



**NEITHER A GREENWASHER  
NOR A GREENHUSHER BE:  
A GUIDE TO HIGH INTEGRITY  
CORPORATE CLIMATE ACTION**



# ABOUT THE SDG GLOBAL COUNCIL ON FUTURE FUELS

The Global Councils on the Sustainable Development Goals (SDGs) were set up by the UAE Prime Minister's Office with the intention of bringing together decision-makers from governments, international organizations, academia and the private sector, to share best practices and work towards implementation of the SDGs at a national and global level.

The Global Council on Future Fuels was established at the start of 2022. Its remit is to support research, thought leadership and action on developing a Future Fuels economy capable of helping the world make progress on the SDGs – particularly those related to clean energy (SDG 7), climate action (SDG 13) and industry, innovation and infrastructure (SDG 9).

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# EXECUTIVE SUMMARY

**The number of companies around the world that have made a net zero commitment has grown exponentially since the start of the 2020s.** According to the UN-backed global campaign Race to Zero, more than 11,000 non-state actors have pledged to reach net zero greenhouse gas (GHG) emissions by 2050 at the latest.<sup>1</sup>

**These commitments – and the transition plans put in place to support them – are, rightly, being carefully scrutinised by regulators, civil society organisations, academics and media.**

2023 has seen companies in every industry come under fire for greenwashing – especially in Europe. In the Netherlands, the airline KLM faces a lawsuit arguing that its ‘Fly Responsibly’ campaign breached EU consumer law standards.<sup>2</sup> In the UK, the Advertising Standards Authority has banned adverts touting the green credentials of several companies, including HSBC, Lufthansa, Etihad Airways and Shell.<sup>3</sup> By the end of 2023, the European Union’s Green Claims Directive is expected to become law, effectively banning terms such as ‘carbon neutral’ and ‘eco-friendly’ from product advertising.<sup>4</sup> And where the EU leads, others may well follow: consumers and citizens everywhere have the right to expect accurate communications from companies about their environmental impacts.

<sup>1</sup> Race To Zero Campaign | UNFCCC

<sup>2</sup> <https://www.clientearth.org/latest/press-office/press/landmark-greenwashing-lawsuit-against-klm-airline-granted-court-permission/>

<sup>3</sup> <https://www.bloomberg.com/news/articles/27-05-2023/six-examples-of-greenwashing-from-the-uk-s-advertising-authority>

<sup>4</sup> <https://www.greenqueen.com.hk/eu-greenwashing-ban-everything-you-need-to-know-carbon-climate-neutral-product-claims/>

**Insofar as it makes it harder for companies to get away with making misleading claims, the crackdown on greenwashing is a good thing. But it also has an unintended consequence: the rise of “greenhushing”.** Greenhushing is when companies deliberately keep quiet about their sustainability plans and commitments for fear of being labelled greenwashers.<sup>5</sup> The problem is that greenhusher companies often don’t just stop talking about their plans and commitments, they stop acting on them too.

***“Many Companies might be so worried about the potential backlash of communicating their decarbonisation efforts, they could get paralysed into doing nothing.” – Haldane Dodd, Executive Director, Air Transport Action Group (ATAG)***

**This briefing is for companies that want to avoid both greenwashing and greenhushing.** It is for companies that are genuinely committed to taking bold climate action and that want to ensure the actions they take – and the way those actions are communicated – meet a high bar in terms of both ambition and integrity.

<sup>5</sup> What is ‘green hushing’? The new sustainability trend, explained (fastcompany.com)



**There are no easy answers nor silver bullets for companies committed to net zero. The strongest climate action plans combine a whole range of tools to reduce emissions across the value chain and beyond it.** This briefing covers two tools that have been mainstays of corporate climate plans for decades – Renewable Energy Certificates (RECs) and carbon credits – as well as one that is a much more recent addition to the corporate net zero toolbox: Sustainable Aviation Fuel certificates (SAFc). Each of these solutions comes with its own risks and challenges that need to be carefully managed to mitigate the risk of greenwashing.

**Voluntary carbon credits have had a lot of negative press since the start of 2023. At the same time, efforts to boost the integrity of voluntary carbon markets are gathering momentum and carbon credits remain a potentially valuable tool for companies seeking to create positive impact beyond their own value chain.** From an accounting perspective, the guidance from expert bodies and standard setting organisations is clear: carbon credits should not be counted towards a company’s interim emissions reductions targets.<sup>6</sup> Nevertheless, provided the credits are high quality – meaning they meet criteria of additionality, permanence, and social justice – they can still form part of a holistic corporate climate strategy.

**Renewable Energy Certificates (RECs) – which are used by companies to reduce Scope 2 emissions (ie., emissions associated with purchased energy) – have also come under increasing scrutiny. As with carbon credits, some RECs are more effective at delivering actual emissions reductions than others.**

Recent studies have cast doubt on the efficacy of “unbundled” RECs (this refers to when power and certificates are traded in different contracts).<sup>7</sup> The key concern is that when a company buys an unbundled REC, the company generating the renewable energy is under no obligation to invest the money made from selling RECs in expanding capacity. As a result, unbundled RECs mostly just reshuffle who owns the environmental attributes of *existing* renewable energy.

Bundled RECs – also known as Power Purchase Agreements (PPAs) – are a different story. These are long-term contracts between an electricity producer and consumer. The electricity producer still isn’t obliged to invest in expanding renewable generation capacity, but the long-term nature of PPAs makes it much more likely that they will. Companies that are buyers of energy are wising up to the importance of this distinction between bundled and unbundled RECs. Those that want to ensure their Scope 2 emissions reduction plans are robust are increasingly pivoting away from unbundled RECs and focusing more on PPAs or, where appropriate, onsite renewable energy generation.

**SAFc certificates (SAFc) can be used by companies to address emissions from air travel or air freight. Once again, not all SAFcs – indeed, not all SAF – are the same.** Different forms of SAF have different physical attributes. SAFc buyers need to be aware of the controversies surrounding different feedstocks and get familiar with the different certifications that exist to provide buyers with assurance about the environmental attributes of the product they are buying. The relative novelty of SAF means that accounting norms and rules are still evolving and the market infrastructure remains a work-in-progress. The first SAFc registry was launched in late 2023 – a major milestone for the development of a transparent, well-functioning SAFc market.<sup>8</sup> The time is therefore ripe for companies to enter the SAFc market and help create demand for a solution that is essential if the aviation sector is to reach net zero.

