The carbon-offsetting mythbuster

The right and wrong way to approach carbon offsetting, and how it can work for you







Contents

John Oliver and Carbon Offsetting 4

'The Carbon Offset Problem' 6

A response from Verra

Carbon offsets can make a difference now

Carbon offsetting should be used holistically

10

11

14

15

16

What does a high-integrity carbon offsetting programme look like?

How CarbonClick is making a difference

Want to increase the appeal of voluntary offsetting schemes? Change the messaging

About CarbonClick - Climate Action Made Simple

Introduction

It's no secret that news-opinion pieces in broadcast media, print or online are often developed in reverse order.

You start with the conclusion, and then work backwards in piecing together the various segments that validate your opinion.

We imagine that's what happened with the carbon offsetting episode in HBO's "Last Week Tonight", hosted by John Oliver.

In it, John Oliver told viewers that in his view, carbon offsetting is not only a waste of time and money, but that it can actually make things worse.

Some of what John Oliver said was fair, especially about there being some unscrupulous operators. But much of it was a gross oversimplification. And he omitted a lot of relevant information.

In particular, he focused only on the bad apples, and didn't include a single example of a successful carbon offsetting scheme - and there are plenty.

Needless to say, his show got a lot of media attention.

For example, in one segment he took aim at Ryanair's offsetting schemes, using interviews with Michael O'Leary and data from 2019. This then resulted in a story on a number of Irish news websites.

Of course, John Oliver isn't the first person to take aim at the sector. In fact, as we'll go on to talk about, some of the clips in his broadcast were taken directly from another documentary, but without much of the context that was included in the original programme.

As a result, with the help of our partners at <u>CarbonClick</u>, we've put together this carbon offsetting mythbuster.



We'll first look at some of the claims made by carbon offsetting sceptics like John Oliver and dissect them.

We'll also talk about some of the things that are often missed out upon, when the media and commentators talk about carbon offsetting.

Finally, we'll show how carbon offsetting can be an important part of an airline's sustainability portfolio, how, unlike other solutions,, it can work now and at scale, and give some guidelines on what you should look for before working with any carbon offsetting partner.

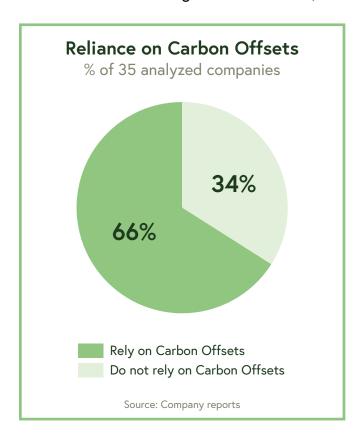
John Oliver and carbon offsetting

Here are some of the claims that John Oliver made in his programme:



Carbon offsets are popular and gimmicky

The show started by saying that everyone from United Airlines to chocolate maker KitKat has committed to becoming "carbon neutral", and that offsetting forms a large part of those plans.



To make the point, Oliver displayed the above chart from the <u>Columbia Center of Sustainable Development</u>, showing that two-thirds of companies are relying on carbon offsets to reach those targets (note, even here the sample size was only 35 companies).

According to John Oliver, carbon offsets are so popular to the point of being gimmicky.

Bands are using them for their tours and he used the example of "Yep", which is trying to offset human breath (see Yep's response here).

They don't do what they say they do

Oliver said that "study after study" shows carbon offsets don't reliably reduce carbon emissions, and yet they are the "backbone of the environmental policies of many of the biggest polluters on the planet."

He gave examples of a number of projects that claim additionality (e.g. the project would not have happened without the offset programme), that are dubious.

One instance is the Hawk Mountain Sanctuary in Pennsylvania, which sold carbon offsets to JP Morgan, among others.

Turning away from additionality, Oliver then addressed 'leakage', saying that planting trees doesn't mean much if "the trees in the forest next door are cut down."

