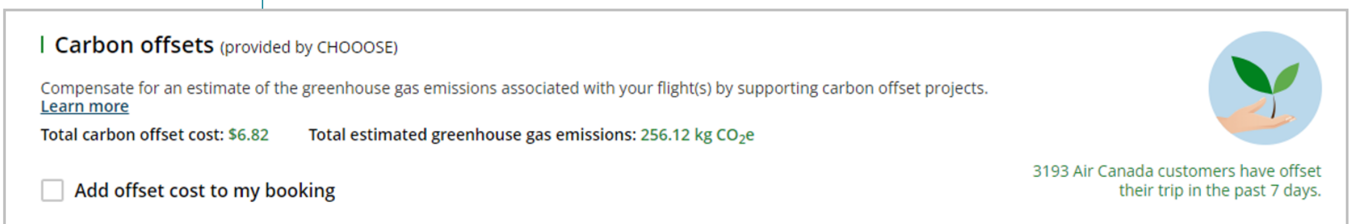
INVESTMENT TEAM TRAINING

Carbon Credits

Ever come across this screen when booking your airline tickets?



Offsetting the carbon emissions from your transatlantic flight for just under $7 looks like a good deal. You get to reduce your own carbon footprint and travel guilt-free for the price of a pumpkin spice latte. Can fixing the climate crisis be that cheap and easy?

Carbon credits were the subject of our latest Investment Team training session conducted by our Sustainability Team. Many of our portfolio companies have set carbon reduction targets and carbon credits are one way to achieve these targets. This session aimed to educate our Investment Team on what carbon credits are, how companies use them, and what issues are associated with them.

Following the widespread adoption of the Paris Agreement, countries and companies have made commitments to reduce their greenhouse gas emissions in line with the goal of limiting global temperature increase to 1.5°C above pre-industrial levels. To do this, emissions need to be reduced by 45% by 2030 and reach net zero by 2050.

Companies can meet their decarbonization targets by either reducing emissions in their operations and supply chains or by purchasing carbon credits.

CARBON CREDITS FOR EMISSIONS REDUCTIONS

EMISSION TARGETS

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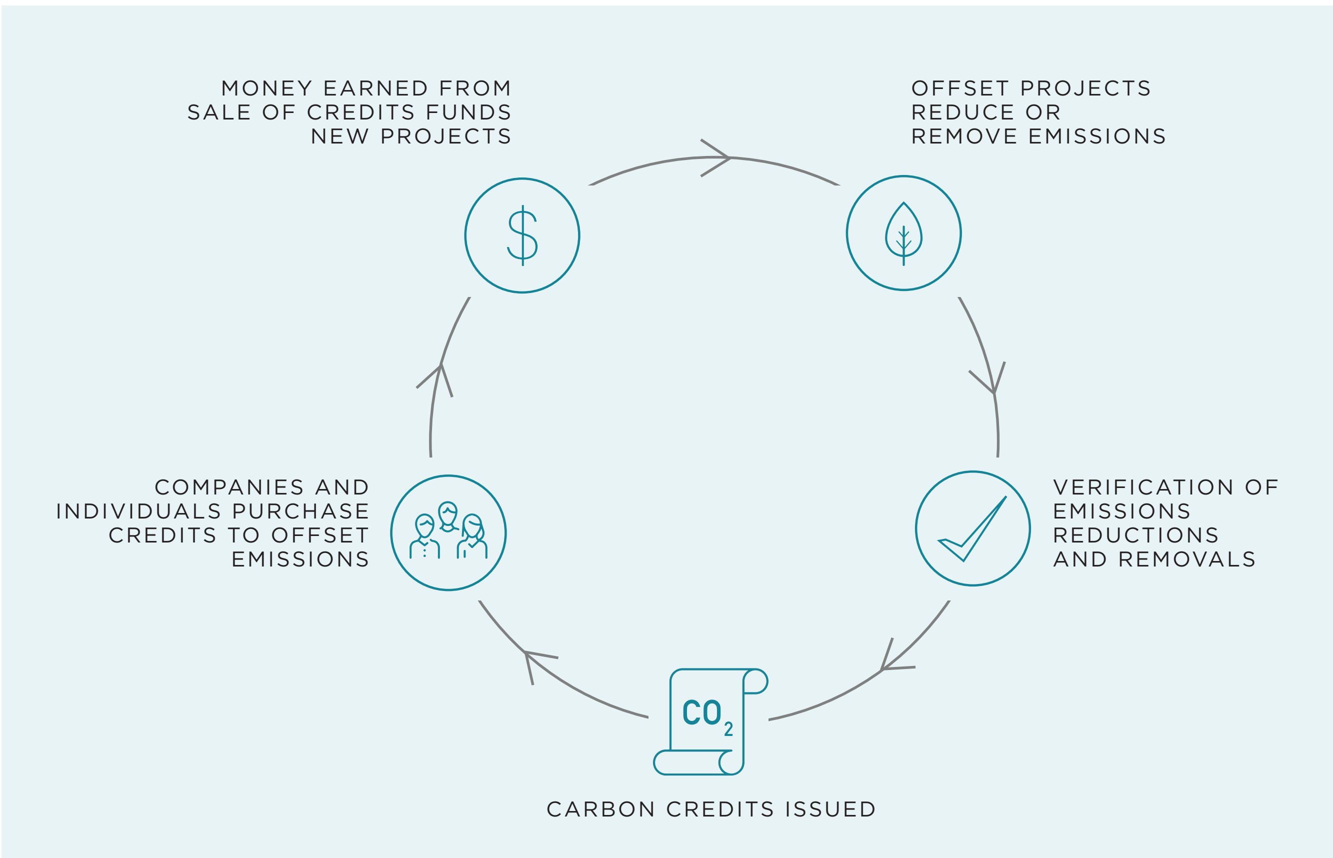
What Are Carbon Credits?

