

A REUTERS SPECIAL REPORT

# **THE RECYCLING MYTH**

**BIG OIL'S SOLUTION FOR PLASTIC WASTE  
LITTERED WITH FAILURE**

By [JOE BROCK](#), [VALERIE VOLCOVICI](#) and [JOHN GEDDIE](#) | Filed July 29, 2021, 11 a.m. GMT

In early 2018, residents of Boise, Idaho were told by city officials that a breakthrough technology could transform their hard-to-recycle plastic waste into low-polluting fuel. The program, backed by Dow Inc, one of the world's biggest plastics producers, was hailed locally as a greener alternative to burying it in the county landfill.

A few months later, residents of Boise and its suburbs began stuffing their yogurt containers, cereal-box liners and other plastic waste into special orange garbage bags, which were then trucked more than 300 miles (483 kilometers) away, across the state line to Salt Lake City, Utah.

The destination was a company called Renewlogy. The startup marketed itself as an "advanced recycling" company capable of handling hard-to-recycle plastics such as plastic bags or takeout containers – stuff most traditional recyclers won't touch. Renewlogy's technology, company founder Priyanka Bakaya told local media at the time, would heat plastic in a special oxygen-starved chamber, transforming the trash into diesel fuel.



Boise, Idaho resident David Garman places plastic waste into his recycling bin. More than 90% of the world's plastic garbage gets dumped or incinerated because there is no cheap way to repurpose it. REUTERS/Brian Losness

Within a year, however, that effort ground to a halt. The project's failure, detailed for the first time by Reuters, shows the enormous obstacles confronting advanced recycling, a set of reprocessing technologies that the plastics industry is touting as an environmental savior – and sees as key to its own continued growth amid mounting global pressure to curb the use of plastic.

Renewlogy's equipment could not process plastic "films" such as cling wrap, as promised, Boise's Materials Management Program Manager Peter McCullough told Reuters. The city remains in the recycling program, he said, but its plastic now meets a low-tech end: It's being trucked to a cement plant northeast of Salt Lake City that burns it for fuel.

Renewlogy said in an emailed response to Reuters' questions that it could recycle plastic films. The trouble, it said, was that Boise's waste was contaminated with other garbage at 10 times the level it was told to expect.

Boise spokesperson Colin Hickman said the city was not aware of any statements or assurances made to Renewlogy about specific levels of contamination.

Hefty EnergyBag, as the recycling program in Boise is known, is a collaboration between Dow and U.S. packaging firm Reynolds Consumer Products Inc, maker of the program's orange garbage sacks and popular household goods such as Hefty trash bags, plastic food wrap and aluminum foil. Hefty EnergyBag said in an emailed response to questions that it "continues to work with companies to help advance technologies that enable other end uses for the collected plastics." It declined to answer questions about Renewlogy's operations, as did Dow spokesperson Kyle Bandlow. Reynolds did not respond to requests for comment.

The collapse of Boise's advanced recycling plan is not an isolated case. In the past two years, Reuters has learned, three separate advanced recycling projects backed by other major companies – in the Netherlands, Indonesia and the United States – have been dropped or indefinitely delayed because they were not commercially viable.

In all, Reuters examined 30 projects by two-dozen advanced recycling companies across three continents and interviewed more than 40 people with direct knowledge of this industry, including plastics industry officials, recycling executives, scientists, policymakers and analysts.

Most of those endeavors are agreements between small advanced recycling firms and big oil and chemicals companies or consumer brands, including ExxonMobil Corp, Royal Dutch Shell Plc and Procter & Gamble Co (P&G). All are still operating on a modest scale or have closed down, and more than half are years behind schedule on previously announced commercial plans, according to the Reuters review. Three advanced recycling companies that have gone public in the last year have seen their stock prices decline since their market debuts.

## PLASTIC BOOM

Many advanced recycling projects have emerged in recent years in response to a global explosion of plastic waste. More than 90% gets dumped or incinerated because there's no cheap way to repurpose it, according to a landmark 2017 study published in the journal *Science Advances*.

Not only is this garbage choking landfills and despoiling oceans, it's contributing to global warming because it's made from fossil fuels. At a time when demand for transport fuel is under pressure from government vehicle-efficiency mandates and the rise of electric cars, the oil industry is doubling down on plastics. Plastic production – which industry analysts forecast to double by 2040 – will be the biggest growth market for oil demand over the next decade, according to the Paris-based International Energy Agency.

