



CORNWALL INSIGHT

CREATING CLARITY

Reviewing The Future of REGOs for Corporates

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Introduction from BT Group

BT Group has led on climate action for more than 30 years – first tracking and reporting on our carbon emissions in 1992. We were one of the first companies in the world to set a science-based target in 2008. As part of our BT Group Manifesto launch in 2021, we set targets to reach net zero for our operations by end of March 2031 and across our value chain by end of March 2041.

As with many other businesses, taking action on energy is an important lever for us in our decarbonisation journey. Over the last eight years, we've cut our global electricity consumption by over 420GWh, achieved mainly through rationalising and upgrading our buildings and networks. We've also supported growth in the supply of renewables in the grid through a number of long-term corporate Power Purchase Agreements (PPAs).

Under existing rules for corporate greenhouse gas reporting¹, electricity purchases can be reflected as zero emissions provided the volume is matched with renewable energy certificates (RECs)². However, given intermittency in the supply of renewables in the grid, it means that businesses will, at times, be powered by electricity generated from fossil-fuel sources, leading to real-world emissions. Under current rules, this would not be reflected in reported emissions. RECs can also be sold separately to the physical electricity to which they relate, with further impacts on transparency.

This report picks up on concerns that we, and several other businesses, have raised relating to reporting transparency, delivery of environmental benefits and pricing volatility. We asked Cornwall Insight to explore these issues with a focus on the Renewable Energy Guarantees of Origin (REGO) certificate scheme (which operates as the UK's equivalent of a REC). This focuses on four key questions:

- The role of REGOs in the UK electricity sector
- Whether REGOs support new renewable power generation
- How does corporate engagement with REGOs impact decarbonisation
- What alternatives could there be to the REGOs

It's clear from the report that reform is needed as there is little evidence pointing towards the environmental and financial benefit that REGOs play in both corporate and grid decarbonisation. We're committed to supporting the growth in renewable power through our energy procurement strategy including long-term PPAs. However, as a result of our concerns, we plan to scale back on the purchase of REGOs so that our reported emissions more closely align to our procurement of renewables, either directly through PPAs or indirectly through renewable supply contracts.

We remain committed to our net zero ambitions and want to ensure it is done in a transparent and impactful way that delivers real-world emission reductions and directs attention to the activities that will most effectively support decarbonisation of the grid.

¹ Greenhouse Gas Protocol Scope 2 market-based methodology

² RECs are issued when one megawatt-hour (MWh) of electricity is generated and delivered to the electricity grid from a renewable energy source.

1 Executive Summary

Renewable Energy Guarantees of Origin, or REGOs, are intended to provide transparency over the origin of the units of electricity produced from renewable generation, and to track the transfer of renewable credentials of electricity from a generator to a user. With one REGO issued per MWh of electricity generated. As the UK electricity system decarbonises, the role of REGOs requires examination, particularly as its application extends beyond the original design of the scheme.

This paper examines four key questions to understand the future role of REGOs in corporate electricity procurement and emissions reporting. These questions deliberately go beyond an assessment of whether the REGO scheme has met its original objectives, and instead focus on what more may be needed to support decarbonisation. The questions reflect transparency concerns around the environmental benefits being delivered through the scheme, and comparability between companies utilising REGOs as an identifier of decarbonisation, alongside rising concerns around greenwashing when using only REGOs to demonstrate decarbonisation credentials.

The paper has been commissioned by BT Group, to provide a factual and independent review of the role of REGOs in today's market, and in light of expected changes within the energy sector. The paper is intended to support consideration of the REGO market by policymakers, and to provide points for consideration by corporates in their decarbonisation decisions.

Key questions



What is the role of REGOs in the electricity sector in GB?



Do REGOs support new renewable power generation?



How does end-user engagement in the REGO market impact on the renewable energy transition?



What are the alternatives to REGOs?

Targets to decarbonise the power sector have been in place since 2019, when the Conservative government committed to achieve net zero greenhouse gas emissions by 2050, with interim targets to fully decarbonise the power system by 2035 (subject to security of supply) and to [achieve](#) 50GW offshore wind capacity by 2030. Renewable development has progressed under various policy support mechanisms and by 2023, renewables accounted for 46% of electricity generation.

The current Labour government has indicated it intends to bring the target for a decarbonised power system forward to 2030. The change is likely to require even greater levels of investment in national infrastructure alongside behavioural change from consumers. Delivering renewable energy is positioned as a priority by government, and we believe that the key questions in this paper will become more, rather than less important as a result.

Key findings

- **REGOs are used by corporates to report lower emissions from electricity consumption, compared to the average GB electricity emissions level, allowing them to show progress against reductions targets or even zero-carbon electricity consumption**
 - The REGO scheme was not created with the intention for it to be used for corporate emission reporting. It was established in 2003 following the 2001 EU Renewable Energy Directive with a purpose, as expressed by the directive, to track and monitor the green characteristic of electricity as it is transferred across the industry and to the customer
 - Broader incorporation of REGOs in evidencing decarbonisation allows organisations to report lower emissions, although this does not necessitate lower energy consumption or real-world emissions reductions
 - Academic [research](#) has found “negligible emissions benefits” from annual matched clean power procurements
 - Further research finds that using a market-based method of reporting [results](#) in “GHG accounts that do not accurately reflect the emissions caused by organisations’ activities”
- **All REGOs provide the same comparative result, regardless of purchasing method and any associated additionality**
 - There are a range of routes to corporate renewable procurement, which vary in the levels of additional environmental benefits delivered beyond the provision of renewable energy already generating – such as lower carbon emissions or more renewable energy
 - Matching 100% consumption to 100% REGOs would provide the 100% renewable backed energy supply, but would not provide any information regarding additional environmental benefits. Therefore, from a consumer perspective, it can be hard to evaluate the level of environmental benefit being achieved by different companies or suppliers
- **REGO trading lacks transparency on prices, volumes of trades, and availability of certificates**
 - While there are a number of information sources, these are generally not freely available and often do not include data on volumes traded – there is no obligation for counterparties to report bilateral REGO market trades. This considerably inhibits price discovery and market awareness of fair pricing, as well as awareness of the volume of certificates available
- **REGOs form a small part of the revenue stack for renewable generation**

- o Historically REGO prices have been so low that many generators have not charged offtakers for REGOs in their Power Purchase Agreements (PPAs)³ – they are bundled with no value ascribed
 - o The price of REGOs has increased dramatically in recent years, from 0-30p/REGO to £6-8/REGO, reflecting EU certificates no longer being recognised in the UK post-Brexit alongside increased demand from corporates and energy suppliers
 - o We expect REGO prices will fall in the future. Following the current shortage in the REGO market, we expect that consumers will become less willing to pay high REGO prices, resulting in falling REGO demand, until tightness in the market has eased. Simultaneously, renewable generation is growing, providing increased availability of certificates
 - o Our forecast shows REGOs will cost in the range of 10% of the wholesale electricity price in coming years, presenting a substantial cost for which end-consumers will expect to see environmental benefits
 - o Renewable generation build out has been primarily supported by government-led subsidy schemes, not by REGOs. While the historical and current schemes operate differently, they all provide a guaranteed level of revenue or “top-up” for renewable generators
- **REGO trading is unregulated, and prices are typically too volatile to support investment in new build renewable assets**
 - o REGO revenues, under most trading structures, are highly uncertain and variable, and cannot be considered viable revenue streams to support investment as part of a business case. This means that any value is typically captured as “upside” – additional profit for the investor – rather than driving investments in additional renewable generation
 - o There are some structures which would allow REGOs to be considered as an investable revenue stream, but these transfer some or all of this price risk onto the REGO purchasers, and are not commonly used
 - **The Conservative government was targeting full decarbonisation of the power system by 2035⁴ (subject to security of supply). The Labour government has brought this forward to 2030. In a fully decarbonised system, REGOs in their current format, are unlikely to prove useful in evidencing renewable supply, although there could continue to be some differentiation between low-carbon and renewable supply**
 - o Our modelling of future power prices shows the generation assets and carbon emissions operating under a range of scenarios to 2054. Our central scenario sees negative power sector emissions by 2035 (in line with previous targets). At this point, all electricity purchased from the grid will deliver net zero carbon emissions. This reflects the relatively higher proportions of renewable and low carbon assets used in the fuel mix
 - **Reform or evolution of the REGO scheme may provide greater opportunity for corporates to support the delivery of a smarter and more flexible energy system. The**