**What follows is a practical guide for sustainability teams to help assess how and when to use RECs, carbon credits and SAFcs.** It outlines the questions to ask of the organisations you are purchasing these products from and the considerations to bear in mind to ensure you communicate your usage of them in a way that is authentic and mitigates the risk of being accused of greenwashing.

<sup>6</sup> high-level\_expert\_group\_n7b.pdf (un.org)

<sup>7</sup> Renewable energy certificates threaten the integrity of corporate science-based targets | Nature Climate Change

<sup>8</sup> SAFc Registry (energyweb.org)



# ORIENTATION – KEY CONCEPTS

Any organisation looking to further their decarbonisation efforts via any one of the tools discussed in this paper will need to familiarise themselves with the concept of additionality and the basics of how a book and claim system works. The short summaries below should aid understanding of the rest of the briefing.

**Additionality:** GHG reductions can be said to be ‘additional’ if the reductions would *not* have occurred in the absence of the incentive created by a given transaction. This is an important consideration for all of the tools discussed in this brief. The markets for both voluntary carbon credits and renewable energy certificates have been plagued by accusations of lack of additionality – ie., buyers paying for something that would have happened anyway.<sup>9</sup>

**Book and claim:** A book and claim system is a chain-of-custody model in which ‘the administrative record flow does not necessarily connect to the physical flow of material or product throughout the supply chain.’<sup>10</sup> The process allows producers to ‘book’ the emissions savings of a good they’ve produced in one place, while customers can ‘claim’ the emissions benefit from these goods for climate disclosures separately.<sup>11</sup>

The benefit of book and claim is that it does not require the buyer and the seller to be connected by a physical supply chain. This approach has been successfully implemented in the renewable electricity sector and is being utilised by the nascent Sustainable Aviation Fuel (SAF) industry, to enable customers to claim the environmental benefits of flying with SAF.

To ensure a book and claim system upholds standards of integrity, the following elements must be in place<sup>12</sup>:

- 1) The physical supply chain must be independently verified to meet sustainability criteria via an established certification process.
- 2) The product’s attributes must be decoupled and represented as a certificate – it is this certificate that is ‘booked’ and ‘claimed’ by different actors, either in individual transactions or a registry. (A registry is a trusted platform that ensures certificates represent real impact and that no double counting can take place because details of who has ‘retired’ – and can claim – each unit is transparently recorded, creating an auditable trail).
- 3) Only after certificates have been retired in a registry can consumers claim them towards climate disclosure frameworks.

9 Additionality - Carbon Offset Guide

10 ISO/DIS 22095(en), Chain of custody — General terminology and models

11 Clean Energy 101: Book and Claim - RMI

12 Clean Energy 101: Book and Claim - RMI

# ACRONYMS

|               |   |
|---------------|---|
| <b>AIB</b>    | Association of Issuing Bodies   |
| <b>ATAG</b>   | Air Transport Action Group  |
| <b>CCP</b>    | Core Carbon Principles  |
| <b>COP</b>    | Conference of the Parties   |
| <b>CORSIA</b> | Carbon Offsetting and Reduction Scheme for International Aviation       |
| <b>CRD</b>    | Consumer Rights Directive   |
| <b>CST</b>    | Clean Skies for Tomorrow Initiative                                     |
| <b>EAC</b>    | Energy Attribute Certificates   |
| <b>EEA</b>    | European Economic Area  |
| <b>FPIC</b>   | Free, Prior, and Informed Consent                                       |
| <b>GHG</b>    | Greenhouse Gas  |
| <b>GoO</b>    | Guarantee of Origin   |
| <b>ICAO</b>   | International Civil Aviation Organisation                               |
| <b>ICVCM</b>  | International Council for the Voluntary Carbon Market                   |
| <b>ILUC</b>   | Indirect Land Use Change  |
| <b>ISCC</b>   | International Sustainability and Carbon Certification                   |
| <b>ISEAL</b>  | International Social & Environmental Accreditation & Labelling Alliance |
| <b>MRA</b>    | Monitoring, Reporting & Assurance                                       |
| <b>MWh</b>    | Megawatt-hour   |
| <b>PPA</b>    | Power Purchase Agreement  |
| <b>REC</b>    | Renewable Energy Credit   |
| <b>REGO</b>   | Renewable Energy Guarantees of Origin                                   |
| <b>RSB</b>    | Roundtable on Sustainable Biomaterials                                  |
| <b>SABA</b>   | Sustainable Aviation Buyers Alliance                                    |
| <b>SAF</b>    | Sustainable Aviation Fuel   |
| <b>SAFc</b>   | Sustainable Aviation Fuel Certificate                                   |
| <b>SBTi</b>   | Science Based Targets Initiative  |
| <b>SDGs</b>   | Sustainable Development Goals   |
| <b>UCPD</b>   | Unfair Commercial Practices Directive                                   |
| <b>UN</b>     | United Nations  |
| <b>VCM</b>    | Voluntary Carbon Market   |
| <b>VCMI</b>   | Voluntary Carbon Markets Integrity Initiative                           |
| <b>WEF</b>    | World Economic Forum  |

# 1. TO OFFSET OR NOT TO OFFSET: THE CARBON CREDITS QUESTION

## 1.1 What are carbon credits and how do they work?

A carbon credit is a transferable instrument issued by governments or independent bodies, in which one credit is equal to 1 tonne of CO<sub>2</sub> or the equivalent amount of other greenhouse gases (GHGs). Once purchased, a carbon credit must be “retired” so that it cannot be sold or traded again.

There are two different types of carbon credit in the voluntary market:

1. **Avoidance credits** are generated by projects designed to avoid future emissions, for example by protecting forests that are at risk of deforestation or providing communities with clean cookstoves.
2. **Removal credits** are generated by projects that actively remove excess CO<sub>2</sub> from the atmosphere, either via technological means (e.g., Direct Air Capture) or nature-based solutions (e.g., afforestation).

In 2022, 93% of the credits sold in the voluntary carbon market (VCM) were avoidance credits, but removal credits are projected to grow their market share over the decades ahead.<sup>13</sup>

## 1.2 Considerations when using carbon credits

The UN High-Level Expert Group on the Net Zero Commitments of Non-State Entities recognises that voluntary carbon credits have a role to play in supporting faster emission reductions and delivery of the SDGs. Using voluntary credits is one of the 10 recommendations laid out by the expert group in a 2022 report. However, they explicitly called out the need for a system to define and uphold the standards and integrity of the credits being used by companies. Without this, actors will continue to engage in a market where low prices and the absence of clear guidelines risk creating the illusion of progress, but not progress itself.