Then he made fun of Ryanair boss Michael O'Leary using a clip of a 2019 interview on BBC's Panorama programme, where O'Leary started to talk about dolphins and whales when challenged on carbon offsets.

There's no real verification

Oliver claimed that the registries that sign off on programme efficacy - Verra, American Carbon Registry, Climate Action Preserve and Gold "aren't really accountable to anyone", and that their standards are too low.

According to Oliver, the result is "an offset system that places profits over science and the rules regulating them are just far too lax"

Verra provided an excellent response to this, which we'll look at in a later section.

Local people are sometimes displaced

He gave the example of a scheme in Uganda involving the Swedish Energy Agency where local people were displaced so the land could be used for carbon offsetting.

It's feel good PR, nothing else

Oliver likened offsetting to "a kids choice award. It doesn't really mean much, but it will temporarily help you look a little bit greener"

We'll come back to addressing these claims, but first of all, let's look at where Oliver's team almost certainly got a lot of their material from.

We can't offset our way out of climate change

Finally, Oliver said we can't offset our way out of climate change.





'The Carbon Offset Problem'

John Oliver isn't the first to take aim at carbon offsetting.

In fact, we're pretty sure that one of his researchers watched an online documentary by Wendover Productions.

Called 'The Carbon Offset Problem', this came out in June and has had over a million views.

For example, the segment Oliver showed about Pennsylvania 's Hawk Mountain Sanctuary seems to have been taken directly from the Wendover Productions documentary.

Obviously it's not fronted by a comedian, and so while sceptical about carbon offsetting the Wendover Productions film is serious, while remaining accessible. It also identifies a number of projects that went wrong.

For example, Wendover talked about the Surui Forest Carbon Project in Brazil, which was used for offsets during the 2014 World Cup until gold was found on the land, and mining commenced.

Every credible player in carbon offsetting will agree that examples like the Surui Project unfortunately exist, and care needs to be taken to avoid them.

Wendover productions also spent a lot of time talking about low energy cooking stoves in India, where people are given more fuel efficient alternatives to prevent forests being cut down for fuel.

The film showed that these schemes often don't work, but *they* can if the time and money is put into verification.

And so, though much of the programme was about highlighting problems, it did conclude by saying this:

"There are plenty of extremely well run programmes run by people genuinely trying to make the world better that have a truly verifiable offsetting impact"



Note the wording. Not "a few". Not "isolated examples". But "plenty."

So the producers agree: With the right projects and the right people behind it, carbon offsetting can work - and often does. But they followed it up with this:

"But that's not what the market incentivises. The market incentivises the scam. The market incentivises the race to the bottom."

Consumers (and companies) don't have the time or inclination to look at the provenance of the different offset schemes. And often they will just go for a quick and easy solution based on price.

To us that's the crux of the problem.

That's why in this report we want to help you navigate that landscape, so that you choose schemes that, in the words of Wendover Productions, "have a truly verifiable offsetting impact."

A Response From Verra

John Oliver claimed that the verification or accounting bodies, which assess carbon offset programmes are toothless and that their standards are too low.

One of the organisations John Oliver called out was verification registry Verra, which published an excellent response both about verification, as well as about some of the other claims Oliver made.

We've summarised some of those responses here:

Companies that do their homework make a difference

"Research shows that companies with a real and long history of using offsets have in place – and have achieved – <u>more advanced</u> reduction strategies than those that don't."

In the previous section, we included the quote from the Wendover Productions documentary about how "a race to the bottom", e.g. just choosing whatever is cheap and easy, doesn't work.

That's unfortunately correct. And organisations that adopt that approach are not serious about sustainability anyway. They just want to tick a few boxes to make the problem go away.

However, the ones that <u>are</u> serious actually plan out their sustainability road-map in detail and do their homework. And as Verra says, they are the ones that get real results.

