

Written evidence submitted by Renewable Power Capital (ECO0019)

Introduction to Renewable Power Capital

Renewable Power Capital (RPC) is a London-headquartered pan-European renewables company established in 2020, with the backing of CPP Investments. Its mission is to accelerate the energy transition to a renewables and storage focused UK and Europe.

RPC invests in the development, construction, and long-term operation of onshore wind and solar projects, enabling the energy transition and driving stable long-term, risk-adjusted returns. RPC's flexible mandate allows it to structure investments which recognise the changing market dynamics in Europe and create innovative solutions to build relationships designed for decades rather than months.

RPC is a significant infrastructure player in the UK and European market. Since its foundation in 2020, RPC has committed over 1.5 billion euros on projects including joint ventures. In February this year RPC acquired a 57 MW ready to build battery storage project in the UK, which followed its investment in two UK storage development pipelines totalling 4.5GW of capacity.

As an investor capable and keen to take on merchant risk, we analyse the impact of market and policy interventions to understand how they affect the investment environment for renewable and storage technologies.

These technologies are mature and investible enough to attract the sort of long-term, patient capital that can absorb merchant risk into its calculations. However, the degree of risk and how it is absorbed varies. Interventions that are not well signposted and work against the liquidity of the market end up in higher risk premiums from investors, especially if they are not introduced with complementary policies that explain how this reduced liquidity will be offset.

1. What should be the underlying principles of the UK energy market?

There are enough investors in the sector to meet the capital needs of decarbonising the grid on all reasonable scenarios between now and 2040, without relying on government subsidies.

Government should instead focus on supporting the right market conditions for *post-subsidy investment*, not least because with a merchant market able to invest and take on risk, this makes for better value for billpayers.

Critical to attracting investment in the GB energy system is:

- a) Ensuring liquidity in forward and PPA markets, allowing investors to sign long-term contracts and build investment businesses cases, knowing that they can trade electricity for the length of the contract in one form/market or another.
- b) Ensuring domestic level storage demand flexibility (through smart homes, EVs and heat batteries for domestic heat), are rolled out alongside renewables like wind and solar. This will offset the low prices paid when weather conditions are favourable for renewables by increasing consumer demand for energy during these periods.
- c) Signalling that renewable dispatchable power is the future. Though there will continue to be some gas on the market, investors in renewables, storage and CCUS need to see the clear signals and long-term commitments to a renewables focused future. Rhetoric that creates concern or confusion to the UK's net zero journey is unhelpful and ultimately makes UK asset infrastructure riskier.

2. Can Government deliver radical reform in the UK energy market?

RPC's key markets include the UK, Spain, Italy, Finland, Sweden and Poland. The UK is not alone in facing challenges in building out grid infrastructure and the need to smooth the grid connection process.

- a) *If the intention of the question is to ask whether it's possible to accelerate the deployment of energy infrastructure because of the challenges in the development process and need to bring local communities to be supporters of projects, RPC is committed to industry leading practices and standards through all our operations, with a diligent focus on health, safety and environmental management. We welcome the Government's further exploration of how to ensure community support for projects and would call on policy makers to learn from best practice across Europe by replicating the Finnish practice of sharing infrastructure levies with local communities.*

Reform is possible in the UK and should be pursued to accelerate the deployment of renewables where appropriate and possible. Recent interventions to accelerate the planning process and reform 'the queue' to eliminate projects blocking progress are welcome and further reform being consulted upon by Ofgem as part of the connection delivery board should build on this to ensure projects in the existing queue are ready to connect too.