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**Plastic production – which industry analysts forecast to double by 2040 – will be the biggest growth market for oil demand over the next decade.**

Source: International Energy Agency

A number of U.S. and European cities have already levied bans or consumer fees on single-use plastic bags. Pressure is also building for "polluter-pays" laws that would shift the cost of waste collection from taxpayers to the companies that make and use plastic. Earlier this month, Maine became the first U.S. state to pass such legislation.

Enter advanced recycling. Also known as "chemical recycling," advanced recycling is an umbrella term for processes that use heat or chemicals to turn plastic waste into fuel or reclaimed resin to make new plastic.

The American Chemistry Council (ACC), an industry group whose membership is dominated by plastics makers, says polluter-pays measures would hurt the economy. It's urging U.S. lawmakers instead to ease regulations on and provide incentives to advanced recycling companies.

As of July, 14 U.S. states had passed these kinds of laws. At least \$500 million in public funds has been spent since 2017 on 51 U.S. advanced recycling projects, the environmental group Greenpeace said in a report last year. Boise's government, for example, has spent at least \$736,000 on garbage bags for its program, according to purchase orders and invoices between May 2018 and April 2020 obtained by Reuters through public records requests.

The ACC says these technologies are game-changers because they could potentially process all types of plastic, eliminating expensive sorting and cleaning.



Joshua Baca, vice president for plastics at the American Chemistry Council, testifying before a U.S. House of Representatives subcommittee on June 24, 2021 in support of federal measures to promote advanced recycling. C-SPAN

“The potential is enormous,” said Joshua Baca, vice president of the ACC’s plastics division. The ACC this month called on Congress to develop a national strategy to reduce plastic waste, including “rapid scaling” of advanced recycling.

However, the Reuters review found some advanced recycling companies struggling with the same obstacles that have bedeviled traditional recyclers for decades: the expense of collecting, sorting and cleaning plastic trash, and creating end products that can compete on price and quality with fossil fuels or virgin plastic.

Transitioning from the lab to the real-world chaos of dirty and improperly sorted household plastic waste has proven too much for some of these newcomers, said Helen McGeough, a London-based senior plastic recycling analyst at Independent Commodity Intelligence Services, a data and analytics firm.

“People have entered into this, perhaps not understanding the processes properly, the waste that they are handling, and so that’s why some things have failed,” McGeough told Reuters.

Advanced recycling is in its infancy, and as with any emerging technology, setbacks are to be expected, a dozen industry players said.

So far, some of their own research shows it’s no panacea.

An assessment of the Hefty EnergyBag program was commissioned by Reynolds. It compared the environmental impact of recycling plastic waste through a heating process known as pyrolysis – the approach Renewlogy used – to two traditional ways of handling it: burning it in cement kilns or putting it in a landfill.

The study, [published on the Hefty EnergyBag program’s website](#) last year, found that in Boise’s case, pyrolysis fared worst among the three in terms of its overall global warming potential. That measure estimated the greenhouse gas emissions of the whole process, from manufacturing the

garbage bags and transporting the waste to the energy used in the recycling process.

A narrower analysis, looking just at the final recycling process and its contribution to global warming, found that pyrolysis scored better than landfilling but was worse than burning plastic in a cement kiln.

“These types of studies will really push the chemical recyclers to think about their operations,” said Tad Radzinski, president of Sustainable Solutions Corporation, the consultancy which conducted the study.

The study noted its calculations came from various sources, including a U.S.-based pyrolysis plant that has experience processing the Hefty EnergyBag materials. Asked whether Renewlogy’s plant was the one it examined, Sustainable Solutions said it could not name the plant because of a non-disclosure agreement with that facility.

Reynolds and Dow had no comment about the study.

Renewlogy said it supplied no data to Sustainable Solutions. “Our numbers are vastly different from those used in the report,” Renewlogy said in response to Reuters’ questions.



Orange bags filled with plastic waste in Boise. A recycling effort to turn this garbage into diesel fuel failed. It is now burned in a cement plant. REUTERS/Brian Losness

## CASHING IN ON TRASH

Advanced recycling projects have mushroomed globally, especially since 2018. That’s when China, once the top buyer of the world’s used plastic, banned these imports because its recyclers were overwhelmed. Other countries, too, are shutting their doors to foreign waste, putting pressure on the developed world to deal with its own garbage.

