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How can the UK leverage climate finance to increase investment & decarbonisation?

Authors' Foreword

In the UK and other developed markets, much of the lower-hanging fruit of decarbonisation—projects with a lower cost of reducing emissions—has already been picked. These represent commercially profitable projects such as adding baseload renewable capacity to the power grid or electrifying buses throughout the public transport system.¹ The coming challenge for the UK is therefore mobilising investment for less commercially viable projects such as transmission infrastructure, or newer, more expensive technologies like utility-scale batteries and carbon capture.² Upfront costs for these projects are typically higher, with returns lower and less certain. Profits are often too low to cover financing costs, even in the UK. For these projects, a "blended finance" approach, mixing concessional support with private investment, is necessary.

Fortunately, the UK has long been a leader in using markets to solve social challenges, alongside a history of ambitious climate goals. As the first major economy to declare a net zero target, the UK is approaching the 2030 goal of reducing emissions by 68% on 1990 levels. Catalysing investment in hard-to-decarbonise sectors there presents not only a challenge, but also a historic opportunity for markets to play a key role in decarbonising the UK and reinforcing British climate leadership.

To meet this challenge and seize this opportunity, public support—via subsidies or blended finance to de-risk private sector investment—is crucial to mobilise private investment. Given the estimated investment needed at £50bn per year by

2030,5 market incentives alone will not suffice. Investment in emergent technologies and highly capital-intensive green infrastructure requires policy innovation. In this light, this policy note focuses on carbon markets as a potential source of concessional finance for UK decarbonisation efforts. By allowing firms to monetise the emissions benefits of their projects as a new revenue stream, carbon finance can help high-risk green investments reach investors' return thresholds. While voluntary carbon markets remain relatively small—Boston Consulting Group estimates the current market size to be around US\$2bn per year—international schemes such as CORSIA and Article 6 of the Paris Agreement have begun to provide a pathway to hundreds of millions of dollars in potential financing.³

The policy solutions envisioned here are particularly crucial for emergent technologies such as long-duration energy storage or carbon capture solutions, which have catalytic potential to accelerate renewable penetration in the grid and support the hardest-to-decarbonise sectors. These technologies require patient capital ahead of commercial viability.

At Seagrass, we helping British businesses and the Government look at exactly these innovative financing mechanisms to deliver much-needed capital. The ideas explored in this note can drive investment towards decarbonisation, push new technologies along the learning curve, and eventually support the broader global energy transition.

About the Authors



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Naveed is CEO of Seagrass, a climate finance subsidiary of E.ON. Seagrass was founded on a mission to help restore the planet and accelerate the transition by scaling carbon finance and investments. Naveed is an innovator and transformation leader, with over 20 years of experience in the energy, telecommunciation, and satellite industries.



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Policy Levers

Here are three policy levers that the UK Government could enact to deliver decarbonisation investment and unlock climate finance. For the purpose of this note, we will focus on the first two.

1

Using Carbon Pricing to Meet Liabilities & Generate Investment in the UK

The first strategy is using carbon pricing to generate investment in the UK. The UK currently has one of the most advanced carbon pricing mechanisms in the world, the UK ETS, and in 2027 plans to introduce a carbon border adjustment mechanism (CBAM). These policies create "carbon tax liabilities" that must be paid on firms' CO2 emissions. In other words, a stick to make polluting less attractive. If the ETS or CBAM were to accept high-quality carbon credits from UK projects such as long-duration energy storage or CCS as a 'carbon tax asset', which firms could submit

instead of paying a tax, it could create a "carrot" to invest in decarbonisation alongside the stick. This carrot could unlock billions of pounds of investment for emerging, high-impact decarbonisation technologies in the UK. The EU estimates that its own CBAM could generate close to €10bn in annual revenue by 2030. Assuming a fixed proportion of firms' UK CBAM liabilities could be met with carbon assets generated in Britain, the scale of investment mobilised would be in the tens of billions of pounds.7

2 Leveraging International Carbon Markets to Decarbonise British Supply Chains

The second strategy leverages international carbon markets to decarbonise British supply chains. UK firms with global operations could use momentum on international carbon finance – including Article 6 of the Paris Agreement and the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) – to fund the decarbonisation of their supply chains in developing countries, potentially in cooperation with the UK's development finance institution,

British international Investment (BII). For companies with directly owned or operated assets abroad, decarbonisation could reduce their Scope 1 or 2 emissions, while for other companies, decarbonisation could reduce their Scope 3 emissions. This would be "Green Export Finance" except paid for by international investors rather than the Treasury, and would also create decarbonisation expertise to bring back to the UK economy.