A carbon credit is a tradable instrument that certifies that a tonne of CO2 (or equivalent GHG) has been reduced or removed from the atmosphere.

Carbon offsets are produced by initiatives such as renewable energy projects to replace fossil fuels, reforestation projects, and carbon capture projects. These projects are verified by carbon offset verification agencies such as Verra and Climate Action Reserve. Once verified, the offset producing project can issue carbon credits equivalent to the amount of emissions reduced or removed from the atmosphere. These tradable credits are purchased by companies and individuals to offset their own emissions by funding emissions reductions elsewhere. This is illustrated in Figure 1.

The concept of carbon credits rests on the premise that their use facilitates the flow of capital to the most efficient and least expensive form of emission reduction, which is likely to lower emissions faster than organizations and individuals doing it themselves.

FIGURE 1



Carbon Credit Markets

There are two types of carbon credit markets – Compliance Carbon Markets (also known as cap-and-trade markets) and Voluntary Carbon Markets (See Figure 2).

FIGURE 2

Compliance Carbon Markets (CCM)	Voluntary Carbon Markets (VCM)
These are created by governments and other supranational organizations to regulate and limit carbon emissions in their jurisdictions.	This is a largely unregulated market with credits verified by independent third-party verifiers, such as Verra, Climate Action Reserve, and American Carbon Registry.
The issuing body provides limited emission allowances to companies in the carbon emitting sectors. This pool of allowances is reduced over time.	There is no limit to the number of credits issued, and these can be bought by any company or individual.
Credits are standardized and can be traded on exchanges. Companies emitting less than their allowance can sell credits to higher emitting companies. This provides an incentive for companies to reduce emissions.	Credits are not standardized and can be traded over the counter. Companies and individuals purchase credits voluntarily to offset their emissions.
There are 30 compliance markets globally, valued at $909 billion in 2022. The EU's Emissions Trading System (EU ETS) represents 87% of the market value.	While this smaller market was valued at $2 billion in 2022, it is estimated to grow to more than $500 billion by 2050.[2]
The average price of a credit in the EU ETS was $83 per tonne in 2022.	The average price of REDD+ (forestry) credits is less than $10 per tonne.

[2] *Source: Bloomberg NEF Long-Term Carbon Offset Outlook 2022 Report.*

Issues with Voluntary Carbon Credits

The voluntary credits market has come under criticism over the past year. A 2022 investigation carried out by the Guardian in collaboration with two other investigative journalism organizations revealed that more than 90% of Verra's rainforest credits (among the most commonly used by companies) are largely worthless and do not lead to carbon reductions. Other news organizations and NGOs have published similar findings about carbon credits.

