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Sustainability Quarterly

SUSTAINABILITY  
IN OUR SECTORS



**Client spotlight:**

Kristof van Passel, Cathay Pacific

**Back to the Future:**

Crop-based biofuels and  
SAF mandates

**Understanding  
UK CBAM:**

A practical guide for importers

**Charity partner focus:**

The Air League

MAY 2026

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HFW is a global law firm with deep expertise in energy-intensive sectors and navigating the evolving regulatory requirements in respect of energy transition.

## Editor's Welcome

Welcome to the April 2026 edition of Sustainability Quarterly.

Transportation and Industry face complex and expanding sustainability regulatory regimes, including emissions trading schemes, mandatory fuel blending and supply targets, carbon pricing and monitoring, reporting and verification obligations.

Across these sectors, we are entering a decisive phase in the global transition to a low-carbon economy. In this edition, we explore some of the policy, strategic and regulatory issues shaping that journey.

We interview Kristof van Passel, Head of Procurement Operations and Sustainability at Cathay Pacific, on Cathay Pacific's leadership in accelerating the adoption of sustainable aviation fuel (SAF), outlining how corporate collaboration, strategic investment and supportive policy frameworks are essential to scaling production and reducing lifecycle emissions.

Against this background, we also examine the possibility that the UK government may permit the use of crop-based biofuels to meet SAF supply targets, balancing concerns over land use change and carbon intensity with the practical realities of meeting rising mandate obligations.

HFW Partner **Adam Topping** and Associate **Violet O'Gorman** also analyse the forthcoming UK Carbon Border Adjustment Mechanism, a major policy development designed to prevent carbon leakage and align importers with domestic carbon pricing, setting out a practical guide for importers ahead of the entry into force on 1 January 2027.

We also feature our charity partner, the **Air League**, exploring how its 2026 Global Innovators' Challenge is helping young people aged 11 to 25 develop Net Zero innovations for the aviation, aerospace and space industries, a timely reminder that talent and creativity sit alongside regulation and market frameworks in driving decarbonisation.

Together, these articles illustrate the interplay between innovation, regulation and market dynamics in driving meaningful decarbonisation.

Finally, we were very proud to win 'Environment/Sustainability Initiative of the Year' at the recent Legal 500 ESG Awards. Giles Kavanagh, our Global Senior Partner and Sustainability Partner, says: "Sustainability is central to HFW's ethos, in our journey to reduce our environmental impact in all aspects of our operations, and also in using our deep sector expertise to help clients achieve their sustainability goals."

Thank you to everyone who has contributed to this edition. We hope you find this edition interesting and we welcome your feedback, comments and queries about the topics covered and our expertise in sustainability and the energy transition.

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## CLIENT SPOTLIGHT

# Kristof van Passel Cathay Pacific

In this issue's client feature, Cathay Pacific's Head of Procurement Operations and Sustainability discusses the airline's market-leading initiatives to secure sustainable aviation fuel. Kristof van Passel also explains why collaboration in the industry is key and how comprehensive government policies will affect adoption.

Sustainable aviation fuel (SAF) is the most important lever available to reduce lifecycle emissions at scale. A multi-pronged approach to its adoption is essential.

The industry has already achieved major efficiency gains through technology, operations and infrastructure improvements. For example, IATA set a goal of 1.5 percent average annual fuel efficiency improvement between 2009 and 2020 as part of a wider climate strategy. Broader industry tracking shows substantial efficiency improvement over the longer term as fleets are modernised and operations evolve.

We keep pushing on fleet renewal, weight reduction, flight planning, air traffic modernisation and increasing digital optimisation. SAF has the potential to reduce lifecycle carbon emissions by more than 80 percent compared with conventional jet fuel, which is why we prioritise it while still pursuing all other measures in parallel.

### Corporate collaboration

The SAF industry is growing fast, but it is still a nascent market. No airline can scale it alone. For this reason, our corporate SAF programme is a collaboration platform. It brings

corporate customers together with a global supply ecosystem so we can turn sustainability ambition into real, bankable demand.

These long-term partnerships really matter because demand certainty over multiple years is what unlocks investment. When producers and financiers can underwrite future cashflows, their confidence in projected returns improves, which in turn helps keep the cost of capital down. This ultimately lowers SAF prices for everyone. Corporates often start with a one-off purchase, but we're increasingly seeing repeat participation and multi-year commitments.

In 2025, commitments from our corporate partners more than doubled. This is thanks to three main factors. First, being early matters. We launched one of the first major corporate SAF programmes in Asia in 2022, which allowed us to build expertise which is hard to replicate. This incorporated commercial, operational and sustainability assurance as well as the traceability and certification that corporates demand.

Second, we invested in a dedicated best-in-class team, because SAF isn't simply a bolt-on. The landscape is

complex and changes fast. Suppliers emerge, policy shifts and registries evolve. Corporate requirements also differ on feedstocks, certification and where fuel is uplifted.

We also focus on improved cost efficiency. Voluntary SAF uplifts rose significantly while the weighted average SAF premium fell sharply, driven by diversified sourcing and strategic contracting. That translates into more competitive pricing for corporate customers and makes repeat and larger commitments easier to justify.

On the supply side, we have a two-track approach. We capture near term opportunities where incentives or market dislocations make spot volumes attractive, while continuously building a pipeline of longer term off-take and investment opportunities that can structurally improve affordability and supply certainty. This combination of corporate demand signals plus strategic sourcing and investment directly accelerates SAF adoption across our network.

### Joined up thinking

Last year we announced two joint investment initiatives which were intentionally complementary.



