OPIS Global Carbon Offsets Report

Daily Prices, News & Analysis on Offsetting Emissions

OPIS By IHS Markit

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Insights

Voluntary REDD+ Project Developers Look to Price Transparency for Support

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VCM Scrutiny, Transparency to Help Industry Scale: Vertis Finance

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US EPA Issues Final GHG-Emission Standards for Commercial, Business Aviation

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Key Benchmarks

VOLUNTARY REDD+ VOLUME-WEIGHTED AVG. (US$/MT)

Vintage	Price	Change
V16	5.500	-0.083
V17	5.083	0.000
V18	5.333	-1.867
V19	5.333	0.000
V20	6.333	-0.667

REDD+ (Reducing Emissions from Deforestation and forest Degradation)

CORSIA ELIGIBLE OFFSETS (US$/MT)

Product	Price	Change
CEO	0.805	0.000

CALIFORNIA CARBON OFFSETS (US$/MT)

Product	Price	Change
Golden CCO	13.150	0.000
CCO(3)	11.800	0.000
CCO(8)	11.700	0.000
DEBS Golden CCO	13.500	0.000
DEBS CCO(3)	12.150	0.000
DEBS CCO(8)	12.050	0.000

DEBS (Direct Environmental Benefit in the State)

IHS MARKIT GLOBAL CARBON INDEX

Product	Total Return	Change	Wt. Avg Carbon $	Change
GLCARB	342.91	5.93	23.71	0.41

Previous business day closing price

Voluntary REDD+ Credits (US$/mt)

Vintage	Low	High	Mean	Change	Wk. Avg.	MTD
Tier 1						
V12-V13	4.25	5.25	4.750	0.000	4.750	4.750
V14-V15	4.25	5.25	4.750	-0.250	4.917	4.917
V16	5.00	5.50	5.250	0.000	5.250	5.250
V17	4.50	5.00	4.750	0.000	4.750	4.750
V18	4.50	5.00	4.750	0.000	4.750	4.750
V19	4.50	5.00	4.750	0.000	4.750	4.750
V20	5.50	6.00	5.750	0.000	5.750	5.750
Tier 2						
V12-V13	5.75	6.75	6.250	-0.250	6.000	6.000
V14-V15	4.50	5.50	5.000	-0.500	5.333	5.333
V16	5.25	5.75	5.500	-0.250	5.667	5.667
V17	4.75	5.25	5.000	0.000	5.000	5.000
V18	5.00	5.50	5.250	0.000	5.250	5.250
V19	5.00	5.50	5.250	0.000	5.250	5.250
V20	6.00	6.50	6.250	0.000	6.417	6.417
Tier 3						
V12-V13	6.00	7.00	6.500	0.000	6.250	6.250
V14-V15	4.65	5.65	5.150	-0.600	5.633	5.633
V16	5.50	6.00	5.750	0.000	5.833	5.833
V17	5.25	5.75	5.500	0.000	5.500	5.500
V18	5.75	6.25	6.000	0.000	6.000	6.000
V19	5.50	6.50	6.000	0.000	6.000	6.000
V20	6.75	7.25	7.000	0.000	7.167	7.167

Volumes: Tier 1: 350k+, Tier 2: 50k-349k, Tier 3: 2k-49k

Voluntary REDD+ Credits Volume-weighted Averages (US$/mt)

Vintage	Price	Change	MTD	Change
V16	5.500	-0.083	5.840	-0.085
V17	5.083	0.000	5.083	0.000
V18	5.333	-1.867	5.699	-0.046
V19	5.333	0.000	5.380	-0.012
V20	6.333	-0.667	6.667	-0.167

CORSIA Eligible Offsets (US$/mt)

Product	Low	High	Mean	Change	Wk. Avg.	MTD
CEO	0.78	0.83	0.805	0.000	0.805	0.805

California Carbon Offsets (US$/mt)

Product	Timing	Low	High	Mean	Change	Wk. Avg.	MTD
Golden CCO	2020	13.10	13.20	13.150	0.000	13.150	13.147
CCO(3)	2020	11.75	11.85	11.800	0.000	11.795	11.725
CCO(8)	2020	11.65	11.75	11.700	0.000	11.700	11.628
DEBS Golden CCO	2020	13.45	13.55	13.500	0.000	13.500	13.497
DEBS CCO(3)	2020	12.10	12.20	12.150	0.000	12.145	12.075
DEBS CCO(8)	2020	12.00	12.10	12.050	0.000	12.050	11.978
Zero CCO	Jan 2021	13.25	13.35	13.300	0.000	13.300	13.275
Zero CCO	Dec 2021	14.25	14.35	14.300	0.000	14.300	14.283
Zero CCO	Dec 2022	15.65	15.75	15.700	0.000	15.700	15.683
Zero CCO	Dec 2023	16.75	16.85	16.800	0.000	16.800	16.775

Voluntary REDD+ Project Developers Look to Price Transparency for Support

On the periphery of an urgent, public cry to scale-up global Voluntary Carbon Markets (VCM) to reach Paris Agreement goals, REDD+ offset project developers are seeking price transparency in a quest for fair-market value and financial support, they told OPIS.

