Consumers will increasingly use their wallets to help fight climate change with carbon-offset purchases

"Do you want a carbon offset with that?" More and more consumers may be asked this question when making travel arrangements, ordering food, or negotiating a new mortgage rate.

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Carbon offsets will increasingly be embedded in many purchasing decisions that retail consumers make each day. Deloitte predicts consumer purchases of carbon offsets will become pervasive and grow into a nearly US\$100 billion market in developed economies by 2030.¹

Deloitte expects new carbon-trading networks to emerge that cater to the heightened demand for tailored, localized, and niche actions to help mitigate climate change. There is already a growing appetite for products that have a sustainability label; roughly two-thirds of US consumers say they would pay more at the pump for gas that offsets its greenhouse gas emissions.² Moreover, an international survey conducted by Shopify last year found that two-fifths of consumers say they would pay a higher price for climate-focused products.³ Demand for offsetting will likely only grow as younger people, who often voice a preference for sustainable products,⁴ gain purchasing power.

Several categories of consumer spending, including food, transportation, and entertainment, could easily incorporate an option to purchase carbon offsets. We estimate that a small percentage of these expenditures will include a supplemental offset, leading Americans to spend \$21.3 billion a year to mitigate the environmental impact of their purchases by 2030, adjusting for expected inflation. If these habits are mirrored in other developed economies, then global consumers in developed economies will collectively pay nearly \$100 billion to offset goods and services at decade's end.⁵

While there may be those who reject environment, social, and governance principles, the majority of Americans remain concerned about the carbon footprint of the items they buy.⁶ Despite the surge of inflation in 2022, the market for sustainable products accounted for 17.3% of purchases in the United States last year, according to Circana and the New York University Stern Center for Sustainable Business.⁷ These products experienced a five-year compound annual growth rate of 9.48% nearly double that of conventionally marketed products—and consumer behaviorists do not expect those preferences to wane.⁸

Carbon offsetting is becoming more common in the travel and tourism industry. Tour operators such as World Expeditions, Bamboo Travel, and Intrepid purchase offsets to neutralize the impact of their consumers' trips.⁹ Stand-alone organizations that offer travelers carbon calculators and the option to offset activities are gaining in popularity as well. Cool Effect, for example, has retired five million tons of carbon emissions and generated US\$36 million for emerging countries since it launched in 2016.¹⁰

In addition, more than 50 global airlines now offer carbon offsetting to passengers, ¹¹ and some carriers reward loyalty points to customers who purchase carboncredit units when booking their flights.¹² Hotels are also beginning to offer carbon-neutral packages to guests,¹³ and large employers, such as HSBC, are incorporating offsets into their low-carbon policies for business travel.¹⁴ After making more informed decisions about conferences and flights, some companies may purchase offsets when they exceed their "carbon budget" allotments.¹⁵

Other industries are encouraging consumers to make sustainable choices as well. The American tea company, Harney & Sons, reports that one out of four customers choose to offset their transactions, which usually equates to 2%-3% of the purchase cost.¹⁶

Several startups have also developed application programming interface (API) software—a code that makes it possible for applications to communicate bridging apps, devices, and services to shared back-end systems. These APIs can link carbon-offset crediting to web and mobile platforms, so businesses can quickly embed a widget that will calculate an order's emissions and offer users the ability to offset it. EcoCart, for example, which partners with brands such as Walmart Canada, Siete Foods, and Cotopaxi, reports that 60% of e-commerce shoppers use this functionality when checking out online.¹⁷ Retailers and service providers will likely continue adding capabilities to offset products or shipment and transportation to boost customer loyalty. Carbon Checkout, a one-click offsetting application cofunded by the European Innovation Council of the European Union, has formed over 2,000 e-commerce partnerships since launching in 2015.18

Most major segments making up the US\$23 trillion global retail industry-food and beverage, clothing, entertainment and lifestyle, and fuel-can easily incorporate carbon-credit purchasing options into their payment platforms. Large retailers such as Walmart, Amazon, and Alibaba could provide a boost to offsetting practices on their own. Given that consumer spending accounts for two-thirds of US economic activity,¹⁹ these brands' transactions could channel a significant amount of new funding to climate action projects around the world.