³ A PPAs is an agreement between a generator and an offtaker, typically for all electricity generated from an asset

⁴ The new Labour Government has an ambition to fully decarbonise the power system by 2030 as set out in its [Manifesto](#), 2024. This is not included in our current forecasts as, at the time of writing, there is no new supporting policy in place to deliver the ambition.

options explored include granular time matching of generation and demand, improving the transparency of trading, intervening in REGO pricing or reestablishing recognition of EU guarantees of origin given the physical interconnection between GB and the EU

- o The Conservative government held a consultation in 2021 to look at options for reform or replacement of the REGO scheme. It published a [summary of responses](#) in July 2023, but did not take further steps towards reform
 - o There are a range of potential options for further exploration to understand the balance of implications for participants across the market, including corporates. Each of these presents different advantages and disadvantages, which are explored in more detail in section 5
- **Spot market reports of current prices are around £7/REGO. Given the roughly 130mn certificates issued in this year, this comes to a total annual spend on REGOs of around £1bn – assuming all REGOs were exchanged on the spot markets at these prices.**
 - o While the purpose of the REGO scheme is not additionality, many scheme participants would wish to see the money they spend on REGOs driving additional renewable generation buildout
 - o £1bn of investment in energy assets could deliver around 1,900MW of solar generation, 680MW of onshore wind or 400MW of offshore wind. This would produce around 1.8TWh/year in each case, enough to power around 660,000 homes, reducing the UK's annual carbon emissions by roughly 900,000t/year

2 The role of REGOs in the electricity sector in GB

This section sets out the role of REGOs in climate reporting, the main trends in pricing and outlines drivers of change.

2.1 Purpose and perception of the REGO scheme

The Renewable Energy Guarantees of Origin (REGOs) scheme was established in 2003 following the Renewable Energy Directive 2001/77/EC of the European Parliament and of the Council. [Article 5](#) of the directive states that:

“Member States shall, not later than 27 October 2003, ensure that the origin of electricity produced from renewable energy sources can be guaranteed as such within the meaning of this Directive according to objective, transparent and non-discriminatory criteria laid down by each Member State. They shall ensure that a guarantee of origin is issued to this effect in response to a request”

The directive sought to guarantee the origin of the units of electricity produced from renewable generation. The purpose of the REGO scheme, as expressed by the directive, is to track and monitor the transfer of electricity across the industry and to the customer. At this simplistic level, the scheme is fulfilling its original purpose.

In Great Britain (GB), the REGO scheme is administered by the Office of Gas and Electricity Markets (Ofgem). Ofgem issues a REGO certificate for every megawatt hour (MWh) of renewable energy generated.

Under the Fuel Mix Disclosure (FMD) regulation, all licensed electricity suppliers are required to disclose the generation source of the electricity they supply to consumers. Suppliers evidence the renewable generation disclosed by purchasing REGOs. Accordingly, one of the primary purposes of REGOs in the GB energy market is for suppliers to authenticate the renewable proportion of their FMD. Suppliers can fully or partially use REGOs to evidence 100% renewable electricity tariffs, allocating the REGOs to the volume of electricity consumed by their customers on the 100% renewable tariff.

One of the key challenges levelled at the REGO scheme is the ability to separately trade the physical electricity and the certificate which verifies the power as renewable. This means the REGO certificate can be unbundled from its associated power and, from a legal point of view, the “green” aspect of the wholesale power is carried in the REGO, not the wholesale power itself. This was a deliberate choice made at the EU level, when instituting the scheme, to allow free transfer of the certificates and flexibility in trading.

Stakeholders have increasingly expressed concern over this practice, contending that this enables suppliers to “greenwash” fossil-fuel produced power as low-carbon. Despite the role of REGOs to deliver transparency to consumers on the proportion of electricity their supplier sources from renewable generation, there are concerns that REGOs may act to misinform consumers on the environmental benefit of their energy choices. The current

method of retrospective annualised matching has also been questioned by government⁵ on its ability to deliver consumer transparency. The current methodology does not distinguish between the different times of generation, so a consumer using electricity at 5pm on a weekday may be matched to renewable energy generated in a different month, on a different day at a different time. The current methodology does not provide full transparency to consumers about their role in decarbonisation. It has resulted in some calling for greater levels of time granularity in REGO reporting, to provide greater transparency around renewable generation, incentives to reduce consumption during low renewable generation periods (to lower their carbon footprint) and to incentivise generators to build more renewal power that works 24/7.

As the proportion of renewable and low carbon generation on the grid increases, time matching from specific technologies could continue to prove more useful than REGOs for corporates and consumers seeking to differentiate renewable from low carbon supply.

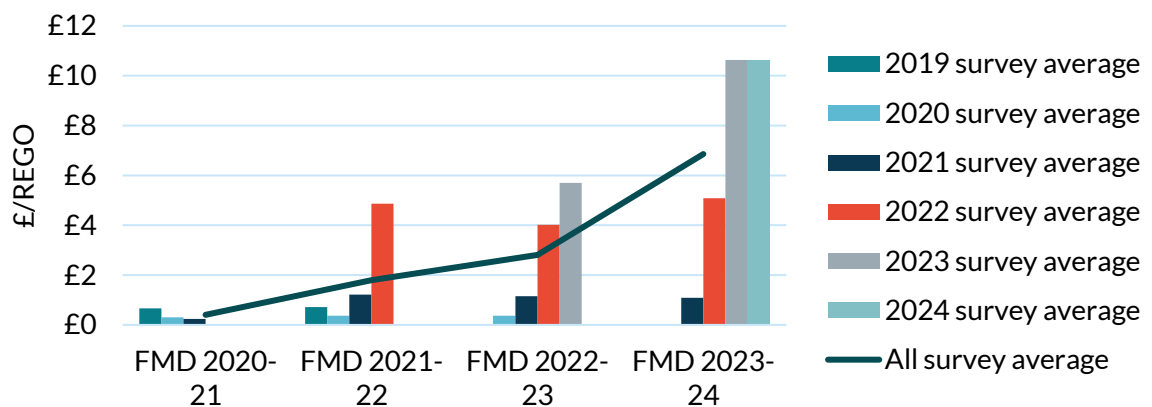
2.2 Historical and current REGO prices

Since December 2019, we have conducted a quarterly Green Certificates Survey, collecting insight from market stakeholders and drawing out REGO pricing and demand trends⁶. There is no central data source with information on REGO pricing, so the survey acts as the best available measure of certificate prices.

Prior to 2019 REGOs were traded at around £0.20/REGO. Under most historical PPAs generators did not charge offtakers for REGOs, so they were bundled in with the power with no value ascribed. Data from the surveys since 2019 shows the upward trajectory of REGO prices, hitting a peak in October 2023. While trading prices have retreated from their peak they are still higher than the <£1 prices observed historically at around £7/REGO according to spot market reports.

Figure 1 illustrates the average trading values for REGOs by FMD compliance years (1 April to 31 March), highlighting the increasing trend of REGO prices over the FMD compliance years 2020 to 2024.

Figure 1: REGO prices, Cornwall Insight surveys, 2019 to 2024







Source: Cornwall Insight

⁵ [Designing a framework for transparency of carbon content in energy products](#), BEIS, 2021. Summary responses published by DESNZ

⁶ In the April 2024 survey, 24 respondents traded in the REGOs market. This included 9 sellers, 7 buyers, 6 brokers/traders, 1 facilitator, and 1 certificate administrator.

There are various supply and demand factors at play which shape the REGO price trend summarised in Figure 2.