It's not meant to be a get out jail free card

Carbon offsets are not meant to be a get out



of jail free card, something credible providers like CarbonClick will 100% agree with. As Verra says:

"Companies using offsets also tend to use them in the way they are intended: to go beyond their internal reductions by offsetting emissions that are too costly or impossible to address with today's technologies, otherwise known as residual emissions."

So, they are a solution to be used for areas of your business where the carbon can't currently be reduced or eliminated.

But in no way is carbon offsetting designed to get you off the hook when it comes to decarbonising your business.

We'll come back to the point about how carbon offsetting should be one tool, and not the only tool, in your sustainability tool-kit.

Accounting and verification is becoming more robust

Verra said that Oliver ignored the following when it comes to accounting and monitoring bodies:

"The <u>Integrity Council for Voluntary Carbon</u>
<u>Markets (IC-VCM)</u> is working to ensure that
all carbon credits in the market represent real
emission reductions (or removals).

"The Voluntary Carbon Market Integrity Initiative (VCMI) is working to ensure that claims made by companies using offsets are accurate, thereby helping to ensure that the use of offsets complements internal reductions.

"Both initiatives have been widely publicised and are currently running public consultations on their requirements. Indeed, the IC-VCM was initially launched as a task force led by Mark Carney, the former Governor of the Bank of England."

There IS research showing that carbon offsetting works

Oliver said that "study after study" claims carbon offsetting doesn't work. According to

Verra, he however:

"Ignores other important studies, such as the most extensive peer-reviewed analysis to date where researchers from Cambridge University looked at 40 voluntary carbon projects in developing countries and concluded that deforestation was 47 percent lower than in areas with the same topography and facing similar threats, while degradation rates were 58 percent lower."

As Verra says, that's not perfect, but it's certainly a tangible difference.

Wildfires make forestry management more important

According to John Oliver - "Given that forest fires are now on the rise thanks to climate change, offset programs can and have literally gone up in flames."

Verra's response?

"This is an outrageous claim that is not supported by any evidence whatsoever, and amounts to a lazy reliance on the existence of wildfires, which are in the public's mind, to fabricate outrage. The existence of wildfires is actually an argument for carbon finance because climate change means forests must be actively managed to reduce fires, and that's part of what projects do."

We can't offset our way out of climate change

This was Oliver's last point. And in fact, serious carbon offset organisations would agree, we can't offset our way out of climate change.

Again, that's not what carbon offsetting is there to do. Used properly, organisations can make a difference to habitats and communities around the world.

But, as we've said, it should be one part of your sustainability strategy, not all of it.

Which brings us to our next section



Carbon offsets can make a difference now



As Verra says, the businesses that really take sustainability seriously are the ones that use carbon offsetting for areas where a significant emissions reduction simply isn't immediately possible.

And aviation is the perfect example of that. The industry can't exist right now without burning fossil fuels.

There is Sustainable Aviation Fuel (SAF), but the quantities presently available aren't nearly enough.

There are also likely to be continued questions about the future availability of biofuels, particularly when it comes to land use.

And though there are companies like Air Company, Twelve and LanzaTech looking to produce E-Fuels by making SAF from CO2, these are still in an early stage of

development and production.

Meanwhile electric and hydrogen aviation may be possible by the end of the decade but initially only in regional routes.

Finally, every major airline is undergoing a fleet renewal programme, but even these new more fuel efficient aircraft still have kerosene burning engines.

So carbon offsetting really is the only tool available at scale and available now.

Provided you choose the right carbon offset partner, do due diligence and ask the right questions, those offsets can actually be quite transformative for communities, especially in the Global South.

We've included some examples from CarbonClick later in this document, where projects made a real difference.

Carbon offsetting should be used holistically

Buying carbon credits via a carbon offsetting programme, doesn't mean wider decarbonisation efforts shouldn't continue.

Instead, they should work side by side with other sustainability initiatives, especially ones that involve future technologies that take time to develop.

Let's look at a number of airlines that are doing exactly that:

Etihad (a CarbonClick customer) offers passengers the chance to offset their flights and has been investing heavily in Sustainable Aviation Fuel (SAF) and other environmental measures through initiatives such as the 'Greenliner' programme'.