The biggest issue facing credits is a lack of additionality. Additionality in this context means that emissions reductions or removals would not have occurred without the revenue from the sale of carbon credits. Additionality is vital for the credibility of carbon credits.

A majority of voluntary credits take the form of avoided emissions. An example of this is credits issued for protecting forests from being cut down. Such credits would only be additional if there was an imminent threat to the forest. However, in reality, most of these forests are not threatened and therefore there is no additionality. The Guardian investigation found that the threat to forests had been overstated by 400% on average for Verra projects and that 94% of the credits had no benefit to the climate.

A 2022 investigation by Bloomberg into renewable energy carbon credits found that most of the 215,000 offsets it investigated were not credible. These were cheap, low-quality credits that did not avoid or reduce emissions. The issue here was again one of additionality. Many of these credits were produced after solar and wind power were established as the cheapest source of energy in most countries and, therefore, selling credits to fund such projects did not provide additional benefit. The Bloomberg investigation found that these junk renewables credits averaged $2 a tonne and were even cheaper than the (also junk) forestry credits which averaged $6 a tonne.

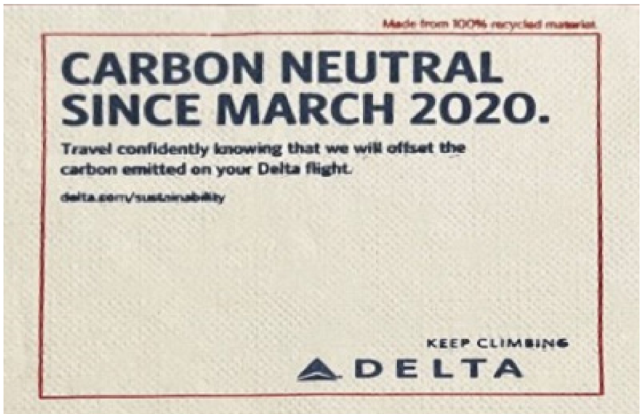
Another issue facing voluntary credits is the lack of transparency. There often isn't enough disclosure on the origination and methodologies of carbon credits. Buyers often cannot verify the impact of the credits they purchase. There is also a lack of disclosure on pricing structure and how much of the money actually goes towards the projects, with concerns about middlemen being the main beneficiaries, as highlighted in this article in the Financial Times.

Other issues include a lack of permanence (e.g., credits for protecting forests that may be cleared by forest fires), lack of standardization, negative social impacts (including human rights issues such as forced relocations), and a lack of regulation.

Implications for Investments

The recent press coverage and controversies surrounding the voluntary carbon credits industry has shone a spotlight on companies that use these credits to achieve carbon neutrality and net-zero targets. Since the adoption of the Paris Agreement, over 70 countries and more than 4,000 companies have set net-zero targets. Companies have set these targets for various reasons, including to get ahead of regulatory compliance, to meet stakeholder expectations, to attract and retain talent, and to mitigate risks. However, according to the Net Zero Tracker, an independent research consortium, over 90% of country targets and 48% of company targets do not specify if offsets will be used in their net-zero plans.

The use of junk carbon credits poses a risk of reputational damage for companies. They could also potentially be on the receiving end of greenwashing lawsuits, which would have a direct financial impact. Earlier this year, Delta Airlines (not a Burgundy portfolio company) was the subject of a class action lawsuit by consumers. The lawsuit alleged that Delta's claim that it is "the world's first carbon-neutral airline" is false and misleading because it heavily relies on junk carbon credits. Among the evidence presented was an in-flight napkin (below) on which Delta made the claim.



Source: Class action complaint document

Following the training session, we have engaged with some of our portfolio companies on their net-zero targets and use of voluntary credits.