Figure 2: Supply and demand factors affecting the price of REGOs

	Factor	Impact on REGO price
Supply	Production of renewable generation: REGOs are tied to renewable generation so higher renewable supply equals more REGOs in the market. Market participants expect renewable generation to increase in the later years of the decade, which means an expectation of an increase in energy attribute certificates. In isolation, this would have a downward pressure on REGO prices.	
	Guarantees of Origin (GoOs) no longer recognised: FMD compliance period 22, which covers April 2023 to the end of March 2024, was the first compliance period when GoOs from EU member states were no longer recognised by Ofgem for disclosure by GB suppliers. This fall in supply of certificates in the market available for suppliers to buy and verify their renewable claims in their FMD added pressure on REGO prices.	
Demand	Increased demand for green tariffs: consumers, including corporates, looking to reduce their reported business emissions have demonstrated interest in green and renewable electricity tariffs. These tariffs are often backed by REGOs. As a result, suppliers increase demand for REGOs to prove that their energy is coming from renewable sources.	
	Direct corporate demand for unbundled REGOs: demand-side pressure from corporates purchasing unbundled REGOs to lower their scope 2 emissions may contribute to REGO prices rising higher than historic levels.	

Spot market reports of current prices are around £7/REGO. Given the roughly 130mn certificates issued in this year, this equates to a total annual spend on REGOs of around £1bn – assuming all REGOs were exchanged on the spot markets at these prices. £1bn of investment in energy assets could deliver around 1,900MW of solar generation, 680MW of onshore wind or 400MW of offshore wind. This would produce around 1.8TWh/year in each case, reducing the UK’s annual carbon emissions by roughly 900,000t/year.

2.3 Future REGO prices

Although prices are expected to remain well above historical levels, surveys show that market participants expect REGO prices to fall. Responses to our July 2024 Green Certificate Survey on future FMD years suggest near term price decreases around 3%, while expectations for FMD24-25 to FMD26-27 fall around 7% in price.

The decreases are linked to an expectation that supply of certificates will increase due to large-scale renewable projects connecting to the grid. However, prices for future FMD years remain at a level notably higher than historical prices. Sustained high REGO prices may be explained by a combination of factors:

- Market uncertainty around the ability of GB renewable generation to meet demand

- o Contracts for Difference (CfD) is the government’s primary renewables subsidy scheme. CfD Allocation Round (AR) 5 in 2023 failed to secure offshore wind generation. While a significant volume of offshore wind secured contracts in AR6 in 2024, the 2023 hiatus further contributes to REGO supply challenges. While this is unlikely to impact until the end of the 2020s, it impacts expectations on availability of future REGOs
- The exclusion of GoOs from EU member states, further limiting supply
- Continued and growing interest from consumers in renewable energy tariffs, especially from businesses who are mandated to submit information on their greenhouse gas (GHG) emissions and want to demonstrate that they are procuring renewable energy and reducing their GHG emissions

Figure 3 shows forecast REGO prices based on three scenarios: central, upside, and downside. These scenarios have been developed using data from our wholesale power market model, the Benchmark Power Curve, to model future supply and demand of REGOs. Supply of REGOs is linked to our forecasts for renewable generation volumes, while REGO demand arises from consumer demand for green and renewable tariffs, including corporates and households seeking to reduce their emissions. Each scenario models different interactions and assumptions of REGO supply and demand under current scheme arrangements, with key differences as follows:



Central

This is our best future view, in which we assume that the 2023-24 shortage in the REGO market results in suppliers being unwilling to pay high REGO prices, as was seen with several exiting the REGO market. This results in falling REGO demand, until tightness in the market has eased. Simultaneously, renewable generation grows as a share of generation, displacing fossil-fuelled generation and providing an increased availability of certificates. The market position eases over the next few years, reaching equilibrium, with certificate demand growing in line with certificate production thereafter. This leads to a continuing reduction in price for certificates, as availability marginally exceeds demand in each year, but prices remain above zero beyond this point, as the value of “green” power (i.e., renewable power) above “low carbon” power (which also includes nuclear and fossil-fuelled with carbon capture) continues to be recognised



Upside

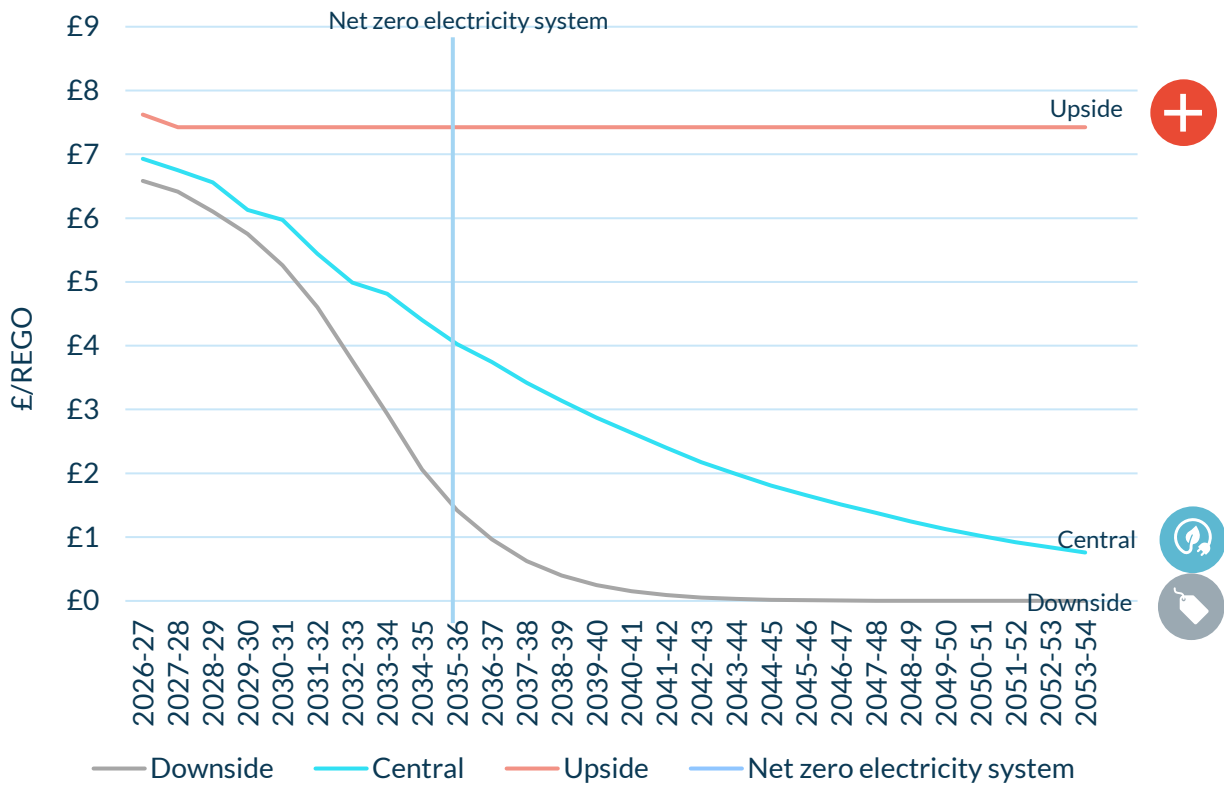
REGO demand grows at the same rate as REGO production, maintaining current levels of availability. In this scenario, demand for REGOs is high as more consumers, including businesses, want to signal that they are taking action to reduce their carbon emissions, and REGO demand growth keeps pace with increases in renewable generation. The current tightness in the market continues and results in prices that are broadly at current levels, despite growing availability of certificates



Downside

Similar to the Central scenario, the high REGO market will price out certain consumers which will result in REGO demand falling until it meets supply. Renewable generation continues to grow at a high rate, while REGO demand only increases at the same rate as wider electricity demand growth in the economy. The increasing availability of certificates will therefore drive prices down over time. The price trends towards zero, reflecting the fall in carbon intensity of the grid which reduces the attractiveness of the certificates for buyers such as corporates as a mechanism for indicating emission reduction

Figure 3: July 2024 REGO price forecast scenarios



Source: Cornwall Insight

Note that modelling is based on 2035 net zero electricity system targets set by the previous government

2.4 Role of REGOs in reporting business emissions

To incentive action from industry to reach net zero by 2050, the UK government has put in place mandatory reporting requirements, including the Streamlined Energy and Carbon Reporting (SECR) regulations introduced in April 2019. Organisations which meet the relevant criteria⁷ must report energy use; GHG emissions; an intensity ratio⁸; previous years energy use and emission figures; methodology used; and information on energy efficiency measures taken in the last financial year.