JetBlue is offsetting flights and has just signed an agreement with Air Company to purchase significant amounts of E-Fuel. The airline is committed to reaching net zero in 2040, ten years ahead of most airlines.

Alaska Airlines is another of the small group of net zero 2040 airlines. It uses carbon offsets and will be working with ZeroAvia in retrofitting its regional aircraft with hydrogen-electric powertrains. Air Canada offers customers carbon offsetting options and recently made an investment in hybrid-electric aircraft manufacturer Heart Aerospace.



On a regional level, Scotland's Loganair is automatically offsetting all flights and is working with next generation aircraft companies such as Ampaire and ZeroAvia in introducing electric or hydrogen aircraft on Scottish island routes.

For these aviation sustainability leaders, carbon offsetting is part of the net zero big picture, but it's not all of it, nor should it be.

Instead, it allows them to make a difference now, while technologies that offer emissions free flights evolve.





What does a high -integrity carbon offsetting programme look like?

In previous sections, we've talked about the importance of choosing the right carbon offsetting partner and asking the right questions.

But what does a high-integrity carbon offsetting programme look like? Here, B-Corp certified CarbonClick, which works with a number of airlines worldwide, gives some guidelines of what you should look for.

With travel restrictions and isolation requirements finally loosening around the world, the desire and need to fly is quickly picking up.

This means international aviation emissions are back on a pre-COVID trajectory and on pace to triple by 2050, compared to current levels.

To reach net zero by 2050, the industry needs to accelerate development of more environmentally friendly aircraft technologies. But these aren't projected to be market ready for decades. To bridge the gap to a net zero future, carbon offsetting is the right solution now.

While carbon offsetting is critical, not all programmes are the same. Integrity is key to any voluntary carbon offsetting effort, to ensure a genuine impact on the planet is made and to generate a good uptake. However, at present, the voluntary offset market is under-regulated, leaving us with vast discrepancies in both the value of credits as well as their climate impact. In fact, the current market is saturated with low-quality carbon credits.



carbon credits are:

- The 'permanence' of new or protected forests is not properly ensured and additional sequestration is at risk of reversal.
- · Establishing projects that require landowners to forcefully evict people living on the project area territory.
- Artificially inflating baseline emissions in order to generate more carbon credits for the project
- Releasing carbon back into the atmosphere once the project ends (for example, forest fires, illegal logging or a change of ownership/control)
- Or that the project does not contribute to achieving additional climate benefits (e.g. issuing credits on protected forests that were never in danger).

What criteria should you be looking for?

It's important to select projects that meet the highest quality standards and are verified by independent third party registries. Carbon offsetting, if done right, is a powerful way to create a positive impact, as it reduces or removes carbon from the atmosphere.

High-quality climate projects make a meaningful and trangible difference, such as restoring native forests, protecting ecosystems and enabling developing countries to harness clean energy solutions.

For example, CarbonClick has developed a unique framework to select projects that are aligned with industry best-practices, ensuring that they are able to withstand the highest level of scrutiny. As part of this, all projects undergo rigorous due diligence and auditing. This is based on the on the following criteria:

- Additional projects would not have happened without carbon finance
- Quantified the carbon credits generated from projects are accurate, unique, tracked and are retired only once
- Permanent the projects' impact are permanent and proper policies are in place to mitigate any risk of reversal
- **Verified** project credits are verified by independent, third party registries
- Co-benefits the project positively supports communities and local ecosystems
- **Biodiverse** that nature-based projects deliver and conserve biodiversity and avoid practices such as planting large monoculture forests that destabilise biodiversity

The importance of aligning projects with the UN's Sustainable **Development Goals**

Another key criteria of a high-quality carbon offsetting project is its ability to



generate wider benefits, positively impacting communities and local ecosystems.