*“Non-state actors cannot buy cheap credits that often lack integrity instead of immediately cutting their own emissions across their value chain. As guidelines emerge for a high-integrity voluntary credit market, credits can be used above and beyond efforts to achieve 1.5°C aligned interim targets to increase financial flows in underinvested areas, including to help decarbonise developing countries.” – The Honourable Catherine McKenna, Chair, High-Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities<sup>14</sup>*

We are already seeing the consequences of the absence of a system for upholding the integrity of voluntary carbon markets. In January 2023, an investigation into the most widely used certifier of carbon credits, Verra, concluded that more than 90% of its rainforest offset credits did not represent real emissions reductions.<sup>15</sup> Verra contests these findings, but the issue goes beyond a single certifier. The recent industry scandals have spooked some of the largest corporate purchases of offset credits to such an extent that the demand for carbon credits is on track to fall for the first time in seven years. Some companies have stated they will stop using carbon offsets all together.<sup>16</sup>

<sup>13</sup> <https://bezerocarbon.com/insights/removals-in-the-vcm/>

<sup>14</sup> [high-level\\_expert\\_group\\_n7b.pdf](https://www.un.org/ehp/resources/files/ohp/2022/11/high-level_expert_group_n7b.pdf) (un.org)

<sup>15</sup> <https://www.theguardian.com/environment/2023/jan/18/revealed-forest-carbon-offsets-biggest-provider-worthless-verra-aoe>

<sup>16</sup> [https://www.reuters.com/sustainability/carbon-credit-market-confidence-ebbs-big-names-retreat01-09-2023-/](https://www.reuters.com/sustainability/carbon-credit-market-confidence-ebbs-big-names-retreat01-09-2023/)

*“The market needs both a reduction in uncertainty and an assurance of quality.” – Dr. John Dees, Senior Decarbonisation Scientist, Carbon Direct*

This does not mean carbon credits have no role to play in corporate climate plans, but it narrows the scope of what that role may be. If they are high integrity and adhere to the criteria below, voluntary carbon credits can be used by companies to mitigate emissions beyond their own value chain. The UN High-Level Expert Group highlights their role in facilitating much-needed financial support towards decarbonising developing country economies. However, carbon credits should not be counted towards an organisation’s interim emissions reductions as required by a net zero pathway.

### Integrity guidelines for the voluntary carbon market

The Integrity Council for the Voluntary Carbon Market (ICVCM) is working to develop the standards for high-quality carbon credits, providing governance and oversight on adherence to Core Carbon Principles (CCP).<sup>17</sup> Launched in March 2023, the CCPs set a global benchmark for high integrity. Any carbon crediting programme can now seek evaluation from the ICVCM by utilising their Core Carbon Principles (CCP) application portal.<sup>18</sup>



Source: ICVCM

The work done by the ICVCM is complemented by that of the Voluntary Carbon Markets Integrity Initiative (VCMI). In June 2023, VCMI launched a Claims Code of Practice which sets out guidance for companies and other non-state actors on the voluntary use of carbon credits and the associated claims they can make regarding those credits.<sup>19</sup>

17 CCP-Book-R-2FINAL26-Jul23.pdf (icvcm.org)

18 Apply now for our new voluntary standards for carbon credits - ICVCM

19 VCMI Claims Code of Practice (vcmintegrity.org)

| VCMI's Code of Practice <sup>20</sup>  |   |
|--|---|
| <b>Step 1: Compliance with the foundational criteria</b>   | <p>The VCMI requires that companies only use carbon credits in addition to – not as a substitute for – science-aligned decarbonisation across their value chains. Prior to purchasing voluntary carbon credits and making claims about the positive impact of those credits, companies should:</p> <ul style="list-style-type: none"> <li>• Maintain and publicly disclose an annual greenhouse gas emissions inventory.</li> <li>• Set and publicly disclose validated science-based near-term emissions reduction targets and publicly commit to reaching net zero emissions no later than 2050.</li> <li>• Demonstrate that the company is on track to meet their near-term emissions reduction target and minimising cumulative emissions over the target period.</li> <li>• Demonstrate that the company’s public policy advocacy supports the goals of the Paris Agreement and does not represent a barrier to ambitious climate regulation.</li> </ul> |
| <b>Step 2: Select a VCMI claim to make and meet respective requirements</b>                                      | <p>Each claim requires the purchase and retirement of high-quality carbon credits proportionate to remaining emissions once a company has demonstrated progress towards meeting near-term targets.</p> <ul style="list-style-type: none"> <li>• VCMI Silver (≥20% and &lt;60%)</li> <li>• VCMI Gold (≥60% and &lt;100%)</li> <li>• VCMI Platinum (≥100%)</li> </ul>   |
| <b>Step 3: Meet the required carbon credit use and quality thresholds</b>  | <p>Purchase and retirement should follow the ICVCM’s Core Carbon Principles and transparently report relevant information pertaining to retired credits</p>   |
| <b>Step 4: Obtain third-party assurance following VCMI Monitoring, Reporting &amp; Assurance (MRA) Framework</b> |   |

### VCMI Early Adopters Program<sup>21</sup>

Announced in September 2023, the VCMI’s Early Adopters Program is designed to highlight and support a select group of corporate climate leaders ready to be recognised for raising their ambition by being among the first to make a VCMI claim. By participating in the programme Early Adopters will be at the forefront of credible and transparent use of carbon credits, helping to increase climate mitigation and deliver finance where it is most needed while creating a path for others to follow. At the time of writing, details of participating companies are yet to be announced.

To date, most criticisms of voluntary carbon markets have focused on one or more of the following issues: additionality, permanence, and social justice. To ensure procurement of carbon credits of the highest integrity, these factors should be very carefully assessed as part of the due diligence process.

20 VCMI-Claims-Code-of-Practice.pdf (vcmintegrity.org)

21 Become an Early Adopter (vcmintegrity.org)



### 1.2.1 **Additionality: can a robust case be made that the projects funded lead to a real-world reduction in atmospheric CO<sub>2</sub> that would not have occurred otherwise?**

The unfortunate reality is that many carbon credits on the market today do not pass this simple test. Proving additionality is particularly challenging for avoidance credits generated by, for example, projects designed to prevent deforestation. Calculating the carbon impact of such projects requires a plausible “baseline” scenario against which to measure – essentially a counterfactual exercise of trying to determine how many trees would have been cut down had the project not been implemented.