Advised in its SECR guidance, the government recommends entities use a location-based approach for reporting scope 2 emissions (indirect emissions from purchased or acquired electricity). This approach is established by The Greenhouse Gas (GHG) Protocol, a globally recognised carbon accounting standard which offers organisations a methodology to measure their GHG emissions. Under a location-based approach, energy attribute certificates such as REGOs are not factored in. The accounting method reflects the

⁷ Criteria listed in the government's [SECR guidance](#) is organisations, LLPs, or groups who meet two or more of the following three conditions in the financial year: turnover £36 million or more; balance sheet total £18 million or more; and number of employees 250 or more.

⁸ In the SECR guidance, the government defines this as normalised data from comparing emissions data with an appropriate activity or financial metric. The ratio can be used by stakeholders to compare energy efficiency of the firm over time and compare it with similar organisations.

emissions of the grid from which the corporate is receiving energy, and it allows for lower emissions from on-site renewable production to be reflected.

The alternative to this is a market-based approach where corporates calculate emissions depending on the energy purchasing decisions they make. It allows corporates to make use of energy attribute certificates, such as REGOs, purchased through a supply contract for a green or renewable tariff which is REGO-backed, or entering into a PPA where the REGOs are bundled in, or through directly purchasing unbundled REGOs in the spot market. This approach has received criticism that it is not reflective of the true emissions resulting from a corporate's electricity consumption. The ability to use instruments such as unbundled REGOs to report lower emissions has been met with concerns that there is little impact on increasing renewable supply.

Corporates may opt to follow voluntary standards to go beyond mandatory carbon reporting and demonstrate commitment to their ESG targets. A widely used voluntary standard is the Science Based Targets initiative's (SBTi) [Corporate Net Zero Standard](#), aligned to the GHG Protocol. It allows for corporates to use either approach, location or market based, when reporting emissions and validating targets. This means that use of REGOs to reduce scope 2 emissions is permitted.

However, the REGO scheme was not created with the intention for it to be used for corporate emission reporting. While REGOs continue to achieve their purpose – preventing double-counting of green electricity when transferred across the industry and to the customer – their evolving application to evidence decarbonisation has grown beyond this intended purpose. In their current format, REGOs are not always aligned to consumer expectations, for example allowing organisations to report lower emissions without requiring lower energy consumption or reducing real-world emissions. In their evolved role, REGOs are not consistently meeting the expectations of consumers in the current market.

3 Renewables in the GB generation mix

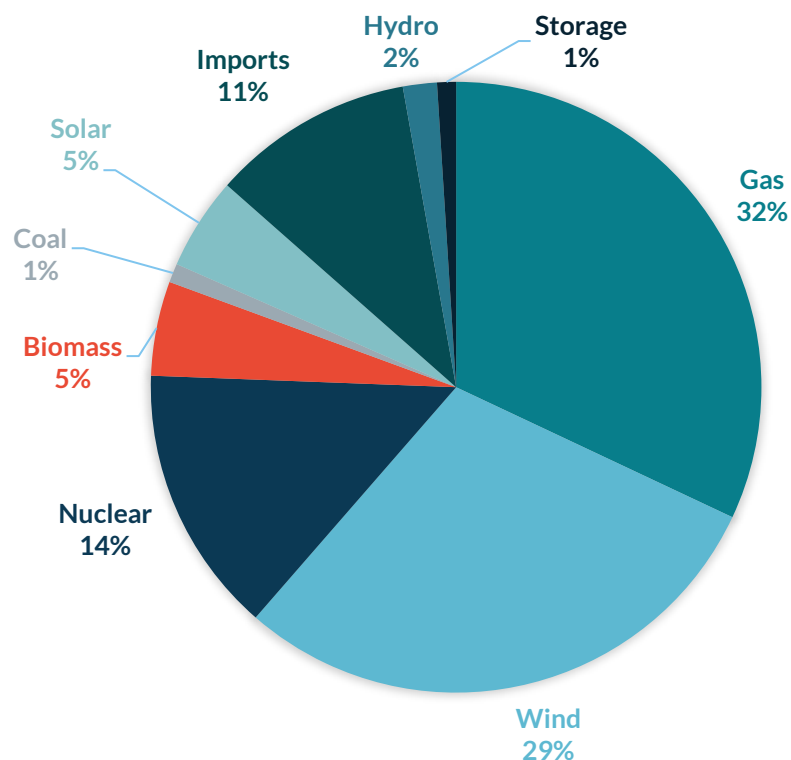
Renewables currently account for around a third of the electricity generation mix, requiring substantial investment to achieve decarbonisation targets.

3.1 Current GB generation mix

In 2019, the UK government committed to achieving net zero greenhouse gas emissions by 2050. Two years later, it added interim targets, including a target to fully decarbonise the power system by 2035 (subject to security of supply) and to **achieve** 50GW offshore wind capacity in 2030. The incoming Labour government has indicated it intends to bring the target for a decarbonised power system forward to 2030. The targets require changes to national infrastructure, electrification of heat and transport and introduction of carbon capture and storage at scale, alongside behavioural change from consumers. Substantial investment will be required to deploy renewable assets alongside flexible generation and consumption measures, in parallel to increases in electricity consumption expected from decarbonised heat and transport.

In 2023, just over 36% of the GB electricity generation mix came from renewable sources. Figure 4 shows the GB electricity generation mix in 2023, where gas accounts for the largest proportion of the fuel mix at 32%, closely followed by wind at 29%.

Figure 4: GB electricity generation mix 2023



Source: [National Grid ESO](#)

3.2 Government and corporate support for renewable generation beyond REGOs

The contribution from renewables to the generation mix has increased rapidly over the last 10 years in response to government-led subsidy schemes. While the historic and current schemes operate differently, they all provide a guaranteed level of revenue or “top-up” for renewable generators, as summarised in Figure 5.

Figure 5: Overview of government support for renewables

Subsidy payment	Description	Operating years for new capacity
Contracts for Difference (CfD)	<p>The current mechanism for subsidy support of renewable generation in GB. The CfD is an auction process, where pre-accredited in-development renewable generation sites compete to set a strike price for the sale of power. The strike prices are set in an auction by technology, which means that all successful sites in a technology are awarded the same strike price.</p> <p>The generator earns the strike price per MWh of electricity exported to the public network. The generator is awarded a subsidy equal to the difference between the “reference price”⁹ and the strike price, multiplied by the number of units exported. When the reference price is below the strike price, the generator receives money; when the reference price is above the strike price, the generator pays back money.</p> <p>Generators are expected to contract in the market to sell the power they generate, though there is no requirement to do so. Strike prices are agreed for 15 years, and are increased annually to account for inflation and other factors.</p> <p>The CfD can result in stable income for generators, and is recognised for its success in awarding contracts to generators providing around 30GW of generation capacity since its introduction in 2014.</p> <p>The ongoing costs are recovered from all end consumers, through electricity bills.</p>	2014 - current
Renewables Obligation (RO)	<p>A historical subsidy for large scale renewables. The RO was introduced in 2002, placing an annual obligation on electricity suppliers to present a specified number of Renewables Obligation Certificates per MWh of electricity supplied to their customers during each obligation period. Suppliers could purchase ROCs from accredited renewable generators or pay into a buy-out fund, or a combination of the two. The ongoing costs will continue to be recovered from all end consumers, through electricity bills, until the end of the scheme in 2037.</p>	2002-2017
Feed-in-tariff (FiT)	<p>A historical subsidy for small scale renewables. Payments made for all electricity produced by a renewable system regardless of whether it was used or exported. This also created an additional export tariff for power exported to the public network. The ongoing costs continue to be recovered from all end consumers, through electricity bills, until the end of the scheme in the latter part of the 2030s.</p>	2010-2019

Source: Cornwall Insight

⁹ [Reference prices](#) are published by the LCCC, and are set differently for dispatchable/baseload and intermittent technologies. Baseload is set based on the traded volume weighted average price, set for the season ahead, while intermittent is set based on the GB Day Ahead Hourly Price.

