs should be reduced from 10 to 5 years. It should also be easy for landlords to make updates to an existing EPC if they have made improvements.
- They should include information on typical costs and payback periods to better enable consumers to act on recommendations (the tool developed for Green Deal includes financial information but is not being used).
- EPCs should reflect both current and future CO_2 emissions over the lifetime of a property, taking likely future grid decarbonisation into consideration.
- Reform to reward flexibility – see Smart Building Rating (SBR) for domestic EPCs.
- Once non-domestic EPCs have been reformed, put in place a clear long-term pathway for future changes to the minimum energy efficiency standards for non-domestic private rented sector that drives investment and balances the need for ambition with realistic delivery, and avoids inefficient two step interventions.

Future Building Standard

- Tightening of targets to better align with net zero: over 60% of respondents to Government consultation suggested the target should be revised, most of whom thought it should be raised – typically to around a 40-50% reduction, not the 27% proposed. [9]
- Need to account for whole life cycle carbon emissions, including embodied carbon.
- Government needs to publish a roadmap showing future targets beyond 2025 to provide direction and clarity.
- Planning policy needs national reform to require every development or redevelopment or relicensing to perform to the same level (such as the Building Research Establishment Environmental Assessment Method (BREEAM) Level 6 or appropriate) across residential properties as well as industrial and commercial levels. This will enable local authorities to require the same levels without fear of displacing development.

[9] Department for Levelling Up, Housing and Communities (2021), The Future Buildings Standard: 2021 Consultation on changes to Part L (conservation of fuel and power) and Part F (ventilation) of the Building Regulations for non-domestic buildings and dwellings; and overheating in new residential buildings
Summary of responses received and Government response

Annex 2: International review of support for businesses

- International review shows range of Government support available for wide range of companies to electrify and decarbonise more broadly.
- Approach varies from significant spending under the Inflation Reduction Act (IRA) to drive investment in decarbonisation but also wider domestic industry base and supply chain with focus on 'just transition.'
- France uses a mixture of carrots (tax credits for low carbon technologies and Private Finance For Energy Efficiency a financial instrument managed by the European Investment Bank (EIB) and sticks (Éco-Énergie Tertiaire Regulatory obligation imposing a 40% reduction in the services sector's final energy consumption by 2030 and Article 101 of the French Climate & Resilience Law requires companies to install low carbon and adaptation measures).
- Germany has significant package to protect industry which is economically and politically important including Carbon Contracts for Difference (CCfDs), Energy Efficiency Competition, Federal Funding for Energy and Resource Efficiency in the Economy and Climate Protection Contracts.
- Italy has introduced Transition 5.0 initiative, a tax credit to inventive investment in digital activities, self-production of energy from renewable sources and staff training. This tax benefit is linked to a reduction in final energy consumption (at least 3%) or energy savings in processes (at least 5%).
- EU has hypothecated revenue from ETS to help Members States decarbonise through the modernisation fund and innovation fund.
- New EU Clean Industry deal expected to include Industrial Decarbonisation Accel Act, EU Competitiveness Fund and Action Plan for affordable energy.
- Some schemes are very technology agnostic eg SDE++ in the Netherlands to enable businesses to choose most appropriate way to decarbonise and create competition between technologies and funding pots.
- Dedicated mechanisms to support SMEs. E.g. in Germany "Federal Funding Industry and Climate Protection" aimed specifically at SMEs. In Italy the New Sabatini 2024 encourages SMEs to purchase new machinery, systems and equipment. Companies can obtain bank financing, supported by a government contribution that covers part of the interest.

Annex 3: Supporting the Power Purchase Agreement (CPPA market)

Although not directly covered by the review, Energy UK has considered the role of long-term contracts between businesses and new low carbon generation and storage projects under Corporate Power Purchase Agreements (CPPAs).

- A number of Governments are trying to help industry enter into long-term Corporate Power Purchase Agreements as a way of providing price certainty.
- Interest in CPPAs has been growing among businesses particularly in retail and IT sectors that have strong Environmental Social Governance (ESG) commitments.
- Price sensitive, low credit rating industrial customers are much less likely to enter into CPPA.
- Much greater activity is seen in Germany where corporates pay a premium for green power, and in Spain where low liquidity for forward electricity products drives corporates to seek long-term fixed prices.
- Government intervention may be required to increase the attractiveness of CPPAs and widen the set of offtakers so that a greater range of businesses and industrial customers can benefit. This could include introducing a Government CPPA guarantee scheme, potentially exempting end users signing new CPPAs from CfD costs or reflecting the use of CPPAs in Climate Change Agreements. Energy UK has drafted a paper on possible ways that Government could support the PPA market. [10]

Three countries have introduced a PPA guarantee scheme to date:

- In Spain the FERGEI Guarantee Scheme managed by CESCE, the Spanish export credit agency, and was granted an initial three-year budget of €600 million, or €200 million annually. It guarantees payments due to suppliers under PPAs if an offtaker cannot meet its obligations. Spain now accounts for 24% of European PPA uptake in 2022, having only entered the market in 2018.
- In Norway the Energy Purchase Guarantee Scheme was created in 2011 to make it easier for industrial companies to obtain long-term electricity contracts at a predictable price. The power seller, the power buyer, or the lender can apply for a guarantee. The Export Credit Guarantee Agency (GIEK) scheme is administered by Export Finance Norway, Eksfin. This scheme is reserved for industrial companies registered in Norway with activities in wood processing, metal production and production of chemical products.
- In France Bpifrance set up guarantee fund in 2023 called Garantie Électricité Renouvelable (the "GER") to encourage CPPA between new renewable projects or those repowering (provided that the new commissioning date has not yet been reached) with industrial consumers. Its initial allocation of €68

[10] Energy UK (2024), Maximising the Corporate Power Purchase Agreement market

million will cover 500 MW of new capacity and only covers onshore wind and PV but is open to a wide range of offtakers helping both industrial consumers but also electrolyser projects to secure long-term contracts.