

STAYING IN CHECK

Presentation of facts to counter inaccuracies in CarbonPlan's "The first offset credits approved by a major integrity program don't make the grade"

CarbonPlan's July 3, 2024 commentary "<u>The first offset credits approved by a major integrity</u> <u>program don't make the grade</u>" includes numerous inaccuracies, and a fundamental error in the study is that CarbonPlan fails to understand business-as-usual for the landfill sector. The below facts are presented to counter the falsehoods.

CarbonPlan indicated projects that were issued credits after taking a zero-credit reporting period were non-additional because the reduction would have occurred without access to carbon financing.

This is not true for several reasons. All of the projects continue to pass the Reserve's additionality requirements: the Legal Requirement and Performance Standard Test, i.e., U.S. landfills typically do not have to control methane in many circumstances. Generally, if a project seeks to be issued credits after a zero-credit reporting period, the project must demonstrate eligibility under the most current version of the protocol. Therefore, projects are demonstrating additionality in the most current context of what business-as-usual is in the sector. Business-as-usual for landfills is that the methane is uncontrolled (landfills that must control non-methane organic compounds [NMOC] per U.S. Environmental Protection Agency's [U.S. EPA] New Source Performance Standards [NSPS] are not eligible under the protocol, due to the decrease in methane resulting from the control of NMOCs) and there are generally no incentives to control methane gas, therefore, carbon financing is fundamental in the implementation of the project. The protocol employs a practice-change threshold to demonstrate additionality, which is the installation of a landfill gas collection system and destruction device. No carbon credits would have been generated at all had the carbon finance not been the impetus to install the system. All projects reporting to the Reserve meet this threshold.

CarbonPlan indicated because projects continued to destroy gas during the zero-crediting period they were rewarded for existing actions, meaning that destruction of methane at the landfill became business-as-usual.

• The Reserve does not require an ongoing project-specific financial additionality test as this approach is subjective and susceptible to "gaming." CarbonPlan indicated that projects that took a zero-credit reporting period for a length of three years or more were non-additional. CarbonPlan did not conduct a project-specific cost benefit analysis of these

projects and this length of time appears to be arbitrary. The fact that they continued to operate does not mean that carbon finance did not play a role in the project. The capital costs for implementing the gas collection were already spent. It would not make sense for the project to shut down after the investment has been made. In fact, the projects were not reporting because the costs of verifying any credits was higher than the value of the credits at that time. By not reporting under the protocol and paying for the required verification, the project reduced its costs significantly as it did not need to train and maintain staff to ensure project monitoring requirements were met, conduct ongoing monitoring and maintenance to the requirements of the protocol, and pay for the cost of verification. Moreover, CarbonPlan's assessment occurred after projects had already made the capital investment necessary to capture methane in order to receive credits. Prohibiting projects from receiving credits once they have made the necessary capital investments would violate the terms of any project (whether carbon-related or not, e.g., no one would tolerate a bank, automotive dealership, etc. unilaterally changing the terms of any contract after the financial commitment was made).

CarbonPlan indicates that some of the landfill projects expanded to support the claim that these projects are non-additional.

 The Reserve's protocol intentionally allows for expansion of the gas collection system to encourage recovery of additional methane. This expansion can be treated as a new project (the project must have separate metering) or can be part of the existing project. Projects may expand due to increases in size (new cells) or to collect more gas. CarbonPlan's assertion does not consider that, by expanding the system, projects may choose to recoup initial costs and/or support the ongoing costs associated with reporting on an existing carbon project. From an environmental standpoint, the Reserve supports the collection and destruction of additional greenhouse gas emissions.

Most landfill projects have not even been issued credits for ten years, the length of the Reserve's initial crediting period.