Dozens of Reducing Emissions from Deforestation and Forest Degradation (REDD+) market participants surveyed by OPIS during the past 14 months described an opaque trading environment where long-term contracts are often structured without a fair-value vantage point.

"We use a formula or a fixed price," a REDD+ project developer told OPIS in September, noting that the development of a daily REDD+ price index would be used to accurately price long-term contracts using the current price as the basis. "As a seller, looking at long-term transactions, we don't want to get ripped off, and our buyers want to lock in a price over time."

On Monday, OPIS launched 27 daily voluntary REDD+ credit price assessments -- the first of its kind to bring a measure of transparency to the VCM.

The new OPIS price index "will formalize our industry," a REDD+ credit retailor told OPIS in November.

REDD+ project developers agreed in various conversations that the index will bring a new level of security in the market and aid in securing investments for new emissions reduction projects.

The daily OPIS Voluntary REDD+ Credits assessments include credits certified by Verra (VCS) and validated under the Climate, Community & Biodiversity Standards (CCB). Last year, about 71 million REDD+ units were issued on the Verra registry, according to IHS Markit.

OPIS evaluates trade information for voluntary REDD+ credits with vintages that are one to eight years before the current year (currently 2012 to 2019) that deliver within 12 months and credits with a current year vintage (currently 2020) that deliver in the next 24 months. REDD+ trades must have a minimum volume of 2,000 for inclusion in the OPIS price assessment process.

Since Nov. 23, more than 2.1 million REDD+ credits traded within the parameters of the OPIS Voluntary REDD+ Credits methodology, according to data submissions to OPIS from global carbon offset credit stakeholders. Those credits averaged US$5.38/mt -- the mean of a range of deals done at a low of US$3.06/mt and a high of US$7.20/mt.

While the range is notably wide, it is a clear depiction of the current price spreads between bids, offers and trades in the voluntary REDD+ credit market.

For instance, one project developer told OPIS earlier this month that he received a bid at US$1/mt for 2017 vintage REDD+ credits -- a market that is well under value within the scope of OPIS voluntary REDD+ credit price assessments.

Despite the market's general price disconnection, OPIS' year-long deep-dive into REDD+ prices overturned some common trends in transaction volumes and price spreads. Due to this information, OPIS Voluntary REDD+ Credits price assessments are categorized not only by vintage but also by volume. In reviewing the data, three distinct volume-tiered submarkets became clear and are as classified as: Tier 3 - Retail (2,000 to 49,000); Tier 2 – Wholesale

(50,000 to 249,000); and Tier 1 - Net zero buyers/financials (350,000+).

Most of the deals collected by OPIS were classified as Tier 3 for the assessment process. Voluntary REDD+ credits sold as retail are on average between US$2/mt and US$3/mt more expensive than the credits sold as part of bigger clips -- like those purchased by corporations looking to become net-zero emissions in coming years, according to REDD+ industry stakeholders and submitted trade data.

"The demand and interest of corporate buyers is generally increasing," a carbon trader said. "The prioritization of the nature-based solutions just makes sense as companies are looking to support initiatives with great added value for biodiversity and communities, which are very rich in nature-based projects."

Massive potential for upcoming voluntary carbon credit demand from corporations is the backdrop for the phenomenon surrounding the Institute of International Finance (IIF) Taskforce on Scaling Voluntary Carbon Markets. The group of 40 leaders from six continents next year will present a blueprint of actionable solutions to scale up the VCM.

The Taskforce's November 2020 Consultation Document estimated that voluntary carbon markets need to increase by at least 15-fold to meet the growing demand from companies with carbon neutrality goals. It said that the voluntary carbon over-the-counter (OTC) market would benefit from price transparency provided by a price reporting agency.

IHS Markit is a member of the IIF Taskforce on Scaling Voluntary Carbon Markets and the parent company of OPIS.