In addition to these schemes, renewable generators have also secured reliable revenues through Power Purchase Agreements (PPAs) and Corporate Power Purchase Agreements (CPPAs), summarised in Figure 6. These methods typical bundle in the REGO, to be used in emissions reports. If REGOs were not bundled, or purchased elsewhere on an unbundled basis, then this power could not be used recognised as low-carbon, despite direct purchases from a renewable generator – it is the REGO which carries the green credentials.

Figure 6: Overview of PPA and CPPAs

Mechanism	Description
Power Purchase Agreement (PPA)	A PPA is an agreement between a generator and an offtaker, typically for all electricity generated from an asset. PPAs can provide a long term stable route to market for wholesale electricity, and are typically offered at a discount to rates on the Day-Ahead wholesale markets.
Corporate Power Purchase Agreement (CPPA)	CPPAs are a way for end users, usually large corporates, to contract directly with generators to purchase electricity. CPPAs typically include REGOs, as buyers are seeking to substantiate renewables claims within their emissions reporting.

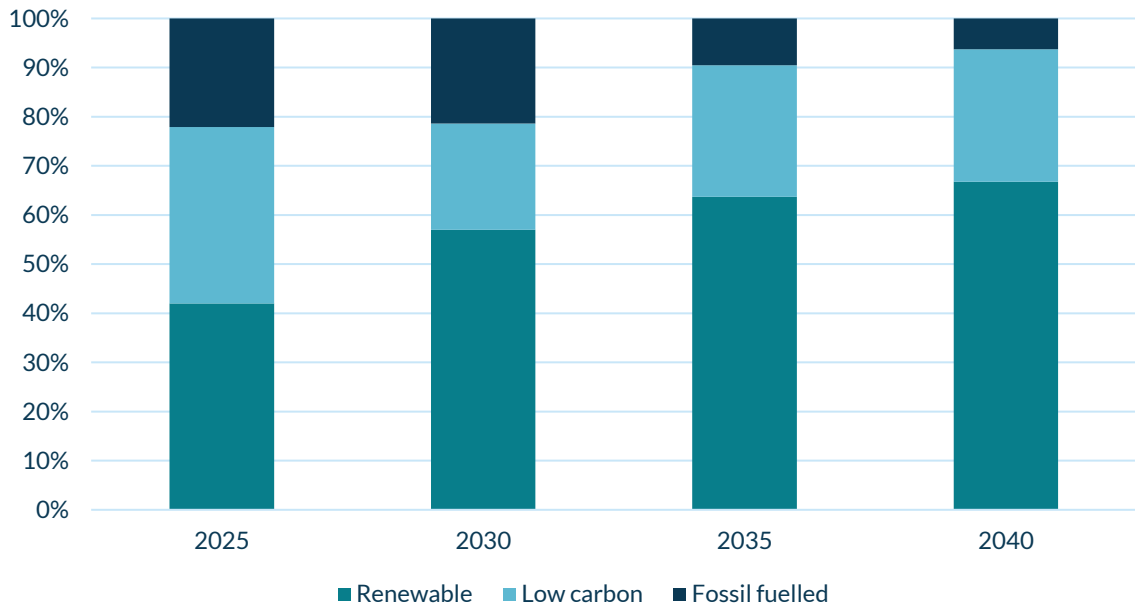
Source: Cornwall Insight

3.3 Forecast generation mix

The future generation mix will depend on a range of factors, including policy measures, financial support mechanisms, global supply and demand, and many more.

We have provided our view of future capacity and the generation mix to frame our views of the future of the electricity market, based on our Benchmark Power Curve modelling. Our modelling is based on detailed fundamental drivers that affect the power market now and in the future. Each scenario reaches net zero in 2050 to reflect the ambition of the UK government and ensures the electricity market is planned towards the current Capacity Market framework of meeting the Loss of Load Expectation of 3 hours per year. This forecast also include the previous UK government’s ambition of reaching net zero within the electricity sector by 2035; our forecasts for a 2030 target – introduced by the incoming Labour government in July 2024 – are not yet available. Our Central scenario is our expected view of commodity prices and the capital cost of different technologies. Figure 7 explores our view of the future generation mix as it evolves over time.

Figure 7: Forecast GB generation (based on output GWh) under Benchmark Power Curve Central Scenario



Source: Cornwall Insight Benchmark Power Curve, Central scenario, Q2 2024

The central scenario shows steady increases in the deployment and use of renewable generation assets, rising from 42% of generation output in 2025 to 64% by 2035, with further increases into 2040 and beyond. In particular, we see significant deployment of offshore wind generation, supported through the CfD scheme. The rise in renewable generation is accompanied by generation from other low carbon assets, which is primarily delivered by nuclear technologies. While this initially includes a decrease in nuclear generation capacity, linked to the planned retirements of some of the nuclear fleet, this subsequently begins to rise after 2030 due to new large scale nuclear power plant coming online, alongside smaller advanced modular reactors.

Our modelling takes account of the significant pipeline for new renewable generation capacity, which is in various stages of planning, totalling ~550GW. Four technology types make up 89% of the total viable pipeline by capacity, and 91% by count – battery storage, solar PV, offshore and onshore wind. A major part of the pipeline is classified as having the planning status of “scoping”, totalling ~415GW. These sites are yet to submit a planning application but have a grid connection option confirmed through the Transmission Entry Capacity (TEC) Register. Many of these projects will take many years to deliver or may prove unviable.

The rise in renewable generation capacity sits alongside a rise in demand for power due to the electrification of heat and transport. To service this demand, we expect gas to continue to be used. From 2030, Carbon Capture, Usage and Storage (CCUS) enabled power stations allow reduction in emissions while continuing to burn gas. From the late 2040s, when high levels of offshore and onshore wind come online, gas usage falls to an emergency back-up level with very low operations. Fossil fuelled generation accounts for a small proportion of the generation capacity in 2040, at a combined 6% compared to ~33% in 2023.

Alongside the renewable pipeline, our modelling assumes deployment of carbon capture technologies, including CCUS, Direct Air Carbon Capture and Storage (DACCS) and Bioenergy with Carbon Capture and Storage (BECCS). In combination, these technologies deliver reductions to GB's grid carbon intensity.