First, we joined the oneworld/ Breakthrough Energy Ventures (BEV) SAF fund as a launch investor. The core idea is to back early-stage technologies that can scale production significantly and, crucially, work toward eliminating the green premium over time. Internally, the investment case was clear. We provide early access to a pipeline of disruptive SAF technologies, share learning with leading airlines and an experienced climate-tech investor and reinforce Cathay's sustainability leadership.

We also announced a co-investment partnership with Airbus of up to US\$70 million for projects that can scale production toward 2030 and beyond. These represent more mature opportunities. The partnership explicitly recognises that scaling SAF requires cross sector collaboration between policymakers, investors, producers and customers.

What ties both initiatives together is the value chain logic. Airlines can be anchor customers, corporates give demand signals, financiers provide capital, producers build and policymakers create enabling conditions. When those pieces align, SAF goes from pilot project stage to real scale.

#### The power of policies

There isn't a single magic policy which will help scale SAF. It needs a package of supply and demand measures that close the price gap with conventional jet fuel and give investors confidence to build.

On the demand side, you need mechanisms that create predictable, economy-wide demand and keep competition fair. Mandates combined with levies are one example because they create a baseline of demand across all operators at covered airports. In Hong Kong, our policy discussions have highlighted that targets alone are not enough. A levy-based demand creation approach can be important alongside enabling infrastructure, otherwise the economics may not work and airlines will source elsewhere.

On the supply side, incentives that directly reduce production cost are crucial – whether through credits, grants or measures that reduce feedstock costs and unlock scalable pathways. California's LCFS is a good example of a framework that creates credit value for lower carbon fuels and helps improve project economics. In the US, the 45Z Clean Fuel Production Credit has been a major factor in the incentive landscape for low-carbon fuels, shaping investment decisions. Robust sustainability rules, such as the ICAO CORSIA lifecycle emissions guidance, matter because they protect integrity and investor confidence while enabling credible claims.

Government policy will be decisive. Without long-term, credible policy frameworks, adoption will remain constrained because the price gap is still large. Spot market SAF prices can be multiple times conventional jet fuel, and voluntary demand is constrained by the green premium. A more bifurcated market is developing. Mandated regions including the EU and UK create baseline demand through blending requirements, while other regions will move based on whether they introduce comparable demand signals and supply incentives.

The economic reality is simple. Fuel is one of the biggest cost lines for airlines, often representing around 25–30 percent of operating cost. It is not possible to load double- or triple-digit fuel cost increases into an industry with thin margins without some form of policy support or cost recovery mechanism. That's why the winning policy mix is a combination of demand and supply side measures to create the market and level the playing field.

#### The evolving ecosystem

Our relationship with conventional fuel suppliers and blenders is evolving quickly, but not uniformly. Broadly, we see three patterns. There are players who remain focused on the conventional fuel business and are slower to transition. There are also

markets where mandates have arrived faster than infrastructure competition and costs rise sharply. Internal analysis highlights that mandatory SAF volumes can carry materially higher premiums than voluntary volumes. That's why we are very focused on transparency and on ensuring mandate compliance costs don't become structurally inflated through non-competitive mechanisms. This is something we explicitly pressure test in supplier processes.

Third, and most importantly, there are promoters. These are suppliers and blenders who want to work collaboratively on long-term solutions. Our strategy is to deepen those partnerships, because they help us secure reliable supply, maintain cost discipline, and scale the corporate SAF programme.

#### Individual impact

We were the first airline in Asia to introduce a membership linked digital platform to encourage individual SAF contributions. Participation is simple and tangible. A traveller enters flight details, receives an estimate of emissions, chooses a SAF contribution level, and pays online. Eligible members are rewarded with Asia Miles.

We don't pretend this will be the single biggest short-term driver. The heavy lifting will come from policy, corporate demand and scaling supply. But we do expect this channel to grow meaningfully as awareness rises. This is because it helps normalise SAF, builds public literacy and adds another demand signal that supports broader adoption. Importantly, it turns decarbonisation into something customers can actively participate in, rather than something that happens elsewhere in the supply chain.

This multifaceted strategy is accelerating the adoption of SAF across our network. Cathay has a long-standing commitment to innovation and sustainability, and having a meaningful impact on the air transport industry has always been our goal.





## Back to the Future

# Will governments turn to crop-based biofuels to bridge the gap between supply and demand and meet SAF mandate targets?

Written by Michael Buffham

In 2024, the transportation sector accounted for approximately 15.9% of global greenhouse gas (“GHG”) emissions, making it the third-largest polluting sector behind only power generation and manufacturing.<sup>1</sup> There are regional variations and, in the EU, the transportation sector was the largest source of GHG emissions in 2024.<sup>2</sup>

In 2023, aviation transport accounted for 2.5% of global energy-related CO<sub>2</sub> emissions, growing faster than road, rail and shipping.<sup>3</sup> With global air traffic forecast to grow from 4.5 billion passengers in 2019<sup>4</sup> to 12.4 billion by 2050,<sup>5</sup> there is likely to be continued scrutiny on aviation’s carbon footprint and its share of GHG emissions in the transport sector.

### SAF Mandates

In the immediate term, Sustainable Aviation Fuel (“SAF”) is widely accepted as the aviation industry’s primary means of achieving decarbonisation. In this context, an increasing number of jurisdictions are setting SAF mandates and targets for the proportion of SAF that must be included in all jet fuel made available to aircraft operators and used in flights departing from their territory. For example:

- The UK SAF Mandate came into force on 1 January 2025 and provides that suppliers must blend 2% SAF into jet fuel by 2025, rising to 10% by 2030 and 22% by 2040;<sup>6</sup> and
- The ReFuelEU Aviation Regulation<sup>7</sup> came into force on 20 November

2023 and applies from 1 January 2024, with SAF blend mandates applying from 1 January 2025, requiring that suppliers ensure all jet fuel made available to operators at EU airports consists of blend containing increasing minimum shares of SAF.