--Reporting by Bridget Hunsucker, bhunsucker@opisnet.com; Editing by Lisa Street, lstreet@opisnet.com

VCM Scrutiny, Transparency to Help Industry Scale: Vertis Finance

Increased scrutiny of the voluntary carbon market (VCM) is a positive factor in its scaling, trading house Vertis Finance's carbon trader Katerina Kolaciova told OPIS in an interview.

"The market is being studied and analyzed from all directions, criticized and pulled apart, but that also means we have a chance to find all flaws and build on the strengths," Kolaciova said. "We need to make sure we set the rules right and that we build the market in a way to enable the scale it should deliver to be consistent with the Paris Agreement."

Increased scrutiny of the VCM also means that market participants must become more engaged and transparent, Kolaciova said.

"Corporate buyers must become more engaged in demanding [carbon offset/credits] projects with high environmental integrity, act on their public commitments and be willing to pay the actual costs of emission reductions. Project developers should keep the innovative efforts in terms of methodologies and activities scaling. Intermediaries and other market participants should work together to increase the transparency, liquidity and providing tools for financial management," she added.

The growing VCM was recently scrutinized by NGOs and other stakeholders as more governments and corporations pledge net-zero commitments and plan to use carbon offsets/credits as part of their climate action strategy.

2021 will be a crucial year for the VCM, Kolaciova said and noted three main reasons: the expected VCM operational blueprint from The Institute of International Finance (IIF) Taskforce on Scaling Voluntary Carbon Markets; the Science Based Targets Initiative's recent acknowledgement of the role of carbon removals in reaching net zero; and a flood of large corporations committing to put the climate change fight at the center of their businesses.

She said that the rulebook for Article 6 of the Paris Agreement, due to be finalized at UN Climate Change Conference COP26 in November 2021, could also provide a boost to the VCM, depending on its design.

"Article 6 can either incentivize a greater impact or leave the market hibernating around the current scale. We hope for the first, that we'll see a well-designed Article 6 that deepens the potential impact," she said.

Article 6 will regulate how countries implement their nationally determined contributions toward emissions reductions and deal with accounting rules like double counting of carbon credits.

In November, the International Emissions Trading Association (IETA) said in an email that the effective and transparent implementation of Article 6 -- the last missing puzzle piece of the Paris Agreement rulebook -- is key to achieving net-zero emissions by 2050.

--Reporting by Nandita Lal, Nandita.lal@ihsmarkit.com, Editing by Bridget Hunsucker, bhunsucker@opisnet.com

US EPA Issues Final GHG-Emission Standards for Commercial, Business Aviation

The U.S. Environmental Protection Agency on Monday issued final greenhouse gas (GHG) emission standards for U.S. commercial and business aviation that environmental groups, a number of states and one major oil producer and fuel supplier have criticized as too limited.

The agency said its final rule will align U.S. standards with the international carbon dioxide (CO_2) emissions standards set by the International Civil Aviation Organization (ICAO) in 2017, "ensuring domestically manufactured aircraft remain competitive in the global marketplace." Roughly 75% of U.S.-made commercial and private aircraft are sold to markets outside the country, EPA said.

"The U.S. leads the world in reducing greenhouse gas emissions and today's historic action that finalizes the first-ever GHG standard for aircraft will continue this trend," EPA Administrator Andrew Wheeler said in a statement.

"This is the fourth concrete final regulation the Trump Administration's pragmatic approach to climate action has produced with meaningful results without unnecessarily sacrificing American jobs or important domestic industries like our aircraft manufacturers."

The ICAO standards were developed with input from EPA, the Federal Aviation Administration (FAA), and U.S. and international aviation industries, the agency said. EPA in 2016 found that aircraft emissions are a contributor to climate change and endanger public health.

EPA added that many airplanes manufactured by U.S. companies met the ICAO standards at the time of their adoption in 2017, and already meet the standards contained in this action. Based on the manufacturers' expectation that the ICAO standards will be implemented globally, EPA anticipates nearly all affected airplanes to be compliant by the effective dates for new type designs and for in-production airplanes.

The Center for Biological Diversity on Monday said the final rule lags existing technology by more than 10 years and fails to force GHG "reductions through either technology or operations changes.

"The aviation sector was previously the largest unregulated transportation source of greenhouse gas emissions in the country. But the new Trump standards won't force plane manufacturers or airlines to make any changes to cut harmful climate pollution," the environmental group said in a statement.

"It's now up to the Biden administration to step up and actually cut aviation emissions as part of an ambitious climate agenda."

