



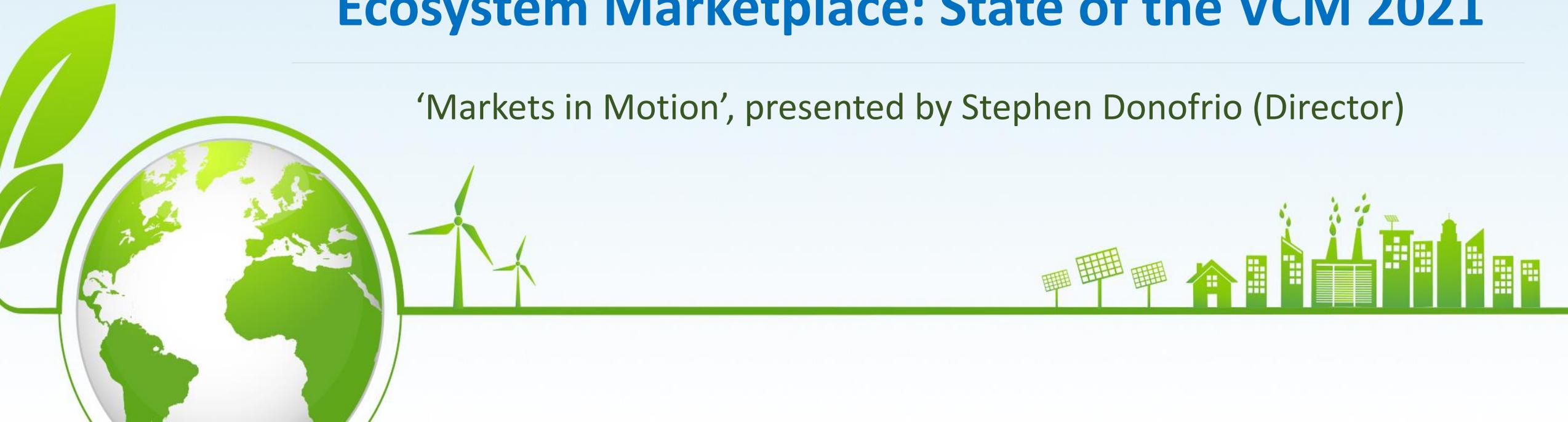
Carbon Offsetting and Reduction  
Scheme for International Aviation