Both the UK SAF Mandate and the ReFuelEU Aviation Regulation specify what constitutes “SAF” for the purposes of the applicable supply obligations and include sub-targets for the development of more advanced synthetic fuels.

Under the UK SAF Mandate, all SAF must achieve a minimum GHG saving of 40% and the main pathways for SAF are:

- HEFA: Hydroprocessed esters and fatty acids – a fuel developed from oils or fats, such as used cooking oil;
- Non-HEFA: various methods of making advanced biofuels from wastes and residues, such as municipal solid waste; and
- Power to liquid (“PtL”): fuels made from low carbon power sources, such as from renewable energy.

The UK SAF Mandate sets a cap on the amount of SAF that can be produced using the HEFA pathway, starting at 100% of SAF demand in 2025 and 2026 and decreasing to 71% in 2030 and 35% in 2040. At the same time, there is a sub-mandate for PtL fuels, starting at 0.2% of jet fuel demand in 2028, rising to 0.5% in 2030 and 3.5% in 2040. The intention is to encourage the development of more advanced second-generation SAF from non-HEFA feedstocks and third-generation PtL fuels.

Under the ReFuelEU Aviation Regulation, “SAF” means:

- Eligible sustainable fuels made from permitted feedstocks, as listed in the Renewable Energy Directive<sup>8</sup> (“RED”), Annex IX, Part B, for example used cooking oil (“UCO”);
- Advanced Biofuels made from waste feedstocks, as listed in RED, Annex IX, Part A;
- Renewable Fuels of Non-Biological Origin (“RFNBos”);
- Recycled Carbon Aviation Fuels achieving a minimum lifecycle GHG saving of 70%; and
- Low-Carbon Synthetic Fuels made from non-fossil sources and also meeting a lifecycle GHG saving of 70%.

The ReFuelEU Aviation Regulation also sets a sub-mandate for the development of PtL fuels, starting at 1.2% of jet fuel demand in 2030, rising to 10% in 2040 and 35% in 2050.

The permitted feedstocks and production pathways under both the UK SAF Mandate and ReFuelEU Aviation Regulation reflect a shift away from first-generation crop-based biofuels to advanced biofuels made from waste feedstocks and synthetic fuels. By promoting the use of waste feedstocks and synthetic fuels, the UK and EU have distanced themselves from the “food versus fuel” debate.

The UK government approach as so far focused on encouraging and supporting the development of advanced technologies using waste and residues and the development of PtL fuels. However, the UK Department for Transport recently launched a call for evidence on the use of crop feedstocks in SAF production.<sup>9</sup> The potential approval of SAF produced from crops under the UK SAF Mandate would represent a significant reversal of existing policy.

So, what is behind this potential shift in approach?

### Feedstock shortages and fraud concerns

On 22 October 2025, the EU Aviation Safety Agency (“EASA”) published the first ReFuelEU Aviation Annual Technical Report, providing an update on how SAF is being supplied, purchased and used across the EU.<sup>10</sup>

This report found that, in 2024, approximately 98% of SAF supplied to EU airports was biofuel produced using the HEFA pathway, with 81% of all SAF derived from UCO and a further 17% derived from waste animal fats.

<sup>1</sup> <https://www.cargoson.com/en/blog/how-much-co2-does-the-transportation-sector-emit>

<sup>2</sup> European Environment Agency, Greenhouse gas emissions from transports in Europe: <https://www.eea.europa.eu/en/analysis/indicators/greenhouse-gas-emissions-from-transport?activeAccordion=546a7c35-9188-4d23-94ee-005d97c26f2b>

<sup>3</sup> International Energy Agency, Aviation Sector Update 2023 (IEA 2023): <https://www.iea.org/energy-system/transport/aviation>

<sup>4</sup> International Civil Aviation Organization, Annual Report 2019: The World of Air Transport in 2019 (ICAO 2020): <https://www.icao.int/annual-report-2019/Pages/the-world-of-air-transport-in-2019.aspx>

<sup>5</sup> International Civil Aviation Organization, Strategic Plan 2026–2050 (ICAO 2023): <https://www.icao.int/about-icao/Council/strategic-plan-2026-2050>

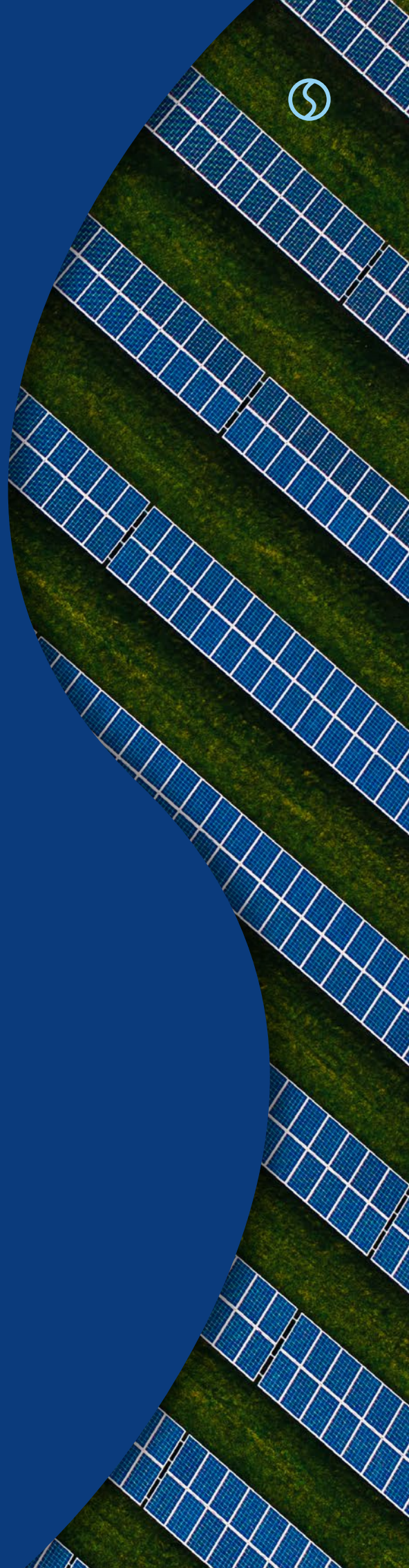
<sup>6</sup> The Renewable Transport Fuel Obligations (Sustainable Aviation Fuel) Order 2024, Part 2, The SAF obligation: <https://www.legislation.gov.uk/ukdsi/2024/9780348262575/part/2>