Final Thoughts

While the voluntary credits industry is plagued by issues around junk credits, there are some pockets of the market which produce high-quality credits. These are typically in the carbon removal space through technologies such as direct air capture. The average cost of these credits is over $500/tonne (junk credits typically cost less than $10/tonne) and reflects more closely the true cost of carbon reduction. Given the risk of reputational damage from using junk credits, companies that do want to use carbon credits in the future will likely have to pay more for these higher-quality credits. In the world's quest to reduce our carbon emissions, all avenues should be open, and a well-functioning and well-regulated carbon credits industry may yet have a part to play.

You may, however, want to read the fine print before purchasing those airline offsets for the time being.

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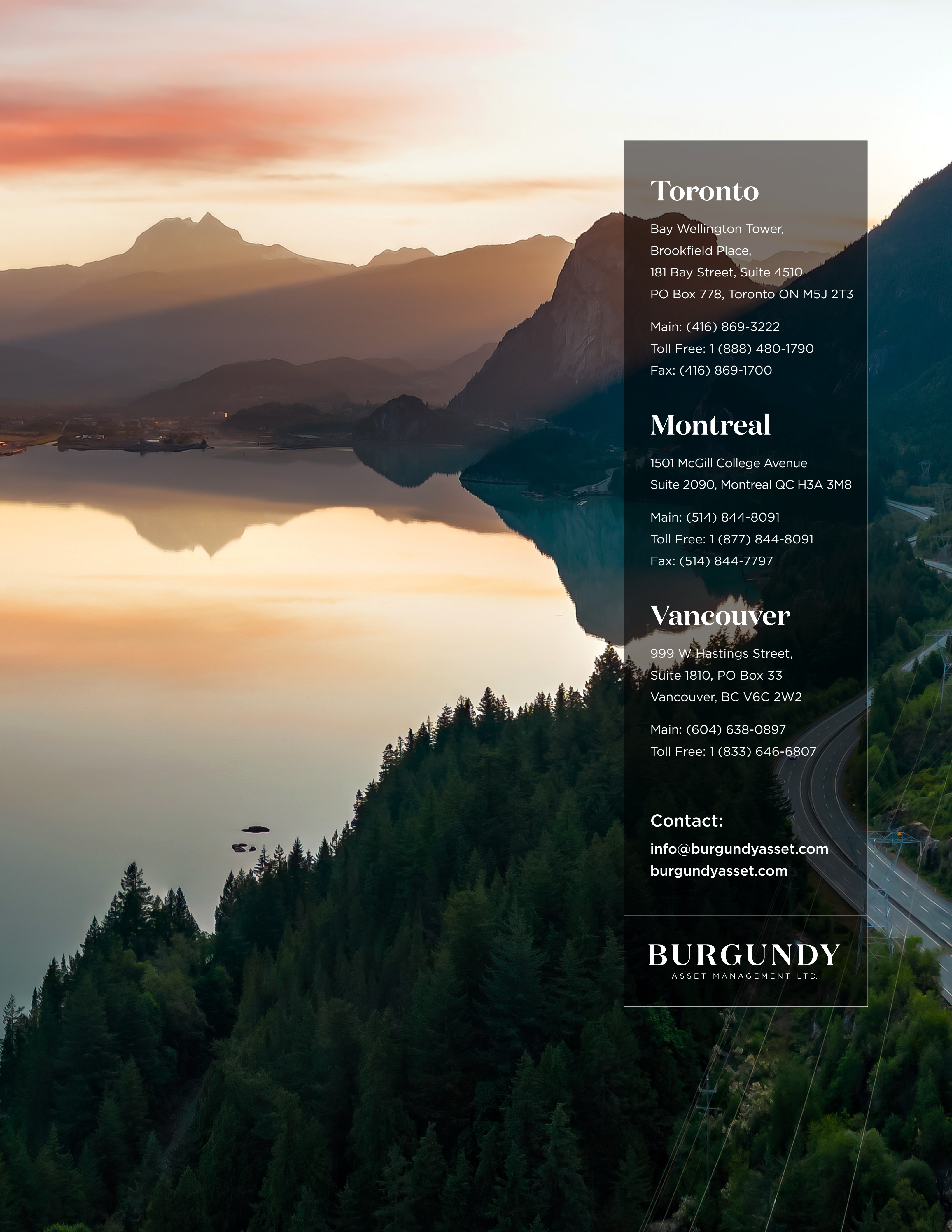

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