Financial firms will play a pivotal role empowering consumers to purchase offsets

ore payments firms are empowering consumers to reduce their carbon footprint as well. For example, Visa allows banks in the Asia-Pacific region to enroll in Eco Benefits, which calculates the carbon foot-

print of transactions for consumers and allows them to counterbalance emissions in a mobile app.²⁰ The card user can elect to offset individual purchases, set up monthly offsetting payments, or pair frequent transactions with an automated purchase of offsets.²¹ Similarly, the California-based climate finance company Aspiration has a suite of digital products that makes it easy for retailers, banks and payment processors, and travel

booking platforms to embed climate action into their payment and checkout flows-automatically allowing customers to measure and tackle their impact with every purchase.

The digitization of carbon-market infrastructure could make it easier for carbon credits to be divvied up and sold on mobile apps, payment transfer systems, and as embedded-finance functionalities on user platforms. Blockchain technology, for example, can remove impediments to suppliers by making it easier for like-minded consumers to raise funds for small-scale or niche activities, such as improving cookstoves for refugees.

Carbon-offset opportunities will be increasingly personal and relevant

arbon offsets can help connect consumers to climate change mitigation projects that may be more meaningful to their daily routines, especially if the carbon credits they're offered include relevant cobenefits. For example, a student plac-

ing a coffee order online will be able to pay an upcharge to fund a rainforest preservation project in Brazil, where the drink's coffee beans were sourced. Similarly, outdoor music venues can extend the option to buy carbon credits that fund conservation efforts in the countries where the performing artists are from.

Over time, the momentum for these carbon transactions can spur local economies. Popular restaurants may choose to recommend carbon credits that help nearby farmers upgrade to more regenerative practices, for instance. Cities and regions could also launch campaigns that link ticket sales for popular events such as sports games with biodiversity projects that repair local habitats. Research universities can help execute these projects or verify their benefits to the region. When consumers begin to see the benefits of their investments in their own neighborhoods and backyards, their trust in the carbonoffset market should grow.

Financial institutions could also enable carbon-credit financing to happen behind the scenes. For example, embedded insurance tools such as telematics apps may reward safe driving behaviors with carbon credits that offset the car's emissions. Other fintech-enabled transactions, such as food delivery or ride-sharing platforms, may offer a premium tier with environmental benefits. Sweden's Braathens Regional Airlines has been marketing this concept in Europe with its "Green Class" ticket that costs about US\$30 extra but adds more biofuel to the passenger's trip and invests in carbon-reduction projects.²² Many US consumers would think highly of such a service, according to a 2016 study from the United States Department of Energy. About 75% of surveyed Uber riders say they would push a "Go Green!" button and pay a minimum of US\$5.95 to offset a 10-mile trip at least once.²³

Banks may also offer tailored carbon credit options in digital wallets based on consumers' most frequent purchases. Individuals may choose to buy carbon credits in advance, especially if they have a lot of travel or emission-intensive activities planned. They could also gift them to environmentally conscious friends and family. Some tech companies have begun partnering with payment platforms to allow customers to exchange rewards points for carbon credits. One collaboration between Ascenda and Patch estimates that global card users only need to convert 10% of their unused reward currencies into carbon credits to offset the equivalent of one year of emissions for the entire United States.²⁴ Similarly, residential real estate businesses should also be heavily engaged in carbon markets because their clients are increasingly demanding carbon-neutral properties. As of 2019, the real estate industry accounted for 38% of greenhouse gas emissions.²⁵ In addition to new legal requirements and net-zero obligations, consumer demand should bring about more demand for carbon credits as well. Many tenants would pay more for premium accommodations, which can include buildings certified as carbon neutral.²⁶ Homebuyers could also be lured by new incentives, such as offers of lower mortgages for residential units that have favorable environmental ratings. Of course, many of these advances could be predicated on setting up an efficient, transparent, and frictionless voluntary carbon market. Banks should play a pivotal role in propping up and sustaining the carbon-trade ecosystem, which will include acting as key partners to new participants. As financial intermediaries, they can add liquidity, assist with pricing carbon-credit assets, and reduce counterparty risk in nascent trading platforms. Banks could work with rating agencies and exchanges in vetting carbon credits for quality and supplying added assurance on certification labels. Finally, they can serve as a bridge to consumers by lending back-end infrastructure to payment functions on nonfinancial apps and websites.



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Endnotes

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