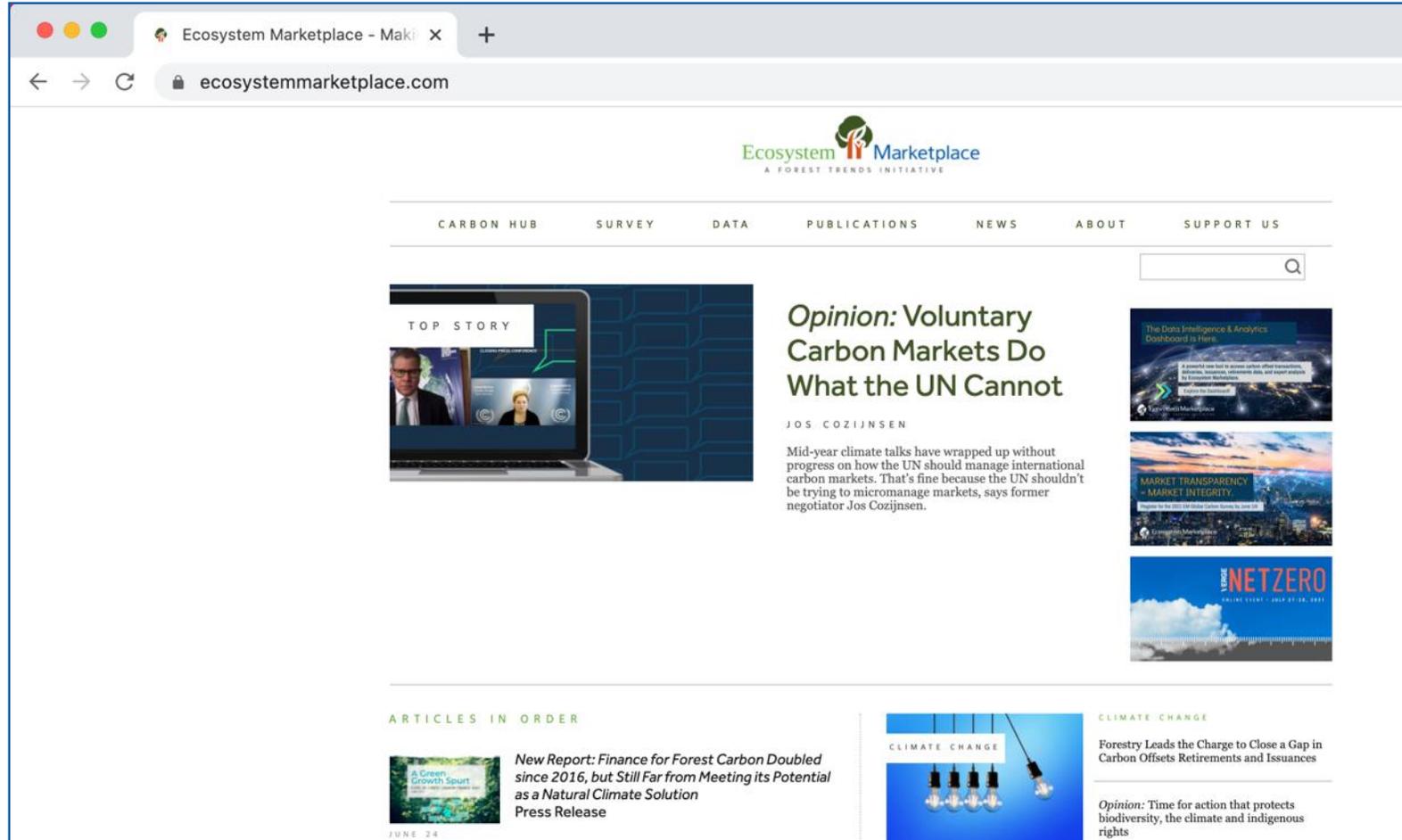
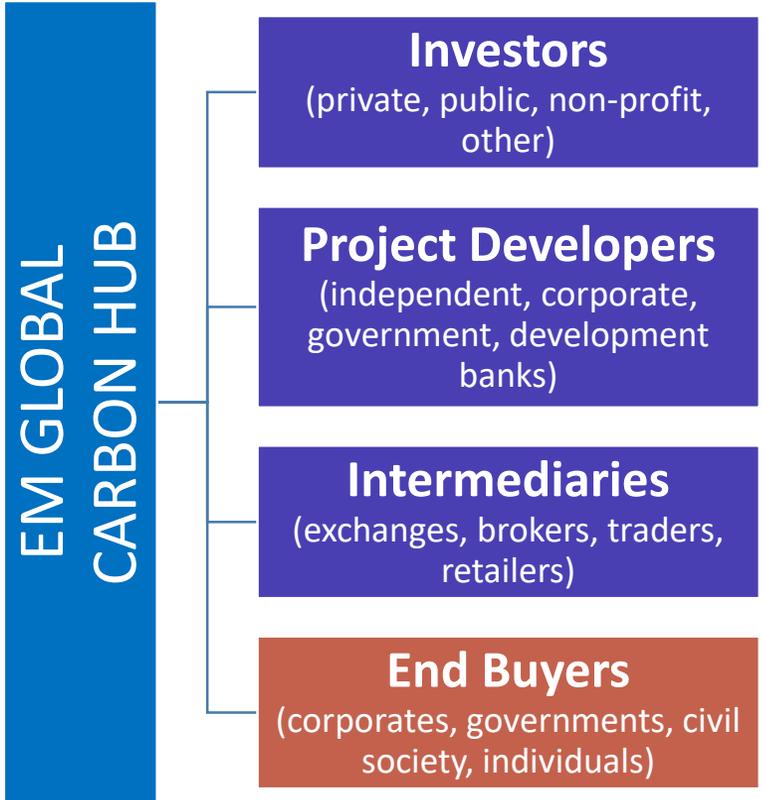
ICAO CORSIA Forum – Session 3



## Ecosystem Marketplace: State of the VCM 2021

‘Markets in Motion’, presented by Stephen Donofrio (Director)





## Trade Data

Core Carbon Principles  
Additional Attributes  
Buyers / Demand  
Corporate Claims & Insetting

Spot  
Forward  
Futures  
Options

Over the Counter (OTC) Exchange  
Retailers  
Brokers  
Point of Sale

### **Box 1: Driving Radical Transparency in the Voluntary Carbon Markets in 2021 – an Overview of Ecosystem Marketplace's Developments, Improvements, and New Features**

In this reporting cycle, we have expanded the list of attributes collected in the survey. EM now collects variables such as Project ID, specific transaction date, buyer information, SDG assessment, methodology, and more.