<sup>7</sup> Regulation (EU) 2023/2405 of the European Parliament and of the Council of 18 October 2023 on ensuring a level playing field for sustainable air transport

<sup>8</sup> Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources.

<sup>9</sup> <https://www.gov.uk/government/calls-for-evidence/saf-mandate-crop-derived-sustainable-aviation-fuel/saf-mandate-crop-derived-saf>

<sup>10</sup> <https://www.easa.europa.eu/en/downloads/142606/en>





**In order to meet rising demand and increasing blend targets under applicable supply mandates, clearly more SAF must be produced, made available and uplifted by aircraft operators. In the medium- to long-term, the development and deployment of second-generation advanced biofuels and third-generation PtL fuels is essential.**



The demand for UCO as a feedstock has led to a surge of imports from South East Asia, in particular from Malaysia, Vietnam, Thailand, Indonesia and China. This has coincided with a number of high-profile fraud incidents involving the supply of products that are described as biofuels made using UCO feedstocks, but in fact are produced from unsustainable feedstocks such as virgin palm oil.

In order to meet rising demand and increasing blend targets under applicable supply mandates, clearly more SAF must be produced, made available and uplifted by aircraft operators. In the medium- to long-term, the development and deployment of second-generation advanced biofuels and third-generation PtL fuels is essential. However, these advanced biofuels and PtL fuels are more expensive to produce than HEFA fuels and many fuels in development are not yet proven at scale.

It is unrealistic to expect airlines, which operate within very tight profit margins, to absorb the increased cost of fuel supply while the industry ramps up production and improves affordability of second- and third-generation SAF.

Meanwhile, the limited availability of feedstocks for SAF produced using the HEFA pathway creates a supply shortage. Coupled with concerns about fraud risk associated with UCO feedstocks, it may be reasonable for governments to consider policy changes that expand the scope of feedstocks that may be used for SAF production in the immediate term.

#### Crop-based biofuels

Discussion on the use of crop-based biofuels often focuses on the “food versus fuel” debate. However, producing biofuels from crop-based feedstocks does not necessarily mean using food and feed. For example, biofuels can be produced using:

- Energy crops, being non-food cellulosic material or lignocellulosic material grown for the purpose

of fuel or energy production and, while not a waste product, not normally used for food; or

- Cover crops, which generally refers to non-food or feed crops grown primarily to manage soil health, erosion, water, weeds, pests, and biodiversity. Cover crops typically are planted between main crop cycles to protect bare soil, then ploughed in (and not harvested) before sowing another crop.

By contrast, food and feed crops can be used for food and feed as well as production of fuel. The two most prominent examples of food and feed crops being used as feedstocks for fuel production are sugarcane and corn bioethanol.

Irrespective of which type of crop-based feedstock is used, the traditional view has been that crop-based biofuels have higher GHG emissions than waste-based biofuels or synthetic fuels based on a lifecycle analysis. For example:

- The emissions from cultivating the crops need to be taken into account, whereas for waste-based biofuels lifecycle GHG emissions tend to be assessed from the point of collection of the waste; and
- Crop-based biofuels can have significant GHG emissions from indirect land use change (“**ILUC**”). Forests being converted to agricultural land for crop-production, driving deforestation, could result in significant GHG emissions from the change in use of the land.

However, some of these assumptions and viewpoints are now being challenged.

#### US and Brazilian corn ethanol production

The US and Brazil are the two largest bioethanol producers worldwide, with industries underpinned by strong policy frameworks, advanced and efficient agricultural systems and growing demand for low-carbon fuels.



Although traditionally built on sugarcane ethanol, which still accounts for 76% of bioethanol production, Brazil's bioethanol industry has an increasing focus on corn bioethanol. Brazil's climate and advanced agricultural systems mean it is possible to produce two full crops per year on the same land, allowing year-round production and high yields. This does not mean a food crop and cover crop in the same year, but two full crops, for example two corn crops or a soybean crop and corn crop. This year-round production and land-use efficiency means that some reports assert Brazil's corn ethanol production pathways are capable of delivering 72-83% lower carbon intensity than gasoline.<sup>11</sup>

Interestingly, bagasse (the fibrous, pulpy residue left after sugarcane has been pulped) is sometimes being used as a fuel for the production of corn bioethanol. Bagasse, which is an EU approved feedstock for the production of Advanced Biofuels from waste feedstocks under EU RED, is estimated to have a carbon footprint 30% lower than first generation sugarcane ethanol.<sup>12</sup> However, it appears that some Brazilian biofuels producers now consider that corn bioethanol's high production volumes and significantly reduced carbon intensity compared to gasoline mean that it is a better option to use bagasse in the production of corn bioethanol than as a feedstock for second-generation advanced biofuels, notwithstanding that corn bioethanol is a first-generation biofuel

produced from food or feed crops.