The boom is also being fueled by investors looking for the next hot green-tech industry.

Most of the advanced recycling firms involved in the projects reviewed by Reuters use a form of pyrolysis, the process of breaking down matter using high temperatures in an environment with little or no oxygen.

Pyrolysis has been tried before on plastic. British oil giant BP Plc, German chemical maker BASF SE and U.S. oil company Texaco Inc – now owned by Chevron Corp – all separately dropped plans to scale up waste-to-fuel pyrolysis technologies more than 20 years ago due to technical and commercial problems.

BASF said it now believes such an endeavor is viable. It said in October 2019 it invested 20 million euros in Quantafuel, a Norway-based plastic-to-fuel company listed on the Oslo Stock Exchange.

Some scientists challenge the assertion that melting unsorted plastic made from a variety of chemicals is good for the environment.

## **“Pyrolysis can generate toxic waste, such as dioxins.”**

Hideshige Takada, geochemist and professor at the Tokyo University of Agriculture and Technology

In addition to consuming large amounts of energy, “pyrolysis can generate toxic waste, such as dioxins,” said Hideshige Takada, a geochemist and professor at the Tokyo University of Agriculture and Technology who has studied pollutants in waste for decades.

Nor has pyrolysis proven capable of transforming unsorted garbage into high-quality fuel and clean plastic resin, says Susannah Scott, a chemistry professor at the University of California, Santa Barbara, who receives funding from the plastics industry to perform recycling research.

Plastics have long been stamped with the numbers 1 to 7 inside the familiar “chasing arrows” logo to help traditional recyclers separate the waste before processing it.

Scott said melting different numbered plastics together through pyrolysis produces a complex blend of hydrocarbons that must then be separated and purified for reuse. That process requires a lot of energy, she said, and typically yields products that don’t measure up to the quality of the original material.

With pyrolysis, “the value of what you’re making is so low,” Scott said.

Advanced recyclers say they’re overcoming these problems with innovations in energy efficiency and purification.

Of two-dozen companies whose projects were reviewed by Reuters, three have gone public in the last year: PureCycle Technologies Inc, Agilyx AS and Pryme B.V. The market value of all has declined since their debuts.

One of the hardest hit has been PureCycle, a Florida-headquartered advanced recycling startup that went public this year through a special purchase acquisition company. It ended its first day of trading on March 18 with shares up 13% to \$33, giving it a market capitalization of around \$3.8 billion.

But its shares tumbled 40% on May 6, the day short-seller Hindenburg Research published a report calling the recycler’s technology “unproven” and its financial projections “ridiculous.” PureCycle shares have since regained some ground.

PureCycle said the same day that Hindenburg’s report was “designed to drive down the stock price in order to serve the short seller’s economic interests.” It declined further comment about the report.

Hindenburg declined to comment.

According to its website, PureCycle uses a “ground-breaking” recycling process developed by P&G, maker of Gillette razors and Head & Shoulders shampoo, to turn a particular type of waste plastic, polypropylene, back into resin. PureCycle is around two years behind schedule on its first commercial plant, which its CEO Mike Otworth told Reuters on March 6 was due to slower-than-expected debt financing and the coronavirus pandemic.

P&G declined to comment.



A numerical symbol that commonly appears on plastic packaging to identify the resin out of which the product is made

The ACC, the chemicals trade group, continues to promote the potential of advanced recycling. Last year, it spent \$14 million lobbying members of Congress on various issues, the most the organization has ever spent, according to OpenSecrets.org, a non-profit initiative that tracks money in U.S. politics.

Until her two-year term ended in December, Renewlogy's Bakaya was the chair of the ACC's advanced recycling unit.



Renewlogy is among a crop of “advanced recycling” startups using heat or chemicals to turn plastic waste into new products. REUTERS/George Frey

## ONE TO WATCH

Bakaya grew up in Australia after her father emigrated there from India, she told business podcast Upside in 2020. She attended Stanford University and the Massachusetts Institute of Technology (MIT), graduating from the latter in 2011. She became a prominent figure in advanced recycling, promoting her technology on media forums such as National Geographic and the BBC.

Bakaya garnered a string of accolades, including making Fortune's “40 under 40: Ones to Watch” list in 2013.