3 Use of the UK Tax System to Incentivise Investment

In addition to these two carbon markets strategies, a third "go big" option would be to use the UK tax system to incentivise investment. This could replicate the success of the Inflation Reduction Act in the United States and create a system of tax incentives to invest in decarbonisation. This has the potential to significantly alter investment decisions in favour of decarbonisation, and, despite eventually lowering tax revenue, does not require upfront spending or borrowing from by the Treasury. Tax credits incentives could therefore be adapted to fit within the current or proposed fiscal rules of major UK political parties and could build on similar existing tax

credit schemes from other sectors in the UK.8 This option of using taxation is not explored in detail in this policy note, but could radically shift the economics of green technologies in the UK and scale up private sector investment, based on early evidence from the United States, where the IRA has led to greater-than-expected growth in domestic manufacturing, clean technology implementation, and private investment. 9 a. 10 Our team will look to explore how this could work in the UK via future analysis, but for the purpose of this report will focus on the first two strategic options noted.

Carbon Policy Options

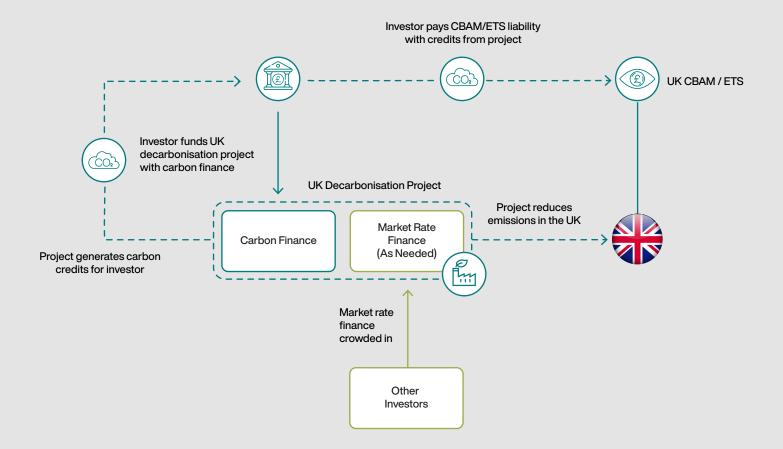
1

Use Carbon Assets to Meet Carbon Liabilities & Generate Investment in the UK

To generate private sector investment in key green industries within the UK, the government could turn carbon credits generated by UK decarbonisation projects into "carbon tax assets." Under this model, emissions reductions from cutting-edge technologies such as carbon capture, long-duration energy storage and green hydrogen could be purchased by investors. The government would then accept these credits as payment for "carbon tax liabilities", i.e. tax bills arising from UK carbon pricing mechanisms such as the UK's ETS or forthcoming carbon border adjustment mechanism (CBAM), currently slated for 2027. This would stimulate demand for UK-based carbon credits, as firms would buy credits for the economic rationale of reducing their tax bills, and, therefore, incentivise investment into local decarbonisation projects. This would generate new, concessional funding avenues for UK firms or projects focused on reducing emissions.

The exact scope of which projects in the UK would be able to generate carbon tax assets could be determined via a detailed assessment into impact and need. However, in principle, such a scheme should target nascent, costly technologies that cannot access purely commercial financing. This carries twin benefits. First, it could unlock investment in highly impactful technologies like carbon capture or long-duration energy storage that are otherwise challenging to finance, rapidly accelerating decarbonisation in the hardest-to-abate sectors. Second, the UK could include new technologies of strategic focus, like direct air capture (DAC), to help drive additional funding towards them and position the UK as an industry leader. Such proposals around greenhouse gas removals have in fact been mooted previously by the government in connection with the ETS, with a further consultation launched in May 2024. 11 & 12

Investor Generating UK Decarbonisation Carbon Credits to Meet Carbon Tax Liabilities