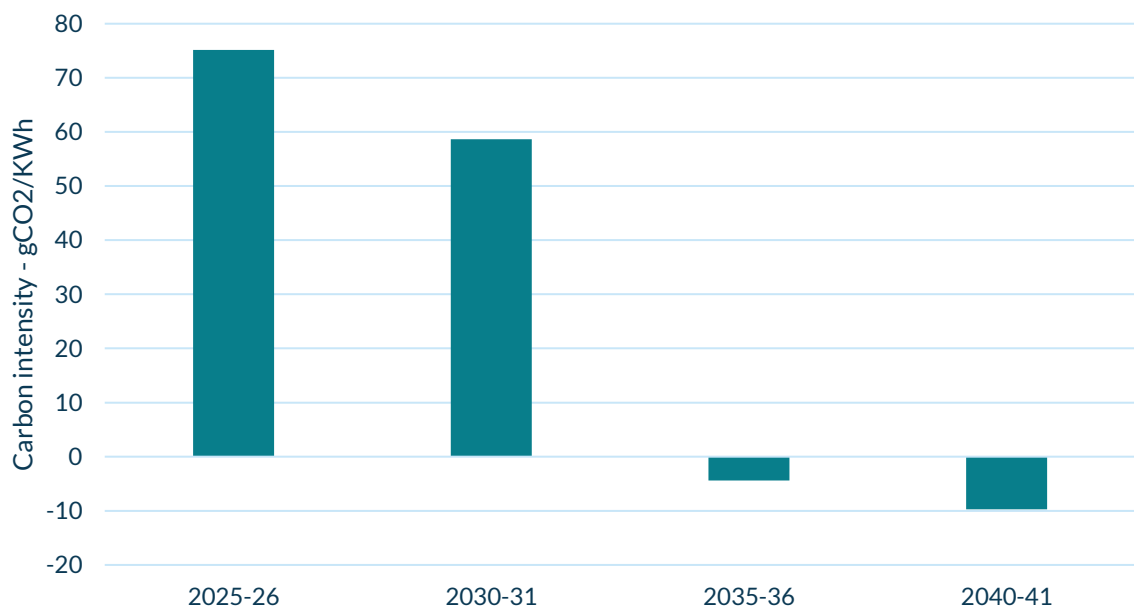
3.4 Grid carbon intensity

Grid carbon intensity is a measure of how much CO₂ emissions are produced per kilowatt hour of electricity consumed. The carbon intensity of electricity varies depending on the relative mix of low carbon and conventional technologies used to generate power, alongside changes in demand. Carbon intensity can vary by time of day, weekday or weekends and seasons reflecting these changes in supply and demand.

Our Central scenario sees negative power sector emissions by 2035. At this point, all electricity purchased from the grid will deliver net zero carbon emissions. This reflects the relatively higher proportions of renewable and low carbon assets used in the fuel mix. This is in line with the previous government’s targets, and our forecasts are currently in the process of being updated for the new 2030 target.

We record a step change in annual carbon intensity between 2030 and 2035, falling from 58.6GCO₂/kWh to -4.5GCO₂/kWh. Substantial increases in offshore wind deployment play a key role in the generation mix, more than doubling in installed capacity and accounting for ~46% of generation in 2035 compared to 32% in 2030. In addition, BECCS and DACCS drive negative emissions, leading to the net negative carbon intensity from 2035 onwards.

Figure 8: Grid carbon intensity under Benchmark Power Curve Central Scenario



Source: Cornwall Insight Benchmark Power Curve, Central scenario, Q224

Full grid decarbonisation means that REGOs, in their current format, are unlikely to prove useful in evidencing renewable supply, although there could continue to be some differentiation between low-carbon and renewable supply.

4 Additionality of REGOs

This section sets out the funding mechanisms supporting existing renewable generation and investor perception of REGOs.

4.1 Renewable generation revenue stack

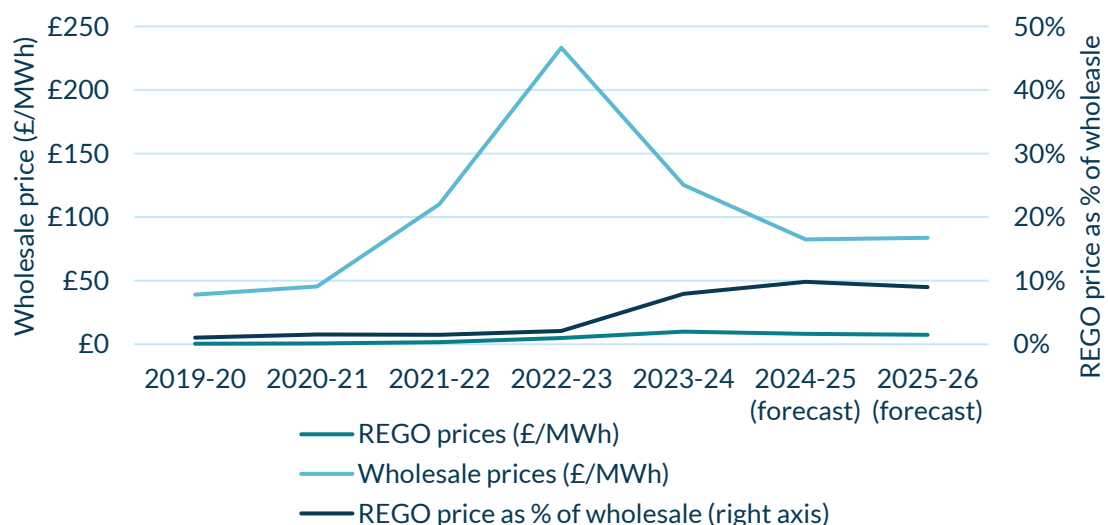
There are a range of revenues which investors will consider when assessing the investability of a generation project. These include wholesale revenues, subsidies, network charging credits, Balancing Mechanism revenues, balancing services revenues, and other elements such as REGOs (see Figure 10). Depending on the technology, location, connection voltage, size, route to market, subsidy scheme and other factors, these revenue lines will be assigned different levels of importance in the revenue stack. One of the most important factors common to all projects, however, is certainty – how likely the asset owner is to receive that payment, in a predictable quantity, on a particular schedule.

For revenue lines considered to be higher risk, investors will apply discount percentages to forecast income in their financial models. For revenues which are highly uncertain, like REGO income, discount percentages may approach 100%, retaining almost no value when considering the investment decision to build the new plant.

When REGO prices were in the historic range of 0-30p/REGO, this was not material, but now that end-users are paying £6-8/REGO, questions about the effectiveness and value-for-money of REGOs for promoting decarbonisation are valid.

Figure 9 shows the relationship between average annual wholesale and REGO prices during recent years and the future trading horizon, illustrating the significant increase in the REGO price as a proportion of wholesale prices since the wholesale price spike in 2022-23. REGOs are expected to be costed in the range of 10% of the wholesale price in coming years, presenting a substantial cost for which end-consumers will expect to see environmental benefits.

Figure 9: REGO prices, wholesale prices and REGO prices as a percentage of the wholesale price



Source: Cornwall Insight

Figure 10: Renewable generation revenue stack

Revenue	Description	Illustrative proportion of total revenue stack
Wholesale energy sales	<p>Sales of electricity to offtakers, usually licensed electricity suppliers but potentially corporate end-users. Depending on route to market, this can be priced in a variety of ways, including long-term trades, fixed prices, fixed prices with an allowance for inflation, or – particularly for small renewable generation – at a discount to the intraday price.</p> <p>The level of ongoing revenue is generally uncertain, and can change radically - bringing either considerably higher profits, or making projects non-viable mid-life.</p>	<p>80-100% (merchant) 45-50% (RO) 0% (FiT/ CfD)</p>
Subsidy payments	See Figure 5	<p>0% (merchant) 80-95% (CfD) 45-50% (RO) 80-95% (FiT)</p>
Network charging credits	Network charges for generators can, at some voltages, times and locations, be negative and offer income to generators. Generation which is connected further to the south and east, at lower voltage, and which generates during system demand peaks, will receive larger credits. These incomes have consistently fallen over the past 10 years.	0-10%
Balancing Mechanism	Revenues are paid to generators which increase or reduce output when called on by ESO, to help keep the GB electricity system in balance. Most renewable generation is not well-suited to increase output and will only reduce output if well-compensated.	0-10%
Balancing Services	Depending on technology, plant may be eligible to provide various services to ESO to help manage system frequency, inertia, voltage or other technical requirements. While revenues can be generous, large amounts of highly flexible BESS plant is expected to swamp many of the services in coming years.	0-10%
REGO sales	Sale of REGO certificates to suppliers wishing to use these for FMD, to evidence sale of renewable electricity to end-consumers, or sale directly to corporate end-users. This allows corporates, under some carbon accounting regimes, to reduce their Scope 2 emissions, and allows suppliers to reduce their Scope 3 emissions as well as to market electricity tariffs as “green”.	1-10%

Source: Cornwall Insight. NB – revenue shares are approximate, varying by type and location of generator

4.2 Investor perception of REGOs

There are a range of investors looking to build new renewable generators. However, the biggest investments come from debt providers: banks, pension schemes and institutional investors. These parties are often keen to invest, in order to secure their own ESG credentials, and due to the nature of renewable generation investment – large up-front investments, with limited ongoing costs and a pay-back period in the range of 12-15 years – often find these opportunities very attractive.