To further complicate matters, an additionality assessment also needs to take into account the risk of “leakage”. Carbon leakage refers to the displacement of emissions from one production or consumption site to another. For example, if the demand for wood products stays the same, the positive effect of a forest preservation project may be partially or entirely cancelled out by more trees being cut down somewhere else instead.

Additionality is generally easier to prove for removal credits, but as previously noted, these account for less than 10% of all credits sold in the voluntary carbon market at present.<sup>22</sup>

### 1.2.2 **Permanence: will the net reduction in atmospheric carbon achieved prove durable over the very long term?**

This is a growing concern as extreme weather events become more frequent and more severe. Carbon sinks can become carbon sources. For example, if a forest that has generated carbon credits subsequently burns down (as happened in the US in 2021), the carbon that had been sequestered and stored is re-released.<sup>23</sup>

Permanence issues can also affect other types of projects. For example, degraded land may be turned into a carbon sink through rewilding or changes to agricultural practices. In these instances, there need to be long-term contractual arrangements in place to mitigate the risk of the land subsequently being sold off and the beneficial changes reversed.

### 1.2.3 **Social justice: do the projects funded adhere to the principles of Free, Prior, and Informed Consent (FPIC) and respect human rights?<sup>24</sup>**

The carbon offsetting industry has a far from perfect track record when it comes to respect for indigenous communities. Stories of forced evictions and unfair treatment of local people have dogged offsetting projects across Latin America and Africa in particular, with repercussions for the brands that purchase credits generated by those projects.<sup>25</sup> As a buyer of credits, it is therefore vital to seek assurances about the social impact of the credits you are buying.

22 <https://bezerocarbon.com/insights/removals-in-the-vcn/>

23 US forest fires threaten carbon offsets as company-linked trees burn (ft.com)

24 Free, Prior and Informed Consent | Indigenous Peoples | Food and Agriculture Organization of the United Nations (fao.org)

25 <https://www.theguardian.com/environment/2023/jan/18/forest-communities-alto-mayo-peru-carbon-offsetting-aoe>

## 2. THE SCOPE 2 CHALLENGE: THE USES AND MISUSES OF RENEWABLE ENERGY CREDITS (RECS)

### 2.1 **What are RECs and how do they work?**

A Renewable Energy Certificate (REC) is a type of Energy Attribute Certificate (EAC) that accounts for the generation of one megawatt-hour (MWh) of energy produced by renewable sources.<sup>26</sup>

RECs go by different names in different markets. For example, in the UK, they are known as Renewable Energy Guarantees of Origin (REGOs), and in the EU, Guarantees of Origin (GoOs). But the principle is the same everywhere: a REC is produced when a source of renewable energy generates one megawatt-hour of electricity to the grid.<sup>27</sup>

The significance of RECs for corporate net zero transition plans is that they are a tool commonly used to reduce Scope 2 emissions from purchased electricity (when onsite generation is not a viable option). By purchasing RECs equivalent to the organisation’s total electricity consumption, a company can claim to run on 100% renewable energy.

When buying electricity, it is not a physical product that is purchased but the right to remove a given amount of charge from the grid. As such, the only way to track the production and use of one MWh of power alongside its attributes is through a book and claim accounting system. This means that:

1. Certificates are generated and “booked” in a registry when renewable electricity is produced and delivered to the grid. These registries ensure that there is no double counting. EAC registries are created and maintained by different companies e.g., Grexel in Europe, Unicorn in the US, and I-REC services globally.<sup>28</sup> In Europe, each EU member state and EEA country has its own issuing body and registry operator.
2. Once booked, these unique units can be traded independently from the underlying electricity, and only the person or entity that “cancels” this unique unit can claim the usage of that specific MWh. To ensure different registries are compatible and that market participants can easily trade EACs between countries, the Association of Issuing Bodies (AIB) has created a central data space in which trades can take place between compatible national registries.<sup>29</sup> When a corporation purchases a REC it essentially takes credit for one MWh of renewable energy that exists somewhere on the grid.
3. Once a REC has been acquired it must be ‘retired’ in order for a company to use it in their sustainability reporting. If a REC is retired through the associated tracking system, it cannot be sold again – i.e., no one else can lay a claim to that unit of renewable generation.

### 2.2 **Considerations when using RECs**

#### 2.2.1 **Bundled or unbundled?<sup>30</sup>**

Not all RECs are created equal. They come in two main varieties: bundled or unbundled. The table on the next page explains the differences.

26 <https://www.irecstandard.org/what-are-recs/>

27 Offsets and RECs: What’s the Difference? (epa.gov)

28 Public information – RECS Energy Certificate Association

29 AIB Hub | AIB (aib-net.org)

30 RECs and other Energy Attribute Certificates (EACs) (think-renewable.com)

| Features                | Unbundled RECs  | Bundled RECs  |
|-------------------------|---|---|
| <b>What are they?</b>   | When power and certificates are traded in different contracts.  | When the REC and underlying power are traded in a contract together. Often long-term contracts between an electricity producer and a consumer – also known as Power Purchase Agreements (PPAs).   |
| <b>Ease of purchase</b> | Very accessible – corporations typically purchase in bulk to cover large percentages of electricity use.  | Not necessarily difficult to acquire, however the transaction can take several months.  |
| <b>Price point</b>      | Price fluctuates with the market.   | Fixed for a determined period – typically 10-15 years.  |
| <b>Additionality</b>    | Little or no additionality. The operator is under no obligation to invest money made by selling RECs in expanding capacity. As a result, unbundled RECs mostly just reshuffle who owns the environmental attributes of existing renewable energy. <sup>31</sup> | The electricity producer is not obliged to invest in expanding renewables generation capacity, however, the nature of PPAs makes it much more likely that they will. The long-term nature of the contract makes it easier for the generating entity to access project finance for adding new renewable power to the grid. |

A 2022 study analysing 115 companies concluded that widespread use of RECs has led to inflated estimates of the effectiveness of mitigation efforts.<sup>32</sup> The lack of additionality unbundled RECs provide has led companies to overestimate and overstate the climate benefits of their REC purchases. The study clearly distinguished between RECs and PPAs, since evidence suggests that PPAs do lead to additional renewable energy production and real emission reductions, providing the long-term power price de-risks new projects and allows access to project finance.

At present, guidance from the Science Based Targets initiative permits companies to use either kind of REC to meet their Scope 2 emissions reduction goals. RE100, a global alliance of companies committed to going “100% renewable”, also allows members to choose between bundled and unbundled RECs to meet their targets, although it recommends onsite generation and corporate PPAs as preferable to unbundled RECs.