From a practical perspective, the government could start receiving input immediately from relevant stakeholders around scheme design and implementation for the UK's ETS and forthcoming CBAM, for which the Government recently launched its initial consultation.¹³ Including specific calls for information around linking both the ETS and CBAM to carbon assets within or alongside existing consultations. This could be followed by more specific consultations to answer important questions around project or credit type eligibility, such as carbon dioxide removals or other hard-to-abate emissions, and, most significantly, the level and pricing at which firms could meet a carbon tax liability with a carbon tax asset. Trial implementation phases could then be run as part of the UK's ETS ahead of a potential fuller launch to coincide with the introduction of the CBAM in 2027.

Allowing carbon assets to match carbon liabilities would position the UK as a global leader in climate finance. While a limited number of smaller economies have already implemented such polices, for example Singapore, where up to 5% of domestic carbon taxes can be paid for using Article 6-compliant credits, the UK would be the first major advanced economy to do so.¹⁴ The EU estimates that its own CBAM could generate close to €10bn in annual revenue by 2030.

Assuming a fixed proportion of firms' UK CBAM liabilities could be met with carbon assets generated in Britain, the scale of investment mobilised would be in the tens of billions of pounds.

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2 Use International Carbon Finance to Decarbonise Overseas British Supply Chains

Internationally, the UK could leverage momentum on carbon markets to generate international and domestic investment into British firms' overseas supply chains. There are two broad models for this approach. The first would be for a British company that directly owns or operates international assets within its supply chain. Our conversations with UK policymakers indicate several major UK companies with large international footprints that might be ideal candidates for accessing such climate finance. In the food and beverage sector, firms such as Unilver or Tate & Lyle, could generate investment in supply chain decarbonisation, while mining firms such as Rio Tinto or Anglo American could directly lower their Scope 1 and Scope 2 emissions on assets owned overseas.

As an example, by selling carbon credits to finance the installation of renewable energy at its production facility in Thailand, Tate & Lyle could reduce its Scope 1 and 2 emissions, supporting its goal to deliver a 30% absolute annual reduction by 2030. Alternatively, companies without directly owned supply chain assets abroad could work with suppliers to access carbon finance for decarbonisation. An example would be a manufacturing company working with its steel supplier to finance the decarbonisation of its steel processing facility with carbon credits. This would reduce the company's Scope 3 emissions. Across both modes, British firms would also develop expertise in carbon markets that could be subsequently applied to operations in the UK longer term.

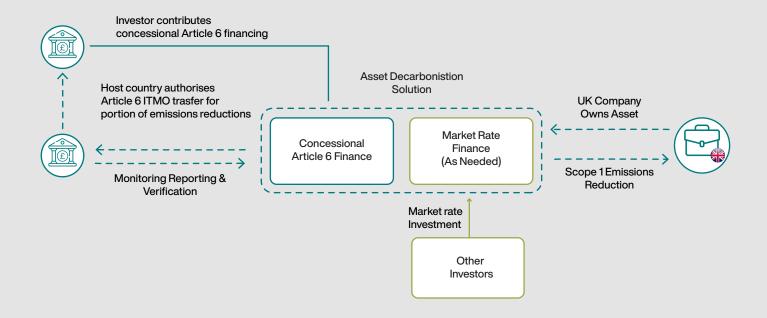
One option for how this could work practically would be to access voluntary carbon markets, given the market's long

history and growth over the last decade. However, as noted earlier, the voluntary carbon market remains small, with most buyers focused on high social-impact and community-focused projects that entail significant co-benefits.¹⁷ Thus, without a significant change in demand, voluntary carbon markets are unlikely to offer a major financing opportunities for UK firms looking to decarbonise.

A second, more promising avenue, beyond purely voluntary carbon markets, would be tapping into international compliance carbon markets, such as those governed by Article 6 or CORSIA. Article 6 of the Paris Agreement created a global carbon market, allowing states to trade emissions reductions to reach their NDC targets and offering a new way for corporates to decarbonise or fulfill their climate targets. Under Article 6, developed countries or investors fund decarbonisation projects in developing countries, with the host country transferring a portion of the emissions reductions in exchange. Accessing new Article 6 markets could unlock a wave of new capital to simultaneously help British firms with access cheap capital abroad and provide critical climate finance for developing countries.