Additionally, on the new online API-enabled platform, EM has shifted from an offline to on-demand online platform to allow for more frequent EM analysis and facilitated respondent reporting.

Contact us at [carbonsurvey@ecosystemmarketplace.com](mailto:carbonsurvey@ecosystemmarketplace.com) for specific data requests.

## Insights & Sentiments

Perceptions  
Motivations (e.g., net-zero, neutrality)  
Market Confidence  
Forecasting

# 2021

172 EM Respondents  
have reported as of Aug.  
31

*(project developers,  
investors, and  
intermediaries)*

- ✓ 172 = 13% increase from 2020 (152)
- ✓ Projects located in 80 countries
- ✓ Bases in nearly 40 countries
- ✓ Covers ~75% VCM
- ✓ +200 End-buyers identified by EM Respondents YTD
- ✓ +35 countries & 17 industry sectors



Ecosystem Marketplace  
A FOREST TRENDS INITIATIVE

## 2021 EM Global Carbon Survey RESPONDENT

*Contributing towards EM's goal of driving carbon market transparency, a growing global network of EM Respondents from 40+ countries reported carbon market insights and offsets trades on projects located in 80 countries in 2021.*

JOIN US.  
[ecosystemmarketplace.com](https://ecosystemmarketplace.com)

# 2021 ON TRACK FOR \$1 BN + AS ALL TIME MARKET VALUE HITS \$6.7 BN

Table 1: Annual Voluntary Carbon Market Overview, 2019 to 31 August 2021

	Volume (MtCO <sub>2</sub> e)	Price per ton (USD)	Value (USD)
2021	239.3	\$3.13	\$748M
2020	188.2	\$2.51	\$473M
2019	104.3	\$3.07	\$320M

Source: Forest Trends' Ecosystem Marketplace initiative

**DISCLAIMER:**

Ecosystem Marketplace is an initiative of Forest Trends. Data on voluntary carbon market transactions in this document was derived from information supplied by participants in a market survey. Forest Trends' Ecosystem Marketplace does not represent or warrant the accuracy, suitability, or content of the survey responses or the results of that survey as set out herein. It is the sole responsibility and obligation of the reader of this report to satisfy themselves as to the accuracy, suitability, and content of the information contained therein. Forest Trends' Ecosystem Marketplace (including its respective affiliates, officers, directors, partners, and employees) makes no warranties and shall have no liability to the reader for any inaccuracy, representation, or misrepresentation set out herein. The reader further agrees to hold Forest Trends' Ecosystem Marketplace harmless from and against any claims, loss, or damage in connection with or arising out of any commercial decisions made on the basis of the information contained herein. The reader of this report is strongly advised not to use the content of this report in isolation, but to take the information contained herein together with other market information and to formulate their own views, interpretations, and opinions thereon. The reader is strongly advised to seek appropriate legal and professional advice before entering into commercial transactions.

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ECOSYSTEM MARKETPLACE INSIGHTS REPORT

## Markets in Motion

State of the Voluntary Carbon Markets 2021  
Installment 1

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**2021 EM Visionary Partners**