- b) *If the intention is to ask whether radical reform is possible, we've seen significant reform in the UK energy market multiple times in recent decades, including the Energy Act and Electricity Market Reform of the 2010s and the introduction of the CfD and Offtaker of Last Resort. These delivered welcome signals to the investor community and for some time the UK was the leading place for offshore wind investment and has been a significant leader in the nascent development of flexibility and storage markets. We've also seen the significant negative impacts that reforms can have to markets, including the effective ban to onshore wind development in England because of changes in planning laws. Despite comments that development is now permitted, the impacts of this effective ban continue due to the higher barriers to development that exist for onshore wind.*

These reforms did have radical impact on the market, and in the case of the former, it's important to highlight that though radical reform was achieved, market signals ensured 'evolution' over 'revolution' of existing markets. By introducing carbon budgets, and through the introduction of a market architecture designed to give investors long term confidence in repeated auctions, investor appetite has been there to make reforms that have happened a success.

3. Is the Review of Electricity Market Arrangements likely to deliver the necessary changes to the energy sector?

To ensure a quick and efficient energy transition, the energy market reform needs to ensure investor confidence and market liquidity alongside effective supply and demand pricing dynamics. As currently proposed, REMA does not do this.

From an investor perspective, it's promising the suggestions to split the market and under-developed nodal pricing suggestions have been removed. Capacity Market (CM) proposals look promising but remain underdeveloped and there are key learnings from international markets in

relation to the Corporate Power Purchase Agreement (CPPA) market that should be adopted by the UK that don't currently feature in REMA.

Locational and Temporal price signals

One of the key questions challenging industry and government is how to introduce locational and temporal price signals to such an extent that delivers flexibility markets, without reducing liquidity in the market to a degree that introduces an investor risk premium.

We've seen market liquidity falling in recent years in the UK, as well as the Nordics, where zonal pricing has been introduced. In markets where zonal pricing has caused a drop in liquidity this is because the difference in system pricing and zonal pricing introduces a new dynamic against which to hedge i.e. basis risk, the difference between the zonal price and the "system price". In existing zonal markets, zonal prices can only be hedged for shorter periods than system prices e.g. 1-3 years v 10 years. This creates greater investor uncertainty and creates a lack of reliability for those looking to contract power for the longer term. This also impacts electricity suppliers as they are exposed to this basis risk in the same way as generators.

In mainland European Union nations, this is less of an energy system challenge because individual countries, namely Sweden, can export significant renewable power to neighbouring countries that require this power. However, following Brexit the UK is no longer able to do this as effectively, meaning the potential impact on liquidity is far stronger. Instead, investors have made investments based on national pricing predictions – the introduction of locational pricing adds a risk premium. Uncertainty is increasing the cost of capital. This applies to both PPAs and CfDs.

Having said this, RPC recognises that there is a real need and appetite for flexibility signals. REMA proposals currently suggest the TCR/SCR signals will provide with the necessary temporal signals to advance temporal flexibility. These are not strong enough to provide the temporal signals to cover domestic or business flex. DSR participants and investors need new operational signals to compensate for this.

From an investor perspective, the preferred outcome is to maintain national pricing and increase locational investment signals, but widen the range of transmission signals including temporally. For example, changes could be made to the Balancing Mechanism (BM) and CM to add a further locational element (this would help the operational side of day to day price signals to support system operations but would not effect investment in assets themselves.

CM changes

Initially, the CM encouraged significant high-carbon generation to be installed. The government of the day was told in advance that the scheme, as designed, would not encourage Combined Cycle Gas Turbines (CCGTs), but instead increase cheap diesel dispatch.

Although carbon emissions limits, which were introduced to the CM and revised in 2022, should help address this issue, most of these contracts had 15-year tenors and so are not achieving the outcomes set out in Energy Act legislation.

We welcome the suggestion in REMA to optimise the CM by introducing a minimum procurement target (otherwise known as 'minima') into the auction to better support investment in low carbon flexible technologies. One challenge to the CM is that it incentivises the cheapest form of capacity

without consideration of carbon impact in dispatch order. There is the potential to send a clearer signal concerning clean energy prioritisation.

To meet zero-carbon electricity goals, the UK needs low-carbon dispatchable energy so the CM should ensure that high-carbon dispatchable generation is not unduly incentivised. Rather than just having a procurement target, the Government should signpost a schedule to end unabated fossil fuel participation in the CM.