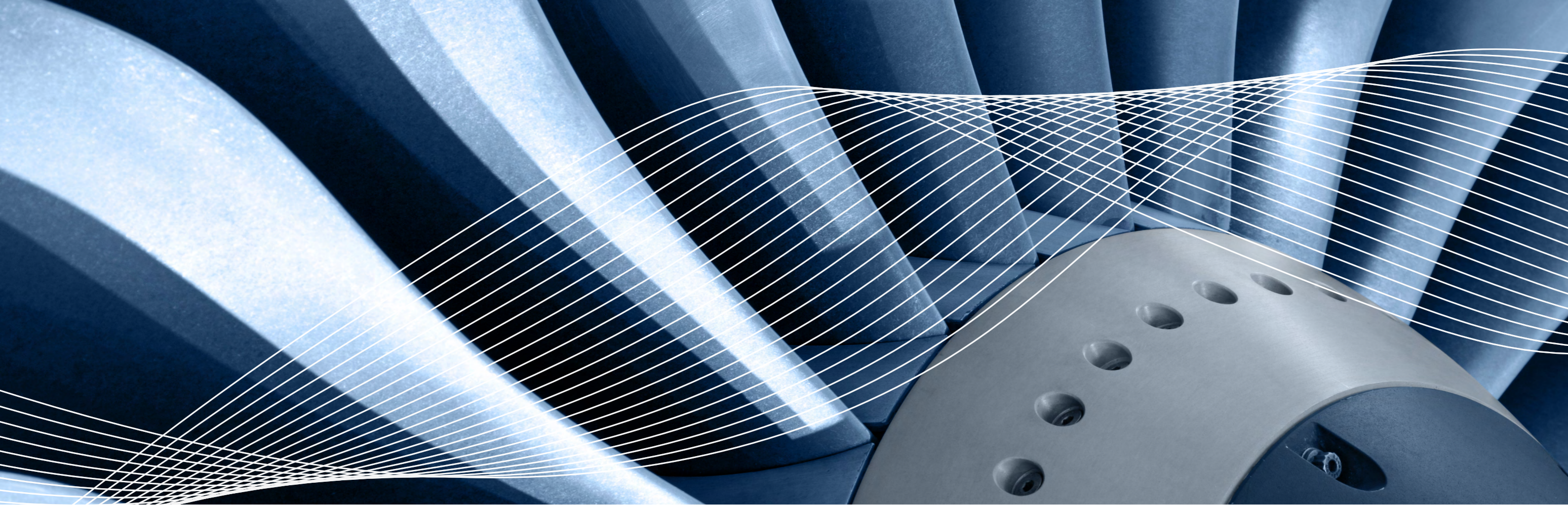
As awareness of the limitations of unbundled RECs grows, leading businesses are pivoting towards greater investment in PPAs and onsite renewables. For example, JPMorgan Chase, which already claims that its operations are powered by 100% renewable energy, has set a target for 70% of its renewables to come from long-term power agreements or onsite renewables by 2025 – up from about 20% in 2021.<sup>33</sup>

Onsite generation and/or PPAs will not be suitable in every circumstance. But companies relying heavily (or entirely) on unbundled RECs to back up their reported progress on reducing Scope 2 emissions should be aware that this practice is likely to become more contentious over time. The best way to mitigate any potential reputational risks will be to have a clear decision-making framework that prioritises bundled RECs and/or onsite generation where feasible, and to communicate transparently about your renewable energy procurement, distinguishing between bundled and unbundled RECs in all relevant disclosures and marketing materials.

31 Problematic corporate purchases of clean energy credits threaten net zero goals | S&P Global (spglobal.com)

32 Renewable energy certificates threaten the integrity of corporate science-based targets | Nature Climate Change

33 <https://www.bloomberg.com/news/articles/09-06-2022/flawed-renewable-energy-credits-are-derailing-climate-efforts>



## 3: THE CORPORATE TRAVEL CONUNDRUM: TIME TO FLY WITH SUSTAINABLE AVIATION FUEL

### 3.1 What are SAF certificates (SAFc) and how do they work?

#### What is Sustainable Aviation Fuel (SAF)?

Sustainable Aviation Fuel (SAF) is a term used by the aviation industry to describe a non-conventional aviation fuel – i.e., one that is not derived from fossil fuels. It is a blanket term for a variety of products – including synthetic fuels (sometimes referred to as power-to-liquid or e-fuels), as well as biofuels and advanced biofuels produced from a range of feedstock including used cooking oil, animal fats, agricultural or forestry residues, algae, bio-waste, waste plastic and waste gases.

In most net zero scenarios for the aviation sector, SAFs are expected to deliver the largest reduction in net GHG emissions of any solution. As is explained in more detail below, there are multiple certifications available for SAF, each of which has different criteria and thresholds for determining whether a fuel qualifies as SAF or not. All certification schemes require SAF to have lower lifecycle CO<sub>2</sub> emissions than conventional jet fuel, but the emissions reduction threshold to qualify ranges widely – from 10% to 70%.<sup>34</sup>

<sup>34</sup> 10% is the emissions reduction threshold a fuel needs to meet to qualify as “CORSIA eligible”; 70% is the threshold set for fuels of non-biological origin under the European Union’s Renewable Energy Directive (RED III). The World Economic Forum’s Clean Skies for Tomorrow initiative has indicated a preference that SAF should achieve, at minimum, a 60% lifecycle reduction in CO<sub>2</sub> emissions relative to conventional jet fuel.

#### How do SAFcs work?<sup>35</sup>

SAF Certificates (SAFc) operate on a book-and-claim model that allows the environmental attributes of SAF to be decoupled from the physical fuel. A SAFc represents the unbundled environmental attributes, including GHG emission reductions, associated with one metric ton of SAF.

Technically, there are actually two different types of SAFc: one for airlines, which can be used to reduce Scope 1 emissions, and one for airline customers, which can be used to reduce Scope 3 emissions. In the SAFc registry being developed by the Rocky Mountain Institute and the Sustainable Aviation Buyers Alliance, the former is known as a SAFcA, while the latter is a SAFcE.

The distinction between SAFcA and SAFcE is important from an accounting perspective. But, for simplicity’s sake, we will use SAFc to refer to both the SAF certificates that can be purchased and used by airlines *and* the emissions reduction claims that can be purchased by airlines’ customers.