The UN has identified Sustainable Develop Goals (SDGs) to help ensure a sustainable, inclusive and resilient future of our planet and livelihoods.

CarbonClick believes that it is important to align climate action with as many SDGs as possible, in order to create a bright future for both people and the planet.

As part of this, projects are aligned with a minimum of four of the below SDGs, if possible, more.

The role of transparency & traceability

CarbonClick helps businesses and individuals embark on their sustainability journey, making it simple, meaningful and trustworthy. Transparency and traceability are key drivers in building trust and increasing the uptake of voluntary carbon offsetting.

Transparency is ensuring travellers know exactly where a contribution is going to and the impact it is having. Traceability helps in building deeper trust by allowing travellers to see and learn about the projects, their locations and local communities that benefit from the financial support.

To enable traceability, CarbonClick first pre-purchases the carbon credits from highquality projects. CarbonClick then goes a step further and actually pre-retire batches of carbon credits in the name of customers.

This means that once someone contributes to a carbon offsetting project, they can immediately see the corresponding retirement certificate sitting in the registry. This means there is no delay or goodfaith required when it comes to eventually offsetting the credits, providing the satisfaction of instant climate action.

Transparency and traceability of carbon offsetting programmes underline the integrity of any provider, allowing for tangible and impactful climate action.

Integrity is paramount to successful carbon offsetting

Companies that want to take a lead on sustainability need to implement high-quality, transparent carbon offsetting programmes that take immediate climate action. In order to have a high and meaningful impact, climate projects must be of the best quality standards and travellers need to be presented with a transparent programme they can trust.

It's imperative that we work together and support each other in taking climate action. Carbon offsetting, if done right, is a critical step towards a Net-Zero future and has the ability to change the current climate change outlook for the better.





How CarbonClick is making a difference

As detailed in the previous section, CarbonClick prides itself in adhering to the highest standards and to making a real difference. Here are just two examples of projects it is involved in.

The Tambopata-Bahuaja Biodiversity project conserves threatened tropical rainforest in an internationally recognised biodiversity hotspot of the Peruvian Amazon, providing habitat for a wide variety of rare and endangered wildlife.

591,119 ha of forest have been protected and 4,000 ha of land has been restored to produce high value fine and aromatic cacao, with also 1 million trees planted.

This project aligns 9 SDGs, which includes no poverty, decent work and economic growth, climate action and life on land.

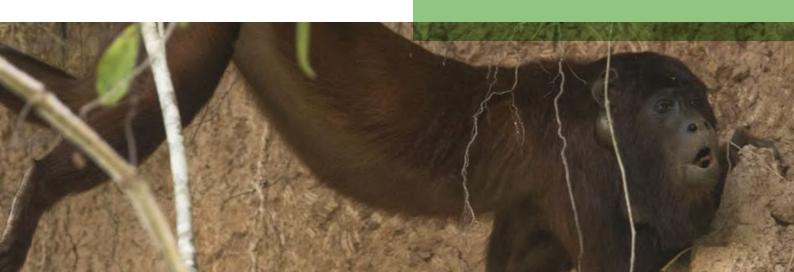
Improved Cooking Practices in Nigeria

is a project that produces and distributes efficient charcoal cookstoves that reduce carbon emission and household spending in Nigeria, as well as improving the health of the communities.

Nigeria has one of the highest deforestation rates in Sub-Saharan Africa. By reducing coal consumption, the deforestation of local forests is reduced, improving soil quality and water conservation and the habitat of local wildlife.

The carbon credits from this project are CORSIA Eligible Emissions Units. In addition to reducing greenhouse gas emissions, the cookstoves provide co-benefits to the users and their families, such as reduction in fuel costs, a reduction in airborne pollutants, a faster cooking time, and an increase in cleanliness and convenience.

Therefore, aligning with SDGs of no poverty, good health and well-being, affordable and clean energy and gender equality.



Want to increase the appeal of voluntary offsetting schemes? Change the messaging

Over the past year, there's been media coverage suggesting the participation in some airline voluntary offset schemes is very low.