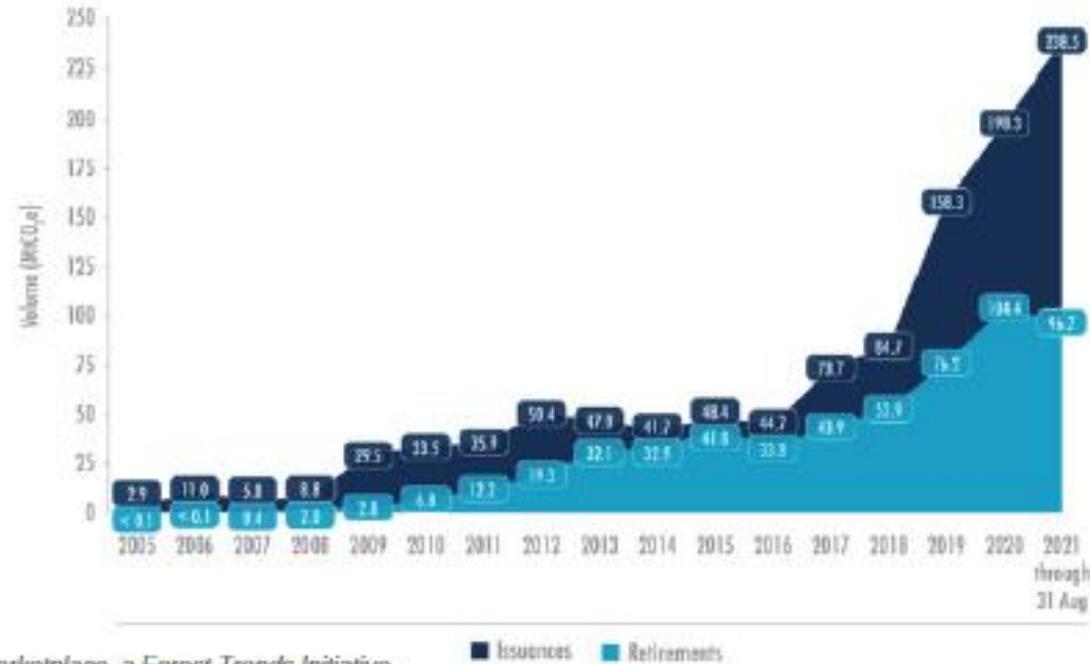


**2021 EM Strategic Supporters**



# ISSUANCES & RETIREMENTS INCREASE AT AN UNPRECEDENTED RATE TO MEET GROWING DEMAND

Figure 3. Market Size by Voluntary Carbon Offset Issuances and Retirements, 2004 to 31 August 2021



Source: Ecosystem Marketplace, a Forest Trends Initiative.

Note: Based on Issuances and Retirements data sourced from American Carbon Registry, Climate Action Reserve, Gold Standard, Verified Carbon Standard, ProClima, EcoRegistry, Climate Forward, City Forest Credits, and Coalition for Rainforest Nations. EM also tracks the Global Carbon Council and ART-TREES, although no offsets have been issued or retired yet, so they do not currently impact these figures. EM also tracks the California Air Resources Board and the Clean Development Mechanism, but they are not included here as these are largely compliance.

# MARKET SIZE BY CARBON CREDIT STANDARDS: INNOVATION & GROWTH IN NCS, ALONGSIDE PHASE OUT OF RENEWABLES

Table 8. Transacted Voluntary Carbon Offset Volume and Average Price by Standard

	2019		2020		2021 (through August)	
	Volume (MtCO <sub>2</sub> e)	Price (USD)	Volume (MtCO <sub>2</sub> e)	Price (USD)	Volume (MtCO <sub>2</sub> e)	Price (USD)
<b>American Carbon Registry (ACR)</b>	2.5	\$5.36	5.4	\$8.44	2.0	\$11.37
<b>Clean Development Mechanism (CDM)</b>	4.9	\$2.02	7.0	\$2.19	8.2	\$1.13
<b>Climate Action Reserve (CAR)</b>	4.0	\$2.34	2.1	\$4.44	4.9	\$2.12
<b>Gold Standard</b>	13.2	\$5.27	13.9	\$4.57	5.2	\$3.94
<b>Plan Vivo</b>	0.9	\$8.99	1.2	\$8.49	0.7	\$11.58
<b>Verified Carbon Standard (VCS)</b>	44	\$1.74	66.1	\$3.76	125.6	\$4.17

Source: *Ecosystem Marketplace, a Forest Trends Initiative.*

Note: Volumes are calculated from EM Respondents that reported trade data as of 31 August 2021. Respondents did not always respond to all survey questions; differences in the totals (for example, between the total annual volume and the sum of project category volumes) can be attributed to this. Throughout the remainder of 2021 and beyond as more organizations report to EM for the first time, and as existing EM Respondents report new transactions, these figures for 2020 and 2021 will likely continue to be updated. This will be reflected in future installments of EM's SOVCM report and on the EM Data Intelligence & Analytics Dashboard (<https://data.ecosystemmarketplace.com>).