Research indicates that Brazil could produce around 39 billion litres of bioethanol per year by 2035, potentially reaching 54-68 billion litres through continued improvements in agricultural efficiency and feedstock utilisation.<sup>13</sup>

The US remains the largest ethanol producer globally, with an industry built on vast corn growth and a sophisticated and well-established bioethanol production infrastructure. In 2022, the US produced around 15.4 billion gallons of bioethanol.<sup>14</sup> Annual production increased to over 18.3 billion gallons in 2024, with bioethanol exports of approximately 1.9 billion gallons, driven by demand in Canada, the EU, India, Japan, South Korea and the UK.<sup>15</sup> Studies suggest that US bioethanol production could reach 18-23 billion gallons per year by 2035.<sup>16</sup>

#### The push for expansion of corn bioethanol for production of SAF

The US bioethanol industry is supported by policy frameworks such as the Renewable Fuel Standard (RFS), which maintains an annual requirement of 15 billion gallons of conventional ethanol per year until at least 2027, ensuring stable demand.

However, the powerful US agricultural lobby is advocating for support and expansion of the bioethanol sector. Notwithstanding the general opposition of the current US administration to green fuel initiatives, the clean fuel production credit was

expanded in 2025, providing a subsidy for fuel produced from feedstocks such as corn, soybeans and other food waste.

The agricultural lobby appears to see support for ethanol production as an existential issue. A significant oversupply of corn, rising costs and shifting global demand has resulted in low crop prices and stockpiles of unused corn. Increasing demand for corn through increasing ethanol production would help stabilise farm income.

In the US, sales of E15 fuel (i.e. with 15% ethanol content) are restricted from June to mid-September under air quality statutes. Despite the US ethanol industry investing millions of dollars lobbying Congress to remove this restriction and allow year-round ethanol blending in gasoline, the 2026 appropriations package did not remove limits on when E15 can be sold.<sup>17</sup>

There is increasing concern in the US ethanol sector that electric vehicles will depress demand for corn ethanol. Coupled with the decision not to permit year-round sales of E15, the focus of the US bioethanol industry now appears to be turning to SAF production, rather than road fuel.<sup>18</sup>

#### Comment

The Brazilian and US ethanol industries maintain that the vast crop yields, land-use efficiency and advanced agricultural systems mean that support for corn ethanol production does not result in choosing fuel over



food or increasing GHG emissions through ILUC. However, the debate continues to rage over the extent to which allowing and promoting first-generation biofuels produced using food and feed crops would encourage deforestation and indirectly increase GHG emissions significantly.

Governments and regulators must make a difficult choice about whether to expand the scope of feedstocks that may be used for SAF production to include crop feedstocks to ensure SAF supply meets rising demand and increasing blend targets under supply mandates.

Encouraging the development and deployment of second-generation advanced biofuels and third-generation PtL fuels remains an essential part of the medium- and long-term decarbonisation strategy. However, an important question arises as to whether

broadening permitted feedstocks in the immediate term could help ease supply shortages, overcome issues with availability of HEFA feedstocks and supply chain fraud, and generate revenues for investment in projects for the production of advanced biofuels and PtL fuels.

It is crucial that policymakers obtain the views of a broad cross-section of industry participants and make a considered decision based on the scientific evidence surrounding the use of crop feedstocks and GHG emissions from ILUC, balancing the pragmatism of increasing SAF production with the necessity of continuing to encourage investment in advanced technologies that offer the best long-term solution for decarbonising the aviation sector.

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11 Global Centre for Green Fuels: Sustainable Bioethanol Supply Potential: United States and Brazil: <https://www.green-fuels.org/post/sustainable-bioethanol-supply-potential-united-states-and-brazil>

12 United States Department of Agriculture (USDA), Foreign Agricultural Service Biofuels Annual Report, 30 September 2025: [https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Biofuels+Annual\\_Brasilia\\_Brazil\\_BR2025-0030.pdf](https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Biofuels+Annual_Brasilia_Brazil_BR2025-0030.pdf)

13 Global Centre for Green Fuels: Sustainable Bioethanol Supply Potential: United States and Brazil (see footnote 11)

14 USDA Economic Research Service, US Bioenergy Statistics: <https://www.ers.usda.gov/data-products/us-bioenergy-statistics>

15 US Grains Council: <https://grains.org/wp-content/uploads/2025/04/USGBC-Bioethanol-Advantages-04-29-25-FINAL.pdf>

16 Global Centre for Green Fuels: Sustainable Bioethanol Supply Potential: United States and Brazil (see footnote 11)

17 The Ethanol Lobby Vastly Outspent the Oil Lobby. The Oil Lobby Is Winning Out. - NOTUS — News of the United States: <https://www.notus.org/energy/ethanol-lobby-outspent-oil-lobby-2025-e15>

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## Understanding UK CBAM

# A practical guide for importers ahead of entry into force on 1 January 2027

Written by Adam Topping and Violet O’Gorman

As the EU’s Carbon Border Adjustment Mechanism (EU CBAM) entered into its definitive phase as of 1 January 2026, the UK is working to adopt its own version – the UK Carbon Border Adjustment Mechanism (UK CBAM). Broadly, the intention of this carbon border adjustment mechanism is to reduce carbon leakage, making importers of goods imported from outside the UK pay a comparable carbon price to that paid by UK producers.