This was addressed in a recent interview between CarbonClick's founders and SimpliFlying's CEO Shashank Nigam, in an episode of the "Sustainability in the Air" podcast.

The point was made that voluntary offsetting isn't properly explained, the consumer isn't reassured that it will actually have an impact, and that the option to offset your flight often isn't even within the booking process. This is key, as if they are offered the option after they've booked, for example via an email when they've already paid, the chances are that very few will offset their flights.

However, as well as making sure that you give the passenger the ability to offset early enough, there is evidence that the kind of messaging you use can have a big impact on participation rates.

A research paper put together by three academics from the University of Queensland - "Improving Carbon Offsetting Appeals in Online Airplane Ticket Purchasing: Testing New Messages, and Using New Test Methods" has looked at exactly that point. In particular, the researchers found that pictorial and short textual information around three key themes - effectiveness, transparency and choice - worked best.

Study participants were given five messages around carbon offsetting, using the Australian airline Qantas.

The boilerplate message that Qantas had at the time - "Want to fly carbon neutral? By flying carbon neutral you will be helping to conserve the environment and nourish communities" - worked worst.

What did work and increase participation were visual messages around effectiveness, transparency or choice.

The effectiveness message involved participants seeing a series of boxes with an image.

One small box had a picture of some soil held in someone's hands with a short text that talked about the "reforestation of 20,000 acres of rainforests across the Amazon."



The transparency message had the heading "where does my money go", with another series of pictorial boxes representing different projects with a % figure beside each (e.g. 30% to conserving Tasmania's wilderness, 30% to improving Cambodian air quality" etc).

The choice message then allowed consumers to say where their contribution would go, again with picture boxes (e.g "Protecting Amazing Rainforest", "Vietnam Biogas Project", "Ugandan Cookstoves.")

The authors conclude by stressing that you only have a relatively small amount of the passenger's time and attention during the booking process and how the information is presented is key.

According to the authors:

"Online bookings are time sensitive and so short text and images showing the outcomes of offsetting could encourage adoption. Our findings are of practical importance. They point to specific features about such messages that elicit stronger reactions from study participants and therefore are promising elements for use in carbon offsetting messages on actual online booking platforms."

About CarbonClick -Climate Action Made Simple

CarbonClick was established in 2019 to make climate action simple, meaningful and trustworthy. It emerged after its founders worked on the voluntary carbon offsetting for a major airline.

They could see the potential these programs had to help restore the planet, but also realised that taking climate action is complex, expensive and time-consuming, and not widely trusted by consumers.

They knew passengers were unlikely to offset the carbon emissions on flights unless they could demonstrate high trust, and could integrate carbon offsetting into the booking process.

CarbonClick was formed to remove all of these barriers, making it simple, cost-effective and transparent.

Today, CarbonClick is a global leader in climate action, working with over 1,000 brands across airlines, airports, loyalty programmes, corporate



travel and hotels, as well as e-commerce, retail and Web3.

CarbonClick is helping its partners, like Etihad Airways and Amadeus, to accelerate their sustainability journey by providing their customers the choice to offset the environmental impacts of their purchases.

With one simple click at the point of purchase, thousands of customers are taking climate action that is immediate and trustworthy, supporting real projects that make a difference to people and the planet. Each project supports several UN Sustainable Development Goals.

After making a contribution, every CarbonClick customer immediately receives a verified

receipt which they can use to trace their offsets to high quality reforestation, biodiversity and clean energy initiatives in some of the world's most vulnerable ecosystems.

CarbonClick CEO Dave Rouse says,

"Yes, it is about making a positive impact on climate change for the planet, but these projects also affect positive change on people and communities."

In 2022, CarbonClick earned the esteemed B Corp Certification, recognising the company for meeting and maintaining the highest standards for environmental performance, social impact, accountability and transparency.

Want to know more?

Get in touch via the CarbonClick website