UK Export Finance back PPA contracts

One element REMA doesn't address is how to improve access to pure renewable power contracts for small businesses and consumers.

The UK currently faces a significant problem within its Power Purchase Agreement (PPA) market, which is that corporate consumers with weak or non-existent credit ratings find it difficult to contract with generators to purchase renewable energy. This is because these consumers are deemed uncreditworthy and completing a PPA with such a counterparty would cause the generator to be unable to raise finance on the project as lenders will not support projects with such offtake arrangements.

By limiting the number of offtakers with whom generators can contract, this often jeopardises the ability of these generators to fund projects. Those who raise finance on projects supported by PPAs find themselves unable to do so because of the perceived risk of non-payment. Not only does this act as a barrier to renewables deployment, it also prevents a significant proportion of the consumer market from accessing green energy and meeting individual net-zero targets – particularly the SME sector.

Government-supported credit insurance is one effective and proven solution to this problem. When consumers attempting to secure PPAs have weak or non-existent credit ratings, the credit guarantee acts as a form of insurance provided by Government. This insurance is granted indirectly through an export credit agency with a broad mandate. Such schemes have already been implemented successfully in Spain and Norway and most recently France.

As an investor in international renewable markets, we would strongly recommend the UK Government consider introducing such a scheme to remain competitive with those leading the green finance offer in Europe. Case studies of similar international approaches are listed in Annex A.

4. What are the major benefits that the UK should be seeking to deliver from energy market reform?

The UK should hold as its goal a decarbonised, energy efficient system that delivers lowest bills for consumers.

5. What are the chief barriers to reform of the energy market and is the Government serious about addressing those?

N/A

6. Is it possible to ensure that consumers are insulated from market failures in the energy sector?

Extremely high but short-lived prices will be a way of maintaining a last resort supply in extreme cases as we move to a decarbonised system. This is as it should be, meaning a very low cost energy system 95% of the time with high prices during the few hours when all other renewables and low carbon options have been exhausted.

It's important that as we move toward this price dynamic, this should not be assessed as a market failure. This is in fact the market working as it should. Occasional high prices will encourage new low carbon power generation and demand side response onto the system to benefit from these prices.

It may be that certain groups of consumers should be insulated from such price spikes, but this may not be necessary if consumers fully experience the benefit of low prices at other times.

Annex A

Case study one: Spain

In 2020, the Spanish government [introduced its Guarantee Fund, the FERGEI](#), which is designed to facilitate the purchase of green power by energy-intensive customers. Using the FERGEI, the Spanish government acts as a guarantor to cover the credit risk of consumers. This allows the consumers to contract renewable power while providing generators with price certainty and stable returns in the medium to long term.

The Spanish government grants these guarantees through the Compañía Española de Seguros de Crédito a la Exportación, S.A. (CESCE). The FERGEI was granted €600m over three years for PPA guarantees and is attached to the Ministry of Industry, Trade and Tourism. To be eligible for the scheme, energy-intensive consumers must contract at least 10% of their annual electricity consumption for five years.

This scheme could increase the ability of consumers to contract renewable power across 600 industries, with up to 80% expected to secure 10-year PPAs.

Case study two: Norway

In 2011, the Norwegian government [established its Energy Purchase Guarantee Scheme](#), which is aimed at allowing industrial companies with high electricity demands to contract renewable power. This scheme falls within the remit of Eksfin – the Norwegian equivalent of UK Export Finance (UKEF) – and is managed by Garanti-instituttet for eksportkreditt (GIEK) – a public agency which issues guarantees on the Norwegian state's behalf.

Eksfin provides a guarantee to either the power seller or the bank in question, that it will cover up to 80% of the outstanding financial obligation. The guarantee accounts for factors such as the consumer's creditworthiness, along with the tenor, volume, and price of the PPA. This scheme applies to PPAs within the wood processing, metal production, and chemicals equipment production industries.

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