- Of the six landfill projects identified by CarbonPlan, none has been issued ten years' of credits, which is the length of the initial crediting period on which any investment in methane recovery was based. Of the additional 11 projects we identified, only one has received credits equivalent to a full crediting period. As already noted, any project would have made its investment based on returns for at least ten years. We present some reasons for this below, but it is reasonable to assume that any landfill project should be able to expect to receive credits for its initial crediting period.
- Some landfill projects decided not to get their projects verified due to a combination of low credit values, the costs of verification for any credits, and other costs associated with any project. Market conditions in roughly the 2010-2019 timeframe were hardly conducive to encouraging verification, where the costs of verification could exceed the value of any credits received. Prior to this time (pre-2010), the number of landfill projects reporting and being issued credits was increasing, due to the expectation of a U.S. federal cap-and-trade program (as proposed in The American Clean Energy and Security Act of 2009, also referred to as the "Waxman-Markey bill"). When it became apparent in mid-2010 that this would not come to fruition, many projects continued to report a few additional years to meet contractual obligations and to meet voluntary demand for low-cost credits, but between

2015-2019 there was a significant drop of projects actively reporting (a 40% decrease in projects reporting from the previous four years). For additional perspective, between 2010 and 2014 the Reserve issued approximately 18.5 million credits to landfill projects to, on average, 67 projects each year. Then over the same span of time, from 2015 and 2019, 11.5 million credits were issued, to an average of 38 projects reporting each year. This represents a nearly 40% decrease in credit issuance and number of projects reporting. Additionally, landfill credit prices post-2010 were on average US\$1.90/mt (per Ecosystem Marketplace's State of the Voluntary Carbon Markets 2016), the value of which would not have covered the cost of verification. Additionally, these finances do not take into account the costs associated with ongoing project monitoring and reporting. Most projects would take a loss if they continued to report. Credit prices for landfill credits since 2020 have continued to rise, nearly doubling year-over-year (per Ecosystem Marketplace's annual State of the Voluntary Carbon Markets for landfill credits in July 2024 were as high as US\$8.30/mt. This increase in price has provided a strong incentive for projects to resume reporting.

Credit issuance tracking shows the zero-crediting period under the Reserve's protocol is conservative.

It should be noted that while carbon credits prices are providing an incentive for projects to return to the market, it is estimated that issuance for landfill projects from 2020 to 2024 will be approximately 12.5 million credits, which is approximately 32.4% lower than 2010 to 2014, when credit issuance was at a high. Even if considering projects that can no longer report due to not being able to meet the legal requirement test, the numbers demonstrate that crediting after the zero-crediting period is conservative since a significant number of eligible credits continues to not be reported.

If practices defined in Reserve protocols don't make sense for the target sectors, the protocols are not going to be used, which means voluntary emissions reductions are not going to happen. It's critical to understand how sectors operate, which is what the Reserve's protocol development process does and why we utilize multi-stakeholder workgroups. Having a zero-crediting period for landfill projects not only makes sense, it encourages landfills to continue capturing gases.

- The fact that many projects continued to collect methane is encouraged by our program and makes sense from a project's investment analysis. Once a project has already committed the capital to install methane recovery systems, it has a strong incentive to keep the equipment operating to recover its investment when market conditions improve.
- The Reserve recognized these market limitations and permitted zero-crediting periods beginning in 2011, when the zero-crediting reporting period was introduced in its Program Manual and began approving zero-credit reporting periods for landfill projects in 2013. This encouraged landfills to stay in the game and come back for crediting when conditions improve. Note that CarbonPlan did not characterize this correctly and indicated that this process started in US Landfill Protocol 5.0 (approved in 2019). Additionally, the Reserve introduced renewed crediting periods via our Program Manual and protocol in 2011 and began approving second crediting periods for landfill projects in 2016. Therefore, projects knew they had the ability to continue generating credits for renewed crediting periods

relatively early and had incentives to maintain gas collection and destructions systems and/or make capital investments to recoup costs.

 Beyond market conditions, another limiting factor discouraging projects were changes to the protocol performance standard tests the Reserve made in version 4.0 (approved in 2011). This change was a waste in place threshold for landfill gas-to-energy projects. In version 5.0 (approved in 2019) the Reserve modified this requirement (through the Reserve's protocol update process that included a multi-stakeholder workgroup and public comment processes) as it was unrealistically discouraging project participation, another reason for zero-crediting periods. Projects that could not renew their crediting period under version 4.0 were able to commence reporting under version 5.0.