The primary text of the legislation for UK CBAM received royal assent on 18 March 2026, as part of the Finance Act 2026. This means UK CBAM will enter into force on 1 January 2027, and will apply to within-scope CBAM goods imported into the UK on or after that date.

Technical consultation has recently concluded on a suite of upcoming draft secondary legislation for UK CBAM, relating to the administrative requirements, such as registration, tax returns and record-keeping. There will also be secondary legislation covering monitoring, reporting and verification. This means there are still some details to be finalised around implementation of UK CBAM.

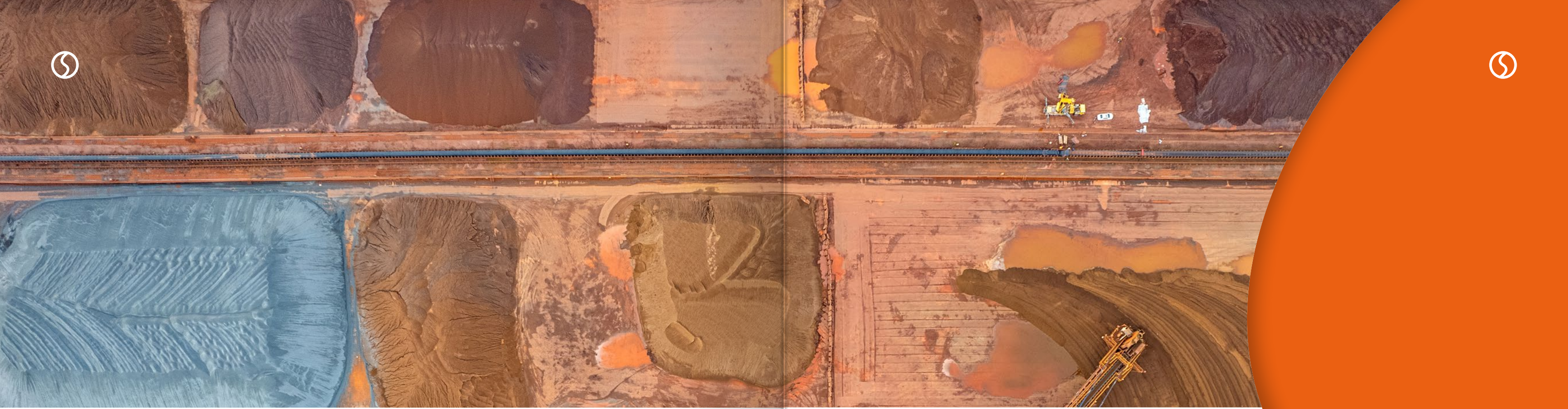
### What are the key features of UK CBAM?

UK CBAM covers goods as specified in Schedule 16 of the Finance Act 2026, namely in the aluminium, cement, fertilisers, hydrogen and iron and steel sectors (with a small number of exceptions from these sectors, such as scrap products). In-scope

UK CBAM goods are slightly different to the list of goods covered by EU CBAM, which also covers electricity.

The CBAM tax point is the point where goods enter into the UK and/or attract import duty. The UK CBAM regime applies across the whole of the UK, including Northern Ireland.

The ‘liable person’ in relation to UK CBAM is the importer, or the person in whose name a customs declaration is made/on whose behalf in-scope goods are imported. It is possible for the ‘liable person’ to appoint a tax agent to submit CBAM returns on their behalf, however the importer remains liable for the CBAM charge, and must be the one who registers for CBAM. The liable person/importer must retain information about the



value of CBAM goods it imports into the UK, and must complete and submit a tax return for CBAM after the end of each account period.

There are various exemptions to UK CBAM: it does not apply where an importer imports less than £50,000 worth of goods, and it only applies to goods which are imported in the course of business. It also does not apply to goods with a UK place of origin, or UK pre-cursor goods, or where returned goods relief is available for a specific good.

The Finance Act 2026 has various schedules relating to CBAM. For example, Schedule 17 provides for administration and enforcement of the legislation (including listing various penalties for non-compliance), whilst Schedule 18 details relevant criminal offences relating to UK CBAM, including for fraudulent evasion and misstatement.

**How will the UK CBAM charge be calculated?**

One key difference between EU CBAM and UK CBAM is that the carbon charge imposed on importers will be by way of a tax/charge, rather than a certificate scheme (as under EU CBAM). The CBAM charge will be calculated based on a sectoral approach – i.e. a rate per in-scope

sector of CBAM goods which will be calculated and published by the UK Treasury each quarter. The price will be calculated by reference to UK ETS auction clearing prices from the previous quarter.

The UK CBAM charge will be calculated based on direct emissions embodied in goods. The liable person/importer for UK CBAM will need to either use actual emissions data obtained from CBAM goods produced (alongside evidence of verification), or default emissions values which are to be published by the UK Government in advance of the introduction of CBAM in 2027.

If the liable person/importer can demonstrate/evidence that the imported CBAM goods have already been subject to a qualifying carbon pricing scheme, then carbon price relief (CPR) may be applied – whereby CBAM liability in relation to a particular import may be reduced (although not beyond the total amount of CBAM liability due). The liable person/importer is responsible for calculating CPR, and for submitting the relevant verified documents for this. It is important to note that CPR may only be used to reduce UK CBAM liability where all independent verification has been appropriately obtained.

There is also currently a provision under UK CBAM for the exemption of goods imported from a jurisdiction with a 'linked' emission trading scheme under CBAM. There are currently no such jurisdictions, although this may change in future.