She declined to be interviewed for this story.



Renewlogy's Priyanka Bakaya holding up a jar of hard-to-recycle plastics at a TEDx talk in Amherst, Massachusetts in 2015. Cade Belisle/The Massachusetts Daily Collegian/Handout via REUTERS

Bakaya said in a TEDx talk in 2015 that she initially set up a company called PK Clean to recover oil from “mixed, dirty landfill-bound plastic.” PK Clean later changed its name to Renewlogy, Bakaya said in an interview with MIT in 2017.

Steve Case, co-founder and former chief executive of AOL Inc, invested \$100,000 in PK Clean in 2016, according to a blog he authored on the website of his venture capital firm Revolution. The governor’s office in Utah said it gave a total of \$200,000 in grants in 2016 and 2017, while Salt Lake City’s Department of Economic Development provided \$350,000 in loans in 2015 to PK Clean, according to Peter Makowski, acting director of business development for the department.

Revolution did not respond to requests for comment. The Utah governor’s office said the program under which PK Clean received the grants had ended and it was no longer funding the company. Salt Lake City said its loans to PK Clean have been repaid.

Boise first sent plastic waste to Renewlogy in June 2018, followed by at least five more truckloads in the following months, minutes of meetings of Boise’s Public Works Commission show. In June 2019, Boise said in a statement it had temporarily stopped sending its waste to Renewlogy while the Utah plant upgraded its equipment. Hefty EnergyBag said Renewlogy left the program for good in December 2020. Renewlogy did not respond to questions about how much of Boise’s plastic waste it had recycled.

Reuters made an unannounced visit to Renewlogy’s Salt Lake City operation in mid-May. On a Monday afternoon, there was little visible activity outside the facility; the front parking lot contained five passenger cars, two of which had flat tires. The back lot contained dozens of bales of plastic waste dotted with faded orange recycling bags stacked next to rusty oil drums and a wheelbarrow full of glass jars containing a murky liquid.





Benjamin Coates, Renewlogy co-founder and chief technology officer, outside the company's Salt Lake City facility. REUTERS/George Frey

Renewlogy co-founder Benjamin Coates emerged from the building to speak to a reporter. Asked about the status of the company, Coates said opponents of chemical recycling were trying to damage the industry by pushing “conspiracy theories” about the technology. He directed further questions to Bakaya before telling Reuters to leave the premises.

Jeremiah Bates, owner of a tire shop next door to Renewlogy, said the recycling plant didn't appear to have been active for at least six months and that he had complained to Coates and the local fire marshal about the debris piling up out back.

Renewlogy did not respond to questions about Bates' assertions.



Jeremiah Bates, owner of Jeremiah's Tires Services next door to Renewlogy. He told Reuters in May that the recycling facility didn't appear to have been active for at least six months and that he was concerned about debris piling up. Renewlogy did not respond to Bates' assertions. REUTERS/George Frey

An inspector from the Salt Lake City Fire Prevention Bureau, Jose Vila Trejo, visited the recycling facility on Feb. 12, according to his inspection report. Vila Trejo told Reuters that his tour of the plant turned up no fire hazard because there were no machines present that could generate heat, flames or sparks.

“They were basically shut down,” Vila Trejo said. “There was no equipment in there.”

Renewlogy confirmed to Reuters that Vila Trejo inspected the building in February. It said the facility had not shut down and that there was equipment at the site.

Renewlogy said it shares the Salt Lake City premises with other companies that work on pyrolysis of wood and other waste, and that much of the junk Reuters saw on the back lot belonged to other firms that it declined to name. Renewlogy added that it continues to operate its plant as a testing facility to develop new plastic recycling technologies.

Reuters exclusively reported in January that an advanced plastic recycling project in India, which was a collaboration between Renewlogy and a charity funded by plastics makers, collapsed last year.

Renewlogy later this year plans to launch another plastics recycling facility, this one in Phoenix, Arizona, according to its website. Joe Giudice, assistant public works director at the City of Phoenix, confirmed the facility was due to start being set up in August. More taxpayer money is due to flow to the company.

The Arizona Innovation Challenge, a state-funded program, in 2017 awarded Renewlogy a \$250,000 grant, funds that will be dispersed when Renewlogy sets up in Phoenix, the Arizona Commerce Authority, which runs the program, told Reuters.