### 3.2 Considerations when using SAFcs

#### 3.2.1 Feedstocks: what is the SAF made from and what are the implications of using this feedstock to produce fuel?

There are various ways of producing SAF. As of July 2023, 11 methods for producing SAF have been approved by the American Society for Testing Materials (ASTM) and a further seven are currently being evaluated.<sup>36</sup> Different production pathways rely on different feedstocks and conversion processes, which affects the sustainability profile, including the lifecycle CO<sub>2</sub> emissions, of the fuel.

<sup>35</sup> [safc\\_registry\\_guide\\_saba.pdf \(rmi.org\)](https://www.rmi.org/saf-certificate-registry-guide-saba.pdf)

<sup>36</sup> <https://www.icao.int/environmental-protection/GFAAF/Pages/Conversion-processes.aspx>

The most common production pathways today rely on biological feedstocks that include used cooking oil, animal fats, agricultural and forestry residues, algae and bio-waste. SAF buyers should be aware of the controversies surrounding some of these biological feedstocks because of the potential unintended consequences of using them for SAF production, especially as the volumes of SAF needed ramp up over the decades ahead. For example, Transport & Environment (T&E), a campaign group based in Europe, has raised concerns over the use of animal fats for SAF production. T&E argues that the demand for animal fats for SAF production forces other industries that use these fats to shift to alternatives, notably palm oil, which is a major driver of deforestation.<sup>37</sup> In the jargon of SAF certification, this is known as ‘Indirect Land Use Change’ (ILUC). If, when purchasing SAF directly from an airline or fuel producer, they are unable to provide assurance that the risk of ILUC has been considered and addressed, this is a red flag.

Though these issues will always be present to a certain extent, certification standards and bodies exist to continuously raise the integrity of bio-based SAF, and many producers are exploring new practices – such as regenerative agriculture – to broaden the biological feedstock pool without increasing competition for already scarce resources.<sup>38</sup> In parallel, advancements in technology have led to breakthroughs in developing power-to-liquid fuels, which, if scaled, have the potential to address many of the issues facing biogenic SAF today.<sup>39</sup>

### 3.2.2 Certification: who is the SAF certified by and to what level?

*“Establishing a high bar and rigorous framework for what SAF certificates should look like, and ensuring they are reputedly verified, is the first step in helping corporate customers to feel comfortable purchasing SAF, knowing that they can make high-integrity claims down the road.” – Dr John Dees, Carbon Direct*

There is a limit to the level of due diligence that corporate SAF buyers can do themselves, which is why sustainability certification schemes are critical. Today there are two bodies that are approved by the International Civil Aviation Organization (ICAO) to certify SAF: the Roundtable on Sustainable Biomaterials (RSB) and the International Sustainability & Carbon Certification (ISCC).

As well as certifying fuels as ‘CORSIA eligible’, both RSB and ISCC offer their own certifications that go beyond the minimum eligibility criteria set by ICAO.<sup>40</sup> Finally, the Sustainable Aviation Buyers Alliance (SABA), a non-profit initiative working to accelerate the path to net-zero aviation, has a detailed Sustainability Framework that sets out criteria and safeguards to identify high-integrity SAF.<sup>41</sup> The table opposite summarises the key criteria and thresholds used by each of these bodies.

37 <https://www.transportenvironment.org/discover/pigs-do-fly-growing-use-of-animal-fats-in-cars-and-planes-increasingly-unsustainable/>

38 Regenerative agriculture can help feed the world. What is it? | World Economic Forum (weforum.org)

39 The first output of the Global Council explored the viability and advantages of pursuing a power-to-liquid fuel industry in the UAE [bankfab.com/-/media/fabgroup/home/about-fab/esg/insights-and-research/research-reports/sustainable-aviation-fuels-white-paper.pdf?view=1](https://www.bankfab.com/-/media/fabgroup/home/about-fab/esg/insights-and-research/research-reports/sustainable-aviation-fuels-white-paper.pdf?view=1)

40 CORSIA stands for Carbon Offsetting and Reduction Scheme for International Aviation.

41 <https://flysaba.org/wp-content/uploads/09/2023/SABA-SAF-Sustainability-Framework23-9-.pdf>

| Who? | Least stringent certification  | Most stringent certification  |
|------|--|---|
| RSB  | <b>CORSIA Eligible SAF</b> <ul style="list-style-type: none"> <li>10% emissions reduction threshold vs conventional jet fuel.</li> <li>Must not be made from biomass obtained from land/aquatic systems with high biogenic carbon stock.</li> <li>The use of the RSB logo is not allowed for this type of certification.</li> </ul>                                  | <b>RSB Compliant CORSIA Eligible SAF</b> <ul style="list-style-type: none"> <li>50% emissions reduction threshold (60% for installations that became operational post-2015) vs conventional jet fuel.</li> <li>Comprised of ICAO’s sustainability criteria plus additional / more stringent criteria based on RSB’s 12 Principles, which cover a wide range of social and environmental factors.</li> </ul>   |
| ISCC | <b>ISCC CORSIA</b> <ul style="list-style-type: none"> <li>As above.</li> </ul>   | <b>ISCC CORSIA Plus</b> <ul style="list-style-type: none"> <li>10% emissions reduction threshold vs conventional jet fuel.</li> <li>Complies with CORSIA Sustainability Criteria for CORSIA Eligible Fuels and addresses additional sustainability requirements for biomass production.</li> </ul>  |
| SABA | <b>SABA Eligible SAF</b> <ul style="list-style-type: none"> <li>60% emissions reduction threshold vs conventional jet fuel.</li> <li>For SAF to be SABA eligible, it must have a certification from either RSB or ISCC that attests to compliance with requirements consistent with the full set of sustainability criteria approved by the ICAO Council.</li> </ul> | <b>SABA Preferred SAF</b> <ul style="list-style-type: none"> <li>60% emissions reduction threshold vs conventional jet fuel.</li> <li>Demonstrate via a certification from RSB or ISCC that SAF produced from land use-based feedstocks is in compliance with ICAO’s ‘Low Land Use Change (LUC) Risk Practices’ methodology.</li> <li>Fuel providers should demonstrate compliance with ICAO’s zero ILUC designations and quantify displacement emissions other than those caused by ILUC.</li> </ul> |

### 3.2.3 Accounting: how should you report the use of SAFc and what is the best way to safeguard against the risk of double counting taking place?

Standards for accounting for the emissions reductions associated with SAFc purchases are still a work in progress. In the meantime, numerous bodies have set out guidance on best practice for reporting SAF usage.