**What are the practical implications of UK CBAM for importers?**

Importers of within-scope CBAM goods into the UK should ready themselves for the upcoming entry into force of the legislation.

It is the responsibility of the importer/liable person to register with HMRC for UK CBAM. There are various tests for the minimum registration threshold for a liable person under UK CBAM, including a forward-looking and backward-looking test. The minimum registration threshold is based on the total monetary value (and not weight, as is the case under EU ETS) of CBAM goods imported or expected to be imported into the UK.

Key points of action for a liable person/importer include:

- Registration with HMRC (if meeting the minimum registration threshold – further details are set out in the legislation and guidance about this);

- Record-keeping relating to imported UK CBAM goods;
- Completion and submission of a tax return for UK CBAM following the end of each accounting period;
- Payment of any UK CBAM charge due;
- Conserving all relevant records and documentation related to tax return.

These points of action are all set out in more detail in the legislation.

**Brief comparison with EU CBAM**

There are various key practical differences to be considered as between UK CBAM and EU CBAM. Notably, the UK CBAM is a tax/charge, whilst EU CBAM is a certificate-based system. Furthermore, although the first accounting period for UK CBAM will be 12 months, from 1 January 2028, UK CBAM accounting periods will be quarterly. Under UK CBAM, there is expected to be an eventual transition to a two-month window for submission of return/payment of the CBAM charge. This differs from the annual certificate submission cycle in place under EU CBAM. Importers should take note of these differing deadlines/cycles.

In practical terms, it should be borne in mind that there will be no transition period for UK CBAM, as

there has been under EU CBAM; UK CBAM will apply directly to goods imported from the start of 2027. This means importers caught under UK CBAM will have less time to adjust to the system, and will need to be prepared well in advance of its entry into force.

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## Charity Partner Focus: The Air League

The Air League is a UK-based aviation and aerospace charity which helps young people access careers in aviation and aerospace. They champion talent, create opportunities and remove barriers for young people with potential from every background. Their aim is to develop a more diverse and inclusive talent pipeline and improve social mobility by reducing barriers to the industry.

We speak to The Air League's CEO, Janine Hornsby, about the charity's 2026 Global Innovators' Challenge. This competition invites young people aged 11 to 25 to develop innovations which will help the aviation, aerospace and space industries achieve Net Zero by 2050.

### **What is the primary aim of the Global Innovators' Challenge?**

We started the challenge a few years ago when it became clear that sustainable aviation was a huge topic, especially for young people. We were seeing big changes in the industry, from Boeing innovating new aerodynamic composite skins to go on an aircraft inspired by sharkskin, to Airbus working on new ZEROe aircraft design featuring hydrogen fuels. Of course the use of sustainable aviation fuel (SAFs) was developing. SAFs are the most immediate solution but are not necessarily the best long-term solution because they're expensive and not altogether carbon neutral. We really wanted to get young people coming up with innovative ideas for near and long-

term solutions. That might be a new engine design, using biomimicry or looking at carbon capture and storage. It doesn't have to necessarily be an engineering concept, it could be an operational idea such as airport design or flight paths. We have seen some mind-blowingly creative ideas.

### **Why is it so important that young people are involved in the future of aviation?**

Sustainability is a growing field in terms of career prospects. It's crucial to get them thinking about it early on. It's going to be a huge driver for everything we do moving forward. There will be growing opportunities not just in engineering or in piloting, but career paths into every aspect of sustainability across the industry.

### **The competition gives young people access to industry leaders. How does this work and who is involved?**

Throughout the months and weeks leading up to the deadline, we get industry experts to do webinars to share their expertise. One of our judges, Neil Turnbull from The Saxon Air Group, talked about electric aircraft and the chief engineer from the Red Arrows, Andrew King, discussed the chemistry around the smoke they use in air shows, which is now carbon neutral. David Debney, the Aerospace Technology Institute's (ATI) Head of Technology for Whole Aircraft is also one of our judges, and he talked to the young people about engine technology.





They produce a 1000 word proposal outlining feasibility, implementation and partnership requirements. We don't limit them to any given category, the sky's the limit. We then choose eight finalists who deliver their projects to the panel of judges in a Dragon's Den style format. The overall winner presents their idea on the main stage of the Sustainable Skies World Summit in front of the whole industry. It's an amazing platform and will really open doors.

**Have there been any projects that have particularly surprised or impressed you?**

We've had some really good entries over the years. For example, we had some apprentices which came up with a way to turn cannabis into SAFs, a solution which was cheap, effective and scalable. The winners a couple of years ago were from British Airways and they proposed reprocessing passenger toilet waste on the aircraft and turning it into SAFs during the flight. One group proposed putting tectonic plates in airports so that the kinetic energy produced from moving visitors generated electricity to run the airports. When we're adults we get the creativity knocked out of us because we're told about all the constraints. These kids don't have those constraints in the way they think.

**Is there the potential for these cutting edge ideas to be developed?**

Yes. The three winners from last year were all approached about jobs purely from this competition because their ideas were so innovative. There's definitely scope for people to run with these ideas because they have to prove they're feasible and implementable.

**What kind of barriers still exist for young people accessing the industry?**

There's a big skills gap which we've known about as an industry for at least 20 years. Nothing meaningful has really been done about it, which is a worry because five to 10 percent of the workforce, particularly in aircraft

maintenance, is going to retire in the next 10 years. When you walk into hangars now there is an older demographic and a very young demographic of apprentices, but there's not a lot in the middle. When the older generations retire and take that knowledge and experience with them, there is not a lot of help for the new people. So we need to get lots of skilled people into the industry quite quickly.