Giudice said Phoenix would not be sending Renewlogy any film plastics due to uncertainty over whether they could be easily recycled.

Renewlogy said it would be “starting very small” and would be “validating each step before scaling up.”

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Big Oil’s flagship plastic waste project sinks on the Ganges

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Trucks arrive at the Devil’s Slide cement plant in Morgan, Utah. The facility has been burning Boise’s plastic waste since March 2020 as a replacement for coal. REUTERS/George Frey

## BOUND FOR THE DEVIL’S SLIDE

Back in Boise, the Hefty EnergyBag program continues, but Renewlogy is no longer involved. Waste in those orange Hefty bags now helps fuel the Devil’s Slide, a cement plant in Morgan, Utah, part of the U.S. unit of Holcim, a European multinational firm. The company told Reuters it has been burning Boise’s plastic since March 2020 as a replacement for coal.

Hefty EnergyBag has forged similar arrangements with cement makers in Nebraska and Georgia, according to the environmental study of the program commissioned by Reynolds.

Environmental groups tracking chemical pollutants say incinerating plastic this way produces significant carbon emissions and releases dioxins associated with the chemicals in the plastic. This is in no way “recycling,” said Lee Bell, advisor to the International Pollutants Elimination Network (IPEN), a global network of public interest groups working to eliminate toxic pollutants.

Bandlow, the Dow spokesperson, said the Hefty EnergyBag program was helping to “transform waste into valuable products.” He declined to respond to questions about the environmental impact of burning plastic in cement kilns.

Jocelyn Gerst, a spokesperson for Holcim's U.S. operations, said the emissions levels of the plastic waste it burns are “the same or lower than traditional fuel,” and that it had a state permit to incinerate plastic. The U.S. Environmental Protection Agency said it does not have any data to show that “substitution of plastic waste for coal makes a significant difference in air emissions.”

Back in Idaho, Anne Baxter Terribilini, a resident of Meridian, a Boise suburb, said she initially was eager to participate in the Hefty EnergyBag program, but was disillusioned to learn that her plastic waste now ends up in a cement kiln.

“I hate to feel like we are being lulled into complacency, believing that we are having a positive impact on the environment, when really we aren't,” she said.

Boise officials said they've been transparent with the public about the handling of their plastic waste. Haley Falconer, Boise's sustainability officer, said the city has learned from the setbacks. In hindsight, she said, it would have been better to build a customized recycling program with a local partner so that Boise could control where its waste was going.

But the city has no place else to put its plastic garbage, so it's sticking with the Hefty EnergyBag program, Boise's McCullough said.

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## FROM SHELL TO UNILEVER, PLASTICS POLLUTERS BACK RECYCLING-TECH FLOPS

**S**ome of the world's biggest multinationals are hailing so-called advanced recycling as the solution to a waste crisis that has lawmakers looking to crack down on plastics use.

The impetus is coming from two sets of players: big oil and chemical companies that make the petrochemicals used to manufacture plastic, and global consumer brands that use huge amounts of the material in packaging. These giants are striking deals with startups that claim they can transform this garbage into fuel or resin to make new plastic.

But some recent efforts in this “high-tech” recycling boom have already fizzled.

At least four high-profile projects have been dropped or indefinitely delayed over the last two years because they weren't commercially viable, Reuters has learned. Here are the details:

### NO DIESEL FOR DOW

Dow Inc, one of the world's biggest plastics makers, backed a program that in 2018 began taking plastic waste from residents in Boise, Idaho and trucking it more than 300 miles (483 kilometers) across the state line to Salt Lake City, Utah. There it was to be converted into diesel fuel by Renewlogy, an advanced recycling startup.

**At least four high-profile projects have been dropped or indefinitely delayed over the last two years because they weren't commercially viable.**

Renewlogy touted its technology as capable of handling all types of plastic waste, including takeout containers and cling wrap, things many traditional recyclers won't touch. But Renewlogy was unable to handle plastic "films," used to make food packaging and grocery bags, and eventually left the program, the City of Boise told Reuters.

Renewlogy said it left the program because plastic waste being sent from Boise was too contaminated to recycle.

Dow deferred questions to Renewlogy.

Boise's plastic waste is now being trucked to a Utah cement plant, [which burns it for fuel](#).