In October comments sent to EPA on the proposed rule, the California Air Resources Board (CARB), said the rule would "simply codify" ICAO's four-year-old approach that included only those emission-reduction technologies that were flight-ready at the time and failed to consider weight-reduction strategies for enhance use of sustainable aviation fuel (SAF).

"In addition to improvements in engine specifications and standards, the rule could achieve significant reductions in GHG emissions and criteria pollutants by mandating or incentivizing the increased use of sustainable aviation fuels,"
CARB said in its comments.

The aviation industry's commitment to reduce its GHG emissions 50% from a 2005 baseline by 2050, CARB said, requires "even more stringent reductions and highlights the necessity of developing a robust SAF industry to supply increasing quantities of alternative fuels to airline operators."

And in comments it submitted in October, Shell's U.S. operations told EPA that the agency could encourage investment in SAF production by establishing more "challenging" targets for biomass-based diesel and advanced biofuels when setting its annual blending volumes under the Renewable Fuel Standard (RFS) program.

While the company said the rule would allow the U.S. to secure the highest practicable degree of uniformity in aviation standards, it urged EPA to consider "two other key components" to reducing the sector's GHG emissions -- increased use of SAF and nature-based solutions to offset emissions that can't otherwise be eliminated.

"When setting the volume mandates for the biomass-based diesel and advanced categories in the annual RFS standards-setting process, we urge EPA to consider the volumes of SAF that can be consumed in the aviation sector.

"By setting more challenging, yet achievable, mandates, EPA can create an environment for investment that can support additional production and use of SAF to help the aviation sector reduce emissions," the company said.

In addition, Shell said it would support an expansion of the federal biomass-based diesel blenders' tax credit "to create an additional tax credit to incentivize the production of SAF and its use in the aviation sector."

--Reporting by Jeff Barber, jbarber@opisnet.com; Editing by Jordan Godwin, jgodwin@opisnet.com

Carbon Offsets Trades

Trade Date	Product	Vintage	Price ($)	Delivery Time	Volume	Notes
12/28/2020	REDD+	V14	4.65	<12 mo.	Tier 3	---
12/23/2020	REDD+	V18	7.20	Feb'21	Tier 3	CCB Gold Single
12/23/2020	REDD+	V20	7.00	Jan'21	Tier 3	CCB Gold Single
12/23/2020	REDD+	V12	6.50	Jan'21	Tier 2	CCB Gold Single
12/23/2020	REDD+	V14	8.00	<12 mo.	--	CCB Gold; < Tier 3 min vol.
12/21/2020	REDD+	V16	6.50	Jan'21	Tier 3	CCB Gold Triple
12/21/2020	REDD+	V18	5.95	Dec'20	Tier 3	CCB Gold Double
12/21/2020	REDD+	V14	5.95	Dec'20	Tier 3	CCB Gold Double
12/17/2020	REDD+	V18	6.00	Dec'20	Tier 3	CCB Gold
12/15/2020	REDD+	V18	5.00	Dec'20	Tier 1	CCB Gold
12/11/2020	REDD+	V18	5.82	Dec'20	Tier 2	CCB Gold Double
12/11/2020	REDD+	V18	3.56	Dec'20	Tier 2	CCB Gold
12/11/2020	REDD+	V13	4.00	Mar'21	Tier 3	CCB Gold Double
12/10/2020	REDD+	V13	5.50	Dec'20	Tier 3	CCB Gold Double
12/08/2020	REDD+	V18	6.00	Dec'20	Tier 2	CCB Gold Single
12/08/2020	REDD+	V13	3.06	Dec'20	Tier 3	CCB Gold Double
12/08/2020	REDD+	V13	3.06	Dec'20	Tier 3	CCB Gold Double
12/08/2020	REDD+	V14	6.74	Dec'20	Tier 3	CCB Gold Double
12/04/2020	REDD+	V16	5.95	Dec'20	Tier 3	CCB Gold Double
12/03/2020	REDD+	V18	6.00	Dec'20	Tier 3	CCB Gold
12/03/2020	REDD+	V18	6.00	Dec'20	Tier 3	CCB Gold
12/03/2020	REDD+	V19	6.00	Dec'20	Tier 3	CCB Gold
12/03/2020	REDD+	V15	6.00	Dec'20	Tier 3	CCB Gold Single
12/03/2020	REDD+	V15	6.00	Dec'20	Tier 3	CCB Gold Single
12/02/2020	REDD+	V19	4.90	Dec'20	Tier 3	CCB Gold Single
12/01/2020	REDD+	V15	5.00	Dec'20	Tier 3	CCB Gold Single

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