The Science Based Targets initiative (SBTi) has published draft guidance recognising SAF as an in-sector mitigation option for both aircraft operators and their customers, paving the way for SAF usage to be counted towards a company’s Scope 3 inventory. However, final guidance from SBTi and the GHG Protocol on the correct method of incorporating SAFc purchases into Scope 3 emissions reporting is still pending.

In the interim, the World Economic Forum’s Clean Skies for Tomorrow initiative recommends keeping the reporting of SAFc purchases separate from your Scope 3 inventory until reporting is formally standardised.<sup>42</sup> The key points to include in this reporting are:

1. Volume of SAF secured through the SAFc purchase.
2. SAFc net GHG emissions calculated on a life-cycle basis.
3. Net GHG emissions reduction from using SAF in place of an equivalent volume of conventional jet fuel.

42 [https://www3.weforum.org/docs/WEF\\_CST\\_SAFc\\_Demand\\_Signal\\_Report\\_2021.pdf](https://www3.weforum.org/docs/WEF_CST_SAFc_Demand_Signal_Report_2021.pdf)



# GREENHUSHING IS NOT THE ANSWER: COMMUNICATING AMBITION WITH INTEGRITY

If used well, carbon credits, RECs and SAFcs all have the potential to play a vital role in enabling both companies and the world to reach net zero emissions. But, as we have seen, getting it right is complicated – and even the most well-informed, well-intentioned companies are likely to fall short of perfect from time to time. How a company communicates the actions it is taking – and the ambition they serve – is therefore crucial.

This section looks at how best to communicate the use of carbon credits, RECs and SAFcs in a way that encourages a “race to the top” and minimises the risk of greenwashing. It starts from the premise that greenhushing is not a viable long-term strategy for companies to pursue. Keeping quiet about your climate (in)action may make it less likely that you will be accused of greenwashing in the short run. But, in the long run, there will be ever fewer places for greenhushers to hide.

The level of societal concern about climate change is rising in every part of the world and will continue to do so for decades to come as the climate crisis worsens. Consumers and citizens will continue to become more sophisticated in their understanding of the tools and strategies available to companies – and more discerning in their judgement of whose climate action has real integrity and whose doesn’t. Given this, the smart choice is to develop an authentic, high integrity approach now rather than wait for the glare of stakeholder scrutiny to catch you unprepared.

## Don’t oversimplify

The first and most important rule for communicating about any climate action – and especially if it involves one or more of the tools covered in this briefing – is to recognise that your stakeholders are becoming more knowledgeable by the day. The issues surrounding carbon credits, RECs and SAF are complicated and nuanced. Trying to “dumb it down” or to distil everything into a single big bold claim is increasingly risky. The best way to mitigate the risk of greenwashing is to be transparent and precise about what you are doing. Don’t spare people the details because it’s the details that matter.

This briefing is aimed primarily at sustainability teams, who are often the ones making decisions about which carbon credits, RECs or SAFcs to buy. But it is just as important that comms and marketing teams understand the detail. They need to be equipped to explain to relevant audiences not just the bare fact that their organisation uses carbon credits / RECs / SAF, but *what kind* of carbon credits / RECs / SAF it buys and *why*.

## Things you shouldn’t say

The forthcoming EU Green Claims Directive – along with increasing scrutiny of green claims from all stakeholders – is likely to trigger a significant shift in the way companies communicate about the climate impact of their products, services and operations. The Directive will obviously only apply within the EU, but many multinational companies with a European presence will choose to apply the new EU standards across all markets – and other jurisdictions may follow suit with their own regulations around green claims. Ultimately, whether it is primarily regulation-driven or norm-driven, the bar is going to rise for what types of public claim are acceptable.

Terms like “carbon neutral” or “climate neutral” are likely to become much less widely used because of rising legal risks in some jurisdictions and rising reputational risks across the board. But, at the same time, demand for genuinely greener, cleaner products, services and businesses will continue to rise. In this context, companies will need to find new ways to communicate the specifics of their approach to reducing emissions. Marketing teams will no longer be able to rely on terms that are fuzzy and generic (e.g., “eco”) or that imply that all harm has been mitigated (e.g., carbon neutral).

## European Union's Green Claims Directive<sup>43</sup>

On 22nd March 2023, the European Commission put forward a proposal for a directive on green claims. The proposed directive will require companies to substantiate the voluntary green claims they make in business-to-consumer commercial practices by complying with a number of requirements. The directive would apply to voluntary explicit environmental claims and environmental labelling schemes that are not regulated by any other EU acts.

The proposal states that environmental and social impact, durability and repairability would be added to the list of product characteristics about which traders are forbidden to mislead consumers. Traders providing a service that compares the sustainability of products would be required to disclose information on the method of comparison, the products being compared and suppliers of the product.

Member states would have to ensure companies carry out an assessment to substantiate explicit environmental claims by meeting a number of requirements, including:

- Specifying if the claim concerns the whole product or part of it, or if the claim concerns all activities of a company or only some of them;
- Basing claims on widely recognised scientific evidence, using accurate information and international standards;
- Taking a life-cycle perspective;
- Taking all the significant environmental aspects and impacts into account to assess the environmental performance;
- Demonstrating that the claim is not equivalent to requirements imposed by law;
- Providing information on whether the product or company subject to the claim performs significantly better than is common practice;
- Checking that a positive achievement has no harmful impacts on climate change, resource consumption and circularity, sustainable use and protection of water and marine resources, pollution, biodiversity, animal welfare and ecosystems;
- Reporting GHG offsets in a transparent way: separating GHG emissions offsets from GHG emissions, specifying whether the offsets concern emissions reductions or removals, and providing information on the quality of the offsets.

The proposal is now in the hands of the co-legislators and a plenary vote is expected in November 2023.