# MARKET SIZE BY PROJECT CATEGORY: RAPID EXPANSION OF REDD+ AND UNSPECIFIED RENEWABLE ENERGY

Table 4. Voluntary Carbon Market Size by Project Category, 2019 - 31 August 2021

	2019			2020				2021 (through August)			
	Volume (MtCO <sub>2</sub> e)	Price per ton (USD)	Value (USD)	Volume (MtCO <sub>2</sub> e)	Volume % Change from Prior Year	Price per ton (USD)	Value (USD)	Volume (MtCO <sub>2</sub> e)	Volume % Change from Prior Year	Price per ton (USD)	Value (USD)
<b>FORESTRY AND LAND USE</b>	36.7	\$4.33	\$159.1M	48.1	30.9%	\$5.60	\$269.4M	115.0	139.4%	\$4.73	\$544.0M
<b>RENEWABLE ENERGY</b>	42.4	\$1.42	\$60.1M	80.3	89.4%	\$0.87	\$70.1M	80.0	-0.3%	\$1.10	\$88.4M
<b>ENERGY EFFICIENCY/ FUEL SWITCHING</b>	3.1	\$3.87	\$11.9M	31.4	921.0%	\$1.03	\$32.3M	16.1	-48.9%	\$1.57	\$24.2M
<b>AGRICULTURE</b>	-	-	-	0.3	-	\$9.23	\$2.8M	3.4	876.8%	\$1.36	\$4.6M
<b>WASTE DISPOSAL</b>	7.3	\$2.45	\$18.0M	8.3	13.0%	\$2.76	\$22.9M	2.7	-67.5%	\$3.93	\$10.6M
<b>TRANSPORTATION</b>	0.4	\$1.70	\$0.7M	1.1	165.2%	\$0.64	\$0.7M	2.1	99.3%	\$1.00	\$2.1M
<b>HOUSEHOLD DEVICES</b>	6.4	\$3.84	\$24.8M	3.5	-45.4%	\$4.95	\$17.3M	1.8	-49.8%	\$5.75	\$10.4M
<b>CHEMICAL PROCESSES/ INDUSTRIAL MANUFACTURING</b>	4.1	\$1.90	\$7.7M	1.3	-68.7%	\$1.90	\$2.5M	1.1	-11.2%	\$3.22	\$3.5M

Source: Ecosystem Marketplace, a Forest Trends Initiative.

Note: Volumes are calculated from EM Respondents that reported trade data as of 31 August 2021. Respondents did not always respond to all survey questions; differences in the totals (for example, between the total annual volume and the sum of project category volumes) can be attributed to this. Throughout the remainder of 2021 and beyond as more organizations report to EM for the first time, and as existing EM Respondents report new transactions, these figures for 2020 and 2021 will likely continue to be updated. This will be reflected in future installments of EM's SOVCM report and on the EM Data Intelligence & Analytics Dashboard (<https://data.ecosystemmarketplace.com>).