## **SHELL PLANT 'REPURPOSED'**

In March 2019, Enerkem, a Montreal-based advanced recycler, announced that Anglo-Dutch oil giant Royal Dutch Shell Plc had joined a consortium of equity partners in a waste-to-chemicals recycling project to be based in Rotterdam, which they claimed was the first of its kind in Europe.

Enerkem says its technology uses extreme heat to turn plastic and other common household garbage into "bio-methanol," a fuel for use in the chemical industry and transportation sector. The Rotterdam project was supposed to convert waste from the equivalent of more than 700,000 homes, Enerkem said in a March 2019 press release.

Two sources directly involved with the project told Reuters it was cancelled late last year due to uncertainty about the plant's ability to secure a reliable waste supply and to turn a profit.

Enerkem said the project was never cancelled, rather "repurposed" to focus on making jet fuel from waste due to high demand for a sustainable product.

Shell will make a decision in 2022 on whether to invest, a company spokesperson said. Shell declined further comment.

## **UNILEVER'S 'RADICAL RECYCLING' FALTERS**

Unilever Plc in 2017 announced it was creating a pilot plant using a "radical recycling process" that turns hard-to-recycle plastic sachets into new packaging. Sachets are used to dispense a vast array of products, including fast-food ketchup, shampoo and toothpaste.

The global consumer products giant told Reuters that its CreaSolv process uses chemicals to dissolve plastic waste into a liquid, drains off the impurities, dries it and extrudes it into clean plastic that can then be turned into new products.

Unilever said in its announcement that it would share this technology with its competitors so that recycling plants could be built around the world.

## **“At best, the sachets end up in landfill. At worst, they end up as litter in the streets, the waterways and the oceans.”**

Unilever in a 2017 announcement about its plastics recycling initiative

Unilever, which makes Dove soap and Hellmann’s mayonnaise, said publicly it began operating a pilot plant in Indonesia in 2018. But within a year it was clear the technology was not commercially viable, and plans to build a full-scale operation were dropped, two people involved in the program told Reuters. Although the sachets could be recycled in small amounts, the people said, it was too expensive to collect, sort and clean enough of these packets to scale up the project without incurring large losses.

In an emailed response to Reuters’ questions, Unilever said the project had faced “some disruption due to Covid-19” but that the pilot plant was still operating. It declined to say at what capacity.

“We’re actively working with others to determine ways to scale this technology,” a company spokesperson said.

On May 6, Reuters called the factory complex where Unilever’s plant was situated in Sidoarjo, East Java, Indonesia. A front desk operator at the complex said no one had visited Unilever’s recycling facility in at least six months.

Unilever did not respond to questions about this claim.

Consumer goods companies like Unilever use billions of single-serve sachets to sell laundry detergent, instant coffee and other basics, mostly in poor countries. These packets are nearly impossible to recycle, and have become a major source of pollution in places like Africa and Southeast Asia.

“At best, the sachets end up in landfill. At worst, they end up as litter in the streets, the waterways and the oceans,” Unilever said in its 2017 CreaSolv announcement.

## **DELTA AIRLINES PROJECT GROUNDED**

Agilyx, an advanced recycling firm backed by Virgin Group and its billionaire founder Richard Branson, in 2018 announced a deal to convert plastic waste to jet fuel for Delta Air Lines Inc.

Press releases issued by the companies at the time outlined the plan: By 2020, a new plant near Philadelphia, Pennsylvania would supply up to 2,500 barrels a day of “synthetic crude oil” derived from plastics to a nearby refinery owned by Delta.

“This project marks the first truly commercial-scale facility that will advance the new plastics economy,” Agilyx’s CEO at the time, Joe Vaillancourt, said in the release. Branson tweeted on Nov. 25, 2018: “This is a major step forward in the search for a cost effective low carbon aviation fuel.”

Construction on the facility never started.

Current Agilyx CEO Tim Stedman told Reuters in March the project was delayed due to negotiations over contracts and finances and “was eventually killed by COVID,” referring to the pandemic that spread around the world in early 2020. In a June email to Reuters, he described the project as “on hold” and said “we remain optimistic” about its prospects.

A spokesperson for Virgin Group and Richard Branson declined comment and referred questions to Agilyx. A spokesperson for Delta said the project was “on hold” due to the pandemic.



Agilyx and Delta gave no time frame for the project to restart.

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## The Recycling Myth

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