Similarly, the implementation of CORSIA for airlines is materially increasing demand for high-quality, eligible credits. This step-change in demand offers a major opportunity for countries like the UK to accelerate their decarbonisation goals, as CORSIA-eligible carbon credits create tangible economic value for airlines that retire them, i.e. a lowering of the tax bill.

UK Company Using Article 6 Finance to Reduce Scope 1 Emissions in its Supply Chain



The UK policy environment is already well-placed to take advantage of international carbon markets. As one example, the UK's development finance institution, British International Investment (BII), could leverage its experience working in developing countries around carbon finance. BII could help structure transactions, provide technical assistance to host country governments around Article 6 where needed, or even provide direct catalytic finance. Since part of the climate benefits associated with these projects remain in the host country, the UK can also use international carbon finance as a form of "Green Export Finance" funded by international investors. Using its strong existing links with potential partner countries, the UK could target and encourage transactions in specific target countries, such as those of the Commonwealth or other strategic partners. ¹⁸

To help British firms access Article 6 opportunities, the UK could immediately begin signing bilateral Article 6 cooperation

agreements with partner host countries, following the lead of other developer nations like Switzerland, Sweden, and Singapore. These agreements would help facilitate Article 6 transactions and could be targeted at countries that are major hubs for UK corporate supply chains. To underpin these agreements, the government could design broader protocols for British companies to access both compliance and voluntary carbon finance, helping to instill market confidence and ensure environmental integrity. At the same time, the government could work with Bll to identify priority markets and allocate dedicated resources to support market growth.

Given the nascent stage of international carbon markets, the UK's leadership could have a significant impact in unlocking their possible scale and impact. Conveniently, it would also continue the legacy of the UK's COP26 Presidency in Glasgow, where Article 6 was first finalised, meaning that its successful implementation should have added incentive.



Conclusion

In summary, we recommend that the UK Government and British-based firms, especially those with international exposure, look at the two scenarios outlined as plausible and immediate ways to leverage carbon finance to meet the investment need in carbon-related projects, especially those focused on emergent technologies, to support long-term decarbonisation and scale the global energy transition.



Use Carbon Assets to Meet Carbon Liabilities & Generate Investment in the UK

- Add inclusion of high-quality UK decarbonisation credits in the UK CBAM to the current consultation
- Create a specific call for proposals about what industries should be included in a possible "Carbon Tax Asset" that is fungible with the UK ETS and CBAM
- Explore the experience of other international best practices, including from Singapore and South Korea
- Potentially explore a limited-scale pilot for the UK ETS

2

Use International Carbon Finance to Decarbonise Overseas British Supply Chains

- Begin signing bilateral Article 6.2 framework agreements with key international partners, for instance Commonwealth countries, modelled on Swiss-style frameworks
- Design a broader protocol for UK firms to follow when buying or issuing voluntary project-based offsets, using international best practices (e.g., UNFCCC, ICAO, SBTI guidelines)
- Engage BII to support and expand British firms' decarbonisation overseas through technical support, financial aid and diplomatic assistance



Get in touch

If you'd like to discuss UK Climate Finance Policy and how the carbon markets are impacting your business, please reach out to the team.



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About Seagrass

Seagrass is a climate finance company. We enable buyers to source carbon credits to deliver capital to high-impact climate projects.

We do this by supporting clients across the voluntary and compliance markets, with holistic solutions that cover the entire carbon lifecycle - Carbon Sourcing, Carbon Financing and Carbon Advisory.

We serve businesses with decarbonisation and sustainability targets, alongside innovative project developers. We also advise governments and investors with policy insights, carbon market frameworks, and financing to speed up the use of carbon finance to deliver NDCs.

Specific to Article 6, we are have curated a world-first financial framework to support the adoption of carbon finance and supply of concession capital to carbon projects, including a pilot transmission line project in Rwanda.

With our holistic solutions, clients can invest in a wide range of projects, across our global network, and settle transactions through our trading infrastructure, both offline and digitally.

We are a subsidiary of E.ON SE, one of the Europe's largest operators of energy networks and energy infrastructure, serving over 47 million customers, with a commitment to delivering the energy transition and wider sustainability.

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Appendix

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