# OFFSETS FOR CORPORATE NET ZERO AND CARBON NEUTRALITY: SHIFTING PREFERENCES AND PRICES IN SECTORS

Figure 5 and 6: Volumes and Prices by Buyer Sector, 2020 and 2021

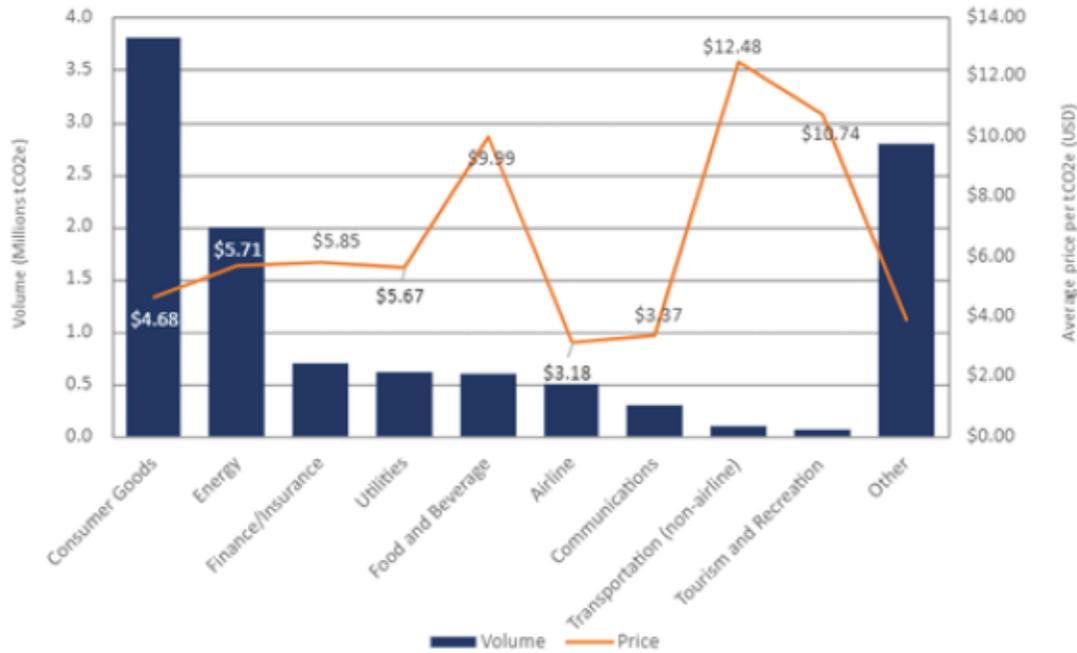


Figure 5: Volumes and Prices by Buyer Sector, 2020

Source: Forest Trends' Ecosystem Marketplace initiative

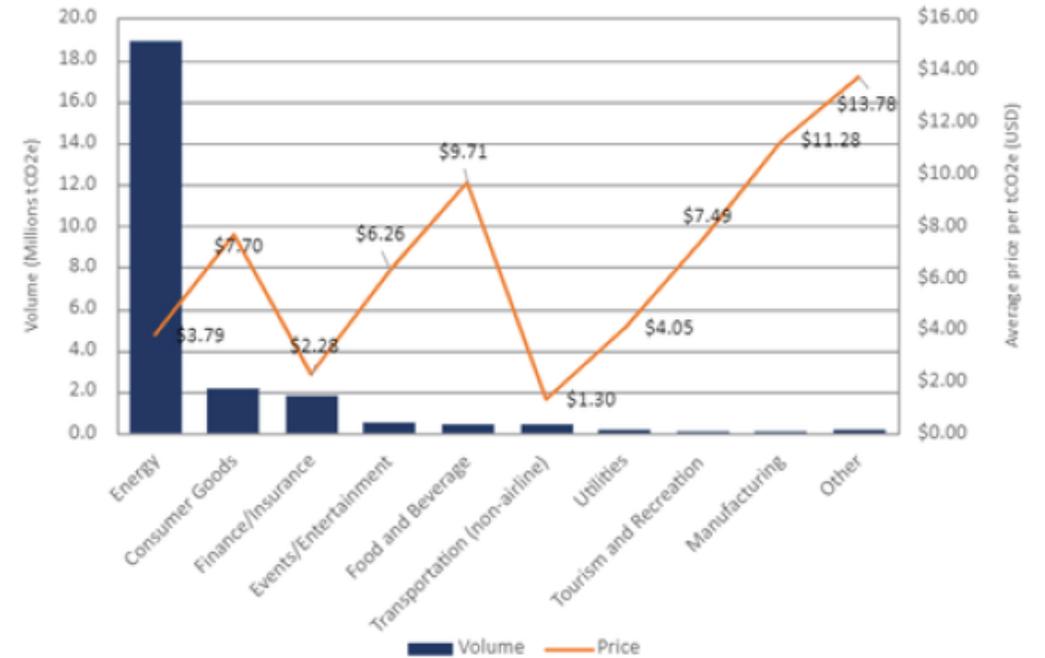


Figure 6: Volumes and Prices by Buyer Sector, 2021

Source: Forest Trends' Ecosystem Marketplace initiative



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THANK YOU