<sup>43</sup> 'Green claims' directive (europa.eu)

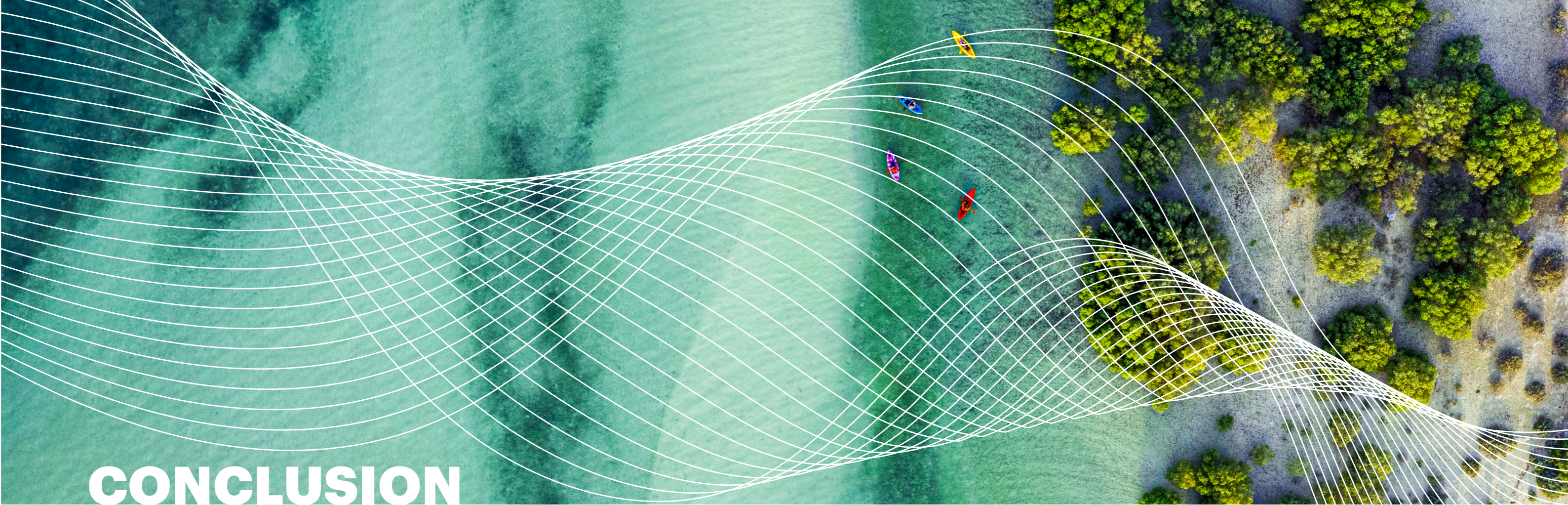
## A checklist for ensuring credibility

The Voluntary Carbon Markets Integrity Initiative (VCMI) has developed some foundational principles that can be used as a guide for companies looking to communicate credit-based mitigation efforts.<sup>44</sup> Although these principles were developed with carbon credits in mind, they are broadly applicable to all of the tools discussed in this paper.

| Question   | Rationale   |
|--|---|
| Is the claim being made clear to the target audience?            | Any claims must be clearly stated to enable the target audience to interpret them accurately and objectively. Every effort should be taken to ensure that the claim cannot be misrepresented, notwithstanding the fact that it is ultimately impossible to control how a claim is interpreted by a third party.   |
| Is the claim being made transparent?                             | All underlying information and evidence that substantiates a claim should be transparent and all assumptions, data and relevant information should be transparently disclosed.  |
| Is the claim traceable?  | Any data that underlies a claim should be traceable e.g., it should be possible to carbon credits back to their point of issuance.  |
| Is the claim true and verifiable?                                | Any claim must be truthful and substantiated by verifiable evidence.  |
| Is the claim accurate?   | Where possible, generalisations should be avoided.  |
| Is the claim conservative?                                       | If there is any uncertainty regarding the substantiating data of a claim, conservative estimates should be applied.   |
| Is the claim relevant and not misleading?                        | Claims should not seek to distract key audiences from a company's most detrimental impacts on the climate and environment. A company should make claims in context, relative to their full value-chain and societal impact. Key audiences include: <ul style="list-style-type: none"> <li>• Consumers of a company's products and services;</li> <li>• Impacted audiences that may not be consumers but have other environment decisions (e.g. voting) influenced by a company's claims; and</li> <li>• Consumers of sustainability reporting.</li> </ul> |
| Is the claim informative?  | Any claim should help the target audience learn more about the nature of the claim being made.  |
| Does the claim set the right incentives for the target audience? | In no way should a claim incentivise negative environmental behaviour. Ideally, a claim should encourage a consumer to take further positive environmental action.  |

Taking corporate climate action can seem daunting. The volume of greenwashing accusations coupled

<sup>44</sup> ISEAL Credibility Principles (isealalliance.org)



# CONCLUSION

with the constantly changing regulatory environment can make companies hesitant to make public commitments. Clear standards and rules for ensuring the integrity of the voluntary carbon markets, RECs and SAFcs remain a work-in-progress. If companies are too afraid to publicly commit to net zero targets, the momentum that is so desperately needed to address the climate crisis will be impossible to achieve.

***“We are going to need the energy industry to take some risks. We are going to need the finance industry to take some risks. Because the biggest risk is climate change.” – Haldane Dodd, Executive Director, Air Transport Action Group (ATAG)***

The aim of this paper has been to cut through the noise and make life easier for those within companies making decisions about which tools to use, how to use them and how to communicate about them. It may not answer every question you have, but it should at least help you know what the right questions to ask are.

Carbon credits, RECs and SAFcs are all important tools in the climate action toolbox. None should be used in isolation and not every tool will fit every job. Understanding the distinctive characteristics of each of these tools and the nuanced issues surrounding them will help companies to utilise them to maximum effect.

While there are no silver bullets, there is a place for each of these solutions in a well-formed climate action plan. Greenwashing is undoubtedly a problem, but so too is greenhushing. At a time when the urgency of the climate crisis is reinforced almost daily, inaction is as inexcusable as inaccuracy. Though the landscape of solutions is complex, there is no longer reason for companies to fall prey to either.



# FURTHER READING

## ACKNOWLEDGEMENTS

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- Carbon Direct
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- Khalifa University
- Neste
- RSB (Roundtable on Sustainable Biomaterials)
- Sustainable Aviation Buyers Alliance (SABA)
- The Royal Society
- Transport & Environment

**For those looking for further information and guidance on the topics addressed in this paper, we recommend the following sources in particular:**

Claims Code of Practice | Additional guidance launching 28th November ([vcmintegrity.org](https://vcmintegrity.org))

Powering Sustainable Aviation Through Consumer Demand: *The Clean Skies for Tomorrow Sustainable Aviation Fuel Certificate (SAFc) Framework* – Insight Report (2021). Retrieved 1<sup>st</sup> November 2023, from [WEF\\_CST\\_SAFc\\_Demand\\_Signal\\_Report\\_2021.pdf \(weforum.org\)](https://weforum.org/reports/2021/07/2021-safc-demand-signal-report)

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