Key characteristics they will be looking for include:

- Long-term, stable returns
- Assets which retain residual value over their lifetimes
- High certainty that projects will deliver expected revenues
- Low construction and technology risk exposure

The latter three points are manageable outside of trading structures, with the former required to be in place for major infrastructure buildout ahead of reaching an investment decision.

REGO revenues, under most trading structures, are highly uncertain and variable, and cannot be considered viable revenue streams to support an investment decision. This means that any value is captured as “upside” – additional profit for the investor – rather than driving investments in additional renewable generation.

However, there are trading structures for REGOs which transfer some or all of this price risk onto the REGO purchasers, and therefore allow REGOs to be considered as a viable revenue stream. Typical REGO trading structures include:

- **One-off purchase:** Under this structure, a generator undertakes to transfer all REGOs produced within a specified period, or for the lifetime of the generator, to the offtaker, in return for a single up-front payment. This transfers both price and volume risk to the offtaker, and is the most secure for the generation investor. It is relatively uncommon in the market
- **Fixed-price sale:** This structure fixes a price for REGOs between parties. This may or may not include a regular increase to account for inflation. Commercial negotiations would likely result in a REGO price being agreed at a level lower than current market prices in real terms, reflecting the additional risk the offtaker is taking on. The structure transfers price risk to the offtaker and guarantees REGO income for the investor
- **Indexed-price sale:** This structure does not fix the price, but pegs this to an index provided by an independent third party. These indexes are less common than power market indexes, but we understand that these do exist
- **Spot trade:** This structure transfers REGOs, often existing certificates, to the buyer for a price agreed between the parties, or potentially through an auction or other price discovery mechanism. It offers no ongoing certainty on the price of future trades

The first two of these structures allow highly certain REGO revenues to be costed into the business plan but will likely result in lower value being captured as the risk is transferred to the offtaker, while the third structure allows some account of revenues to be included. Spot trades can be the most lucrative arrangement, particularly during tight periods in the market such as the one which has recently been experienced, but provide no long-term certainty and cannot be costed into the business plan by most investors.

The risk of reform to the REGO scheme, which has been considered by DESNZ and previous department BEIS, poses a risk in the eyes of investors. Legislative reform of the scheme could trigger the “change in law” provisions of PPA and CPPA contracts, allowing parties to renegotiate. We discuss the potential for change to the REGO scheme further in section 5.1.

Anecdotally, we have heard from investors that REGOs could – if the revenues are secured – potentially make otherwise non-investible projects viable. This means that long-term PPAs or CPPAs, with a creditworthy counterparty, could support additional renewable generation to be built and connect to the system. However, with the majority of new renewable generation expected to be supported by the CfD scheme, this is likely to be marginal additions rather than a significant volume.

Purchasers will also be examining the total cost of power and REGOs from PPA and CPPA deals, comparing the cost and benefits of these deals to what is available elsewhere in the market. This includes separate purchase of power and certificates. High long-term price deals for REGOs are likely to be, at least partially, compensated for in lower wholesale power pricing under these arrangements, leaving the generator no better off.

Overall, REGOs do not form part of the core revenue stack for either merchant or subsidised plant, and money spent on REGOs does not help to increase the amount of renewable generation capacity in GB. This is contrary to the expectation of many purchasing REGOs.

5 Alternatives to the REGO scheme

This section addresses the potential alternatives to using REGOs including options for evolution of the REGO scheme.

5.1 Evolution of the REGO scheme

Government held a consultation in 2021 to look at options for the reform or replacement of the REGO scheme. It published a [summary of responses](#) in July 2023, but has not taken next steps towards reform. A range of options to reform REGOs has been suggested through this consultation, and other work, which include:

- Reestablishing recognition of EU GoOs, to ease pricing and volatility in the market
- Increase the granularity of REGO certificates to better reflect real-world emissions
- Increase the transparency of REGO trading
- Introduce formal recognition of bundled versus unbundled REGO trading
- Capping or fixing the price of REGOs

Each of these options has advantages and disadvantages, which we discuss in this section. Depending on the goal of reform – to reduce REGO prices, to stabilise REGO values to support additionality, or to reduce greenwashing concerns – different options should be targeted.



5.1.1 Recognition of EU GoOs

Historically, when the UK was part of the EU, GoOs were allowed to be imported to the UK freely. These benefited suppliers by reducing exposure to some GB green levies, making the higher cost of EU GoOs compared to REGOs economically viable. Since Brexit, the EU ceased recognising UK REGOs and from April 2023, the UK government has [ceased to recognise](#) EU GoOs.

The new Labour government stated in its manifesto a desire to rebuild trading ties with Europe, which may make this development more likely than under the previous government.

If a reciprocal arrangement for the EU and UK to once again recognise each others' certificates were to be introduced – reflecting the real-world power-flows across the international border via interconnectors – this would likely lead to closer price alignment of REGOs and GoOs, with a consequential fall in REGO prices. The GoO price tends to be more stable than the REGO price, due to the larger market for certificates across Europe, and a diversity of supply and demand across a range of territories.

However, if the previous use of GoO to defray other levies as part of the cost-stack was to be resumed, this may again incentivise suppliers to purchase GoOs over REGOs, resulting in lower demand for REGOs. This could drive down the price of REGOs closer to historic levels,

reducing the value of the certificates. While suppliers and corporates may view this reduction in cost as positive, it would miss the opportunity to make improvements to the scheme to the benefit of consumers.

We note that the EU is looking into options for increasing the granularity of certification of renewable energy, on a voluntary basis. Alignment of certification schemes with the EU could bring the benefits of this work to the GB market. However, we also note that while GB commentators often regard EU GoOs as a homogenous product, in fact each member state has its own rules and regulations.

This option would likely reduce the costs of the scheme, by increasing certificate availability, but would not provide other benefits.



5.1.2 More granular REGOs

One of the principal challenges to REGOs is that they are valid for the entire year-long compliance period in which the certificate is produced, and therefore not tied to real-world power generation and carbon emissions. One way to more closely tie certificates to real world emissions would be to reduce the validity period of a certificate.

While options such as seasonal, monthly or daily have been considered, the most commonly suggested is hourly matching. Other markets have also had success with “peak” matching, where certificates are only produced – and required – during a short time of day, or a range of time bands such as midday, evening, overnight.

Generally, a shorter period of validity would result in a more volatile certificate price, with periods of high availability of renewable generation seeing lower prices and periods of low availability seeing much higher prices.

Figure 11: Pros and cons of various REGO granularities

Granularity	Pros	Cons
Annual	<ul style="list-style-type: none"> Simplest granularity Well understood as the current paradigm and in line with existing regulations and reporting rules 	<ul style="list-style-type: none"> No accounting for time of generation versus consumption No requirement to purchase energy alongside certificates
Seasonal/ Monthly	<ul style="list-style-type: none"> Compromise, increasing granularity without imposing as much additional administration as more granular approaches Slightly greater support for baseload/flexible plant 	<ul style="list-style-type: none"> May provide no or much lower value to technologies like solar Still does not provide strong correlation between time of generation and consumption

Granularity	Pros	Cons
Peak/ time-banded	<ul style="list-style-type: none"> Relatively simpler than hourly granularity Rewards users who can shift consumption to peak renewable generation periods Much greater support for use of baseload/flexible technologies Could be adapted to allow storage to earn certificates, rewarding flexibility, where it is storing renewable power Supports gradual move towards more granular matching 	<ul style="list-style-type: none"> May provide no or much lower value to technologies like solar, in the winter where evening peaks occur in the GB market Could require layers of administration around certificates, to allow storage to participate
Hourly	<ul style="list-style-type: none"> Most granular method, with strong link between time of generation and consumption Rewards users who can shift consumption to peak renewable generation periods Could facilitate a more liquid market for certificates and superior price discovery Much greater support for use of baseload/flexible technologies Could be adapted to allow storage to earn certificates, rewarding flexibility, where it is storing renewable power 	<ul style="list-style-type: none"> May provide no or much lower value to technologies like solar Highly complex and requires intense effort to trade and match certificates, though (unlike power trading) this could be conducted ex post Unlikely to allow corporates to demonstrate 100% renewable power without significant effort and spending

Source: Cornwall Insight

The concept of hourly certificate matching, widely considered to be the preferred option, is being studied in GB and other markets. The Energy Tag standard is a global organisation examining the question, which has published voluntary standards and tools, providing a suite of services which are intended to help corporates and national bodies to implement granular matching solutions. Their solutions are being deployed in test phases particularly in the US market, but also globally.