There are obviously financial barriers. There are also training barriers because there are not a lot of places that provide the required training for different roles across the industry, and an opportunity gap around work experience for young people due to lack of resource or security reasons. There are more than enough young people who want to join the industry. I spoke to a group of over 100 aviation engineering degree students at a university. Not one of them could get work experience or placement. So they end up leaving aerospace and aviation because they need a job and they end up working in technology, pharmaceuticals or F1 – something completely unrelated. So we're missing out on really good candidates and qualified young people.

**What are the main industry issues preoccupying young people at the moment?**

They are very concerned about working for organisations that care about the environment, diversity and inclusion. Mental health and wellbeing are high up the agenda so it is important that companies are ethical and care about their people. New technology, especially AI, is obviously a big trend although we try to dissuade them from using AI as much as possible when generating their concepts. We are looking for original ideas and want them to think creatively about cutting-edge ways to develop future technology solutions – we do see that more of those ideas tend to incorporate AI. You couldn't pay an R&D team for a year to come up with half of the creative ideas that these students come up with. They are reimagining the future of flight.



## This year's finalists



### First place

**Oscar Noone (UK) Refuel – Waste to Fuel**

Oscar's proposal examined how pharmaceutical waste solvents could be chemically processed into sustainable aviation fuel.



### Second place

**Aashish Dubay, Roshan Dive, Thomas Lyndon and Rahul Padhiar (UK) ALGAL SAF – QMGs**

This team's proposal focused on aviation fuel derived specifically from algae.



### Third place

**Utkarsh Bhamidimarri, Sayran Selvakkumaran and Daanish Ansari (UK) Project APEX Using Electric Power for short high-power phases of flight**

This project was a hybrid-electric propulsion concept aimed at bridging the gap between fully electric systems and current engine technologies.



**HFW wins 'Best Environmental/Sustainability Initiative' at Legal 500 ESG Awards**

We were very proud to win 'Best Environmental/Sustainability Initiative' at the recent Legal 500 ESG Awards 2026. HFW's Chief Technology Officer John Court was also a finalist for 'Environmental/Sustainability Champion of the Year' for his work in leading the firm's technology sustainability strategy.

Giles Kavanagh, our Global Senior Partner and Sustainability Partner, says: "Sustainability is central to HFW's ethos, in our journey to reduce our environmental impact in all aspects of our operations, and also in using our deep sector expertise to help clients achieve their sustainability goals."

**Firm-wide Environmental Impact**

Our integrated approach – combining operational excellence, technology innovation, and sector leadership – demonstrates measurable, industry-leading progress in sustainability.

We have reduced our global carbon footprint by more than 40% over the past decade (more than 60% on a per-person basis), with our latest independent carbon report showing an 11.6% reduction in scope 1 & 2 emissions year-on-year, with direct emissions down 42.9% and purchased electricity emissions down 2.3%. Waste emissions have also fallen by 7.4%.

Sustainability is core to our property strategy. HFW's London office at 8 Bishopsgate is in the UK's most sustainable tall building, with BREEAM Outstanding certification, the highest solar panels in London, greywater recycling, and automated blinds to reduce cooling demand. The firm's recent moves in Hong Kong and Piraeus were also to buildings with top-tier sustainability certifications.

HFW's London, Brussels, Geneva, and Monaco offices operate on 100% renewable electricity tariffs, and we partner across our network with suppliers that share our commitment to ESG, including

(via caterers Lexington) UK coffee supplier Change Please, which tackles homelessness through the power of social enterprise, and commercial cleaning company GreenZone, which is EcoVadis ESG certified for its environmentally-friendly approach.

**Technology-Driven Sustainability**

The firm's IT sustainability strategy has delivered transformative results. A global printer fleet upgrade reduced paper consumption by 53% (saving 811 trees annually), cut devices by 43%, and slashed print energy use by 85%. CO<sub>2</sub> emissions from print fell from 5,700 kg to just 286 kg.

HFW's cloud-first strategy, including the closure of co-location datacentres in Dubai, Melbourne, and Hong Kong, has reduced IT-related carbon emissions by 30% per year. We have eliminated on-site servers in London, further reducing electricity use, and have modernised our office networks with Juniper, a supplier committed to decarbonisation and circularity. We selected Dell laptops for their use of bioplastics, recycled materials, and modular design for longevity.

**Inspiring Behaviour Change**

We operate an internal Sustainability Syllabus offering foundational

ESG training to our lawyers and business services professionals globally, covering topics including energy transition, climate risk, and ESG duties. Internal campaigns spotlight local office efforts and encourage individual contributions to decarbonisation.

**Sector Expertise for Clients**

We also help our clients achieve their sustainability goals. The firm has more than 100 lawyers advising on climate and sustainability, and we have supported clients on landmark projects such as Geneva-based coffee company Sucafina SA's pioneering US\$700m sustainability-linked financing, and BIMCO's "game-changing" carbon emissions clauses for shipping. We have acted on more than 70% of UK offshore wind projects and also offer non-legal ESG services to support clients' net-zero transitions.

**Pledges and Partnerships**

As a founding signatory of the Greener Arbitration and Greener Litigation Pledges, HFW champions sustainable dispute resolution. We support charitable organisations aligned with our business and sector priorities, supporting clean energy access and climate change mitigation.

## SUSTAINABILITY IN OUR SECTORS



We are committed to using our legal and sector expertise, networks and corporate responsibility initiatives to enable sustainable practices across all of our operations and the industries that we service, and to drive meaningful and lasting change. Please visit our dedicated sustainability hub [www.hfw.com/Sustainability-hub](http://www.hfw.com/Sustainability-hub).

[hfw.com](http://hfw.com)

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