In the GB market, two trials are being conducted by Energy Tag – with banks and data centres, but also with a low carbon power supplier, Good Energy, which is providing all business customers with data on their actual carbon intensity on a half-hourly basis. This is based on the supplier’s PPA trading portfolio and the company’s demand profile. It has suggested that it is currently achieving a 90% match for its customer base, on a half-hourly basis.

One sphere in which hourly matching is likely to be delivered first is hydrogen production. Both the EU and UK rules for green electrolytic hydrogen require hourly matching of green power generation to consumption for hydrogen production. The UK’s rules are still to be finalised, but Energy Tag suggests that its process is aligned with the EU requirements. Emerging US rules for Federal hydrogen support may also be similar.

This option could reduce greenwashing and transparency concerns, at the cost of considerable administrative complexity and trading requirements. Prices for certificates would increase in some periods, and decrease in others, much like wholesale power.



5.1.3 Increase REGO market transparency

There are several information sources on REGOs, but these are generally not freely available and often do not include data on volumes traded. This considerably inhibits price discovery and market awareness of fair pricing, as well as awareness of the volume of certificates available. Improved information on REGOs could therefore increase the efficiency of the traded market, resulting in price stabilisation and allowing REGOs to be more consistently valued in investment cases.

Improved information could be delivered in a number of ways, from requiring trading to be through a central platform, to lighter-touch requirements to register trades including volume and prices. Achieving insight into short-term or spot trades would be relatively simple using these mechanisms, similar to wholesale power trading, but – again, as with wholesale power trading – long-term bi-lateral deals might be more difficult to monitor.

This option could make trading REGOs easier, but does not fundamentally alter the scheme.



5.1.4 Formal recognition of bundled REGOs

There is no formal recognition of the benefit of trading a REGO with the energy it is produced alongside. While many of the methods of going above and beyond REGOs – PPAs/CPPAs, granular energy matching, and reporting lines like USwitch's [Green Accreditation scheme](#) for domestic tariffs – effectively pair REGOs with power, reform to the REGO scheme could be implemented to formalise this.

Tagging REGOs as bundled or unbundled would formalise the benefit of these structures and allow them to be explained to the public and reported on more easily than is currently the case. It would also allow a consistent methodology between all providers and greatly simplified administration, supporting mitigation of greenwashing claims and an easier route to voluntary higher levels of green claims.

This change could support parties to recognise their current progress while providing signals on future steps to take, and support a higher price in negotiations for bundled certificates, reflecting the additionality these bring.

A ban on unbundled REGOs is also possible, though we note that this would be highly controversial for a number of parties. For example, renewable generators who trade actively in the bi-lateral energy markets would not be able to realise value for their certificates. It would also make it difficult for suppliers to close out their renewable positions by matching

residual demand volumes with unbundled certificates, or to reduce their REGO costs by selling on excess certificates.

Formal recognition of bundling/unbundling would not directly support a move towards more granular trading, though this could be introduced alongside or separately to the change.

This option may be the simplest method to increase value for bundled REGOs, and allay some greenwashing concerns.

5.1.5 Capping or fixing REGO prices

A further option would be to either limit the potential upside of REGO prices, or to fix the value of these in the market. This would create a high degree of certainty in terms of the potential income of REGOs to generators, and protect consumers and generators from the potential for very high or low REGO costs respectively.

However, a price would either need to be set administratively by the government, or discovered via a competitive process. Both have significant drawbacks, as has been found in previous renewable generation subsidy schemes, and – with recent market and economic shocks resulting in volatile pricing – it is hard to see how a fair fixed price or price cap could be instituted without disadvantaging parties, or resulting in volumes of un-traded certificates.

This option effectively provides a government-backed revenue line for renewable generation. This could support additionality, but could also drive up the costs of renewable generation and provide double-subsidy for assets already receiving support.



5.2 Carbon offsets

One alternative to REGOs that may be used by corporates to evidence reductions in emissions is carbon offsets. Carbon credits demonstrate a reduction, removal or prevention in the release of carbon emissions, through natural or technological processes. It is usually represented in tonnes of CO₂ equivalent.

There are two markets for carbon offsets in the UK: the compulsory market through the UK Emissions Trading Scheme, which is a cap-and-floor mechanism, applies to energy intensive industries, the power generation sector and aviation. The voluntary carbon market allows businesses to purchase credits in order to reduce their emissions. Some organisations make use of this tool for residual emissions or hard-to-decarbonise areas. The voluntary market is largely unregulated with various organisations developing standards to offer assurance on quality of carbon credits. In the UK, voluntary carbon project standards include the UK Woodland Carbon Code and the UK Peatland Code. Additional global standards include the Voluntary Gold Standard, Verified Carbon Standard, and Clean Development Mechanism.

Details of carbon credit pricing are opaque. Research undertaken for our Green Certificate Survey reported a price of £2.50-£4.99/t CO₂e based on responses from participants who declared being active in the voluntary carbon market.

In GB, some suppliers use carbon offset certificates as part of their green gas strategies. As the green gas market is very short and green gas certificates are not readily available,

suppliers will use a share of green gas, alongside a share of carbon offset, to provide gas labelled as carbon neutral. We note that there is currently no government-approved green gas certificate, no legislative requirement to publish a gas mix disclosure, and no plans to put these in place.

This means that suppliers can be more flexible in how they provide information to customers on their gas mix, compared to the information which they are required to publish for their electricity mix. Some Greenhouse Gas Protocol guidance suggests that corporations are permitted to use carbon offsets to mitigate their Scope 2 emissions. However, this is intended as a secondary measure, to deal with remaining emissions following reduction of consumption and purchase of renewable energy – which, in GB, means certified by REGOs. On 30 July, the SBTi published a report presenting its synthesis on the [effectiveness of EACs in corporate climate targets](#), assessing the effectiveness of carbon credits. It stated that there could be risks to corporates using carbon credits to offset emissions as it could hinder net zero efforts. It was also discovered that some carbon credits are ineffective in delivering intended outcomes. The SBTi has concluded that the findings from the publications reveal that further work is needed in order to draw conclusions as results were mixed.

6 Framing the future of REGOs

Changes to, or evolution of the REGO framework and emissions reporting should be considered in light of the key concerns under the current scheme, and the balance of impacts across market participants.

The main concerns for corporates include:

- **Additionality** – Transparency around the additional environmental benefits being delivered through the scheme, and comparability between companies utilising the measures. In particular, corporates are concerned about being accused of greenwashing when using only REGOs to demonstrate decarbonisation credentials
- **Transparency of pricing** – Allowing buyers to determine fair market value by creating visibility of market prices and volume of trades

The concerns outlined above, alongside rising costs have called into question the role for corporate procurement of REGOs in the short term.

Adjustments or alternative schemes will need to consider:

- **Ability to scale** – can the scheme be undertaken by a large number of corporates if required?
- **Additional administrative requirements** – can the scheme be utilised without significant administrative efforts and specialist knowledge?
- **Transition period** – are there intermediate steps required to bridge the change period until a full alternative can be implemented?
- **Comparability between providers** – can consumers determine and compare the green claims of businesses in a fair and transparent manner?

Fundamentally, achieving net zero targets – particularly the near-term goal of a 2030 net zero electricity sector – will require a smarter and more flexible energy system. It may therefore serve to reevaluate the frameworks introduced 20 years ago to ensure they remain relevant in today's market and can support the short-term transition to decarbonised electricity sector. Improved clarity, granularity and reporting will have near term benefits for early adopters, and long-term benefits for the whole system and all end users.



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