

Carbon Credit Buying Guide

GOAL	Purchase carbon offsets in accordance with Second Nature's MOU
AMOUNT	249,304 Carbon Offsets
WHAT'RE OUR PRIORITIES?	What kind of carbon credits do we want to pursue after this meeting? Alignment with goal to establish a local offsets program by FY24?
WHAT IS TRENDING?	Removals and community-based projects; Carbon farms and sinks
BARRIERS?	Increasing prices (> \$5.00/CC), market confusion, and lack of regulation

TARGET PRICE < \$5.00

Averages

Removals: \$7.00

Reductions: \$1.71

	2019		2020		2021 (through August)	
	Volume (MtCO2e)	Price (USD)	Volume (MtCO2e)	Price (USD)	Volume (MtCO2e)	Price (USD)
Africa	16.1	\$3.94	14.9	\$4.24	23.9	\$5.52
Asia	45.6	\$1.80	63.0	\$1.60	91.8	\$3.34
Europe	1.1	\$2.92	1.7	\$9.47	0.8	\$2.96
Latin America & Caribbean	15.3	\$3.45	18.9	\$4.17	36.6	\$3.74
North America	15.5	\$3.51	11.6	\$6.31	10.0	\$5.13
Oceania	0.5	\$12.53	0.1	\$20.57	0.1	\$32.93

Source: Ecosystem Marketplace, a Forest Trends Initiative.

Note: Volumes are calculated from EM R-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>).

Check out [this spreadsheet](#) to see how the different categories of carbon credits stack up.

Figure 2. Voluntary Carbon Market Transaction Volumes, Prices, and Values by Category 2020 - 2021

	2020			2021		
	VOLUME (MtCO2e)	PRICE (USD)	VALUE (USD)	VOLUME (MtCO2e)	PRICE (USD)	VALUE (USD)
FORESTRY AND LAND USE	57.8M	\$5.40	\$315.4M	227.7M	\$5.80	\$1,327.5M
RENEWABLE ENERGY	93.8M	\$1.08	\$101.5M	211.4M	\$2.26	\$479.1M
CHEMICAL PROCESSES / INDUSTRIAL MANUFACTURING	1.8M	\$2.15	\$3.9M	17.3M	\$3.12	\$53.9M
WASTE DISPOSAL	8.5M	\$2.69	\$22.8M	11.4M	\$3.62	\$41.2M
ENERGY EFFICIENCY / FUEL SWITCHING	30.9M	\$0.98	\$30.4M	10.9M	\$1.99	\$21.9M
HOUSEHOLD / COMMUNITY DEVICES	8.3M	\$4.34	\$36.2M	8.0M	\$5.36	\$43.3M
TRANSPORTATION	1.1M	\$0.64	\$0.7M	5.4M	\$1.16	\$6.3M
AGRICULTURE	0.5M	\$10.38	\$4.7M	1.0M	\$8.81	\$8.7M

* Note, these are annualized averages. EM Data can be analyzed more granularly by day, month, quarter, year.
** Note, these are Categories. EM Data can also be analyzed more granularly by Project Type and sub-Type.
Source: Ecosystem Marketplace, a Forest Trends Initiative.

Recommended Standards

University of Illinois' [Proposed Standards](#): Justify its offsets purchases to all [stakeholders](#).

1. **Additional** (in the sense that they enable reductions beyond business-as-usual);
2. **Measurable**;
3. **Conservative** (to ensure reductions are not overstated);
4. **Permanent**;
5. **Independently verified**;
6. **Trackable**; and
7. **Transparent**.

Carbon Credits Platforms

Buying Option	Example	Activity
Carbon Credit Market	Gold Standard	High-impact Gold Standard carbon credits supported through this marketplace are retired in real-time in our Impact Registry for full traceability, and a certificate documents your purchase.
Locally Funded Credits	City Forest Credits	City Forest Credits is the national standard for greenhouse gas emission reduction and removal for tree projects in cities and towns.
Subscription Model	Nori (\$250/month for 10 CC)	Pay a monthly fee to offset a specific amount of carbon, in this case, from farmers.

[Shopify Guide](#) to Carbon Removal Standards

Non-Negotiable Criteria

1. **Net negativity:** The solution must capture and store more atmospheric CO₂ than it releases over its lifecycle. While a solution's net negativity may be small in the beginning, you should expect the margin to grow as the solution matures.
2. **Verifiability:** The company must be able to quantify how much CO₂ has been captured and stored. Early-stage suppliers should be developing quantification methods and established suppliers should have these methods already in place.
3. **Additionality:** The carbon removal wouldn't occur if you didn't make this purchase.

4. **Safety and environmental justice:** The supplier must be taking steps to mitigate negative externalities, while deploying its technology in a way that is fair and just. This could mean limiting land and fresh water use, and having environmental and economic benefits on local communities where the supplier operates.

Critical for consideration

1. **Cost:** The solution must have potential to reach a low cost at scale to be economical for all buyers, even price-sensitive ones. More buyers means more carbon gets removed. Solutions that can get close to or below \$100/tonne at scale should be prioritized.
2. **Durability:** The longer a solution can store CO₂ out of the atmosphere, the better. With solutions that store CO₂ for less than 100 years, progress can be undone before we've slowed down climate change.
3. **Capacity:** The solution must be able to reach a massive scale. We need to be pulling billions of tonnes of CO₂ out of the atmosphere annually by 2050, and solutions with the potential to do a big chunk of this should be prioritized.

Organization-Specific Considerations

1. **High tech solutions:** Like ASU's carbon capture trees
2. **Solutions with a natural element:** Peat bogs
3. **Local and Community-Centered**
4. **Themed to your mission and goals**

Berkley's Proposed Carbon Offset Purchase Standards

1. **Real:** Credits are considered to be real if the quantity of credits generated and used by a project, or a project type, does not exceed conservative estimates of the actual effect of the project, or the set of projects of the project type, on emissions.
2. **Additional:** Credited reductions would not have occurred were it not for the offset program or the University's climate protection policy. Additionality can be assessed for an individual project or for a project type
3. **Quantifiable:** measurable, including leakage
4. **Durable:** a very high likelihood that they will remain out of the atmosphere for 40 years on-site or through commitments to replace credits.
5. **Enforceable emissions reduction or carbon removal:** reasonably ensured that quality standards are met.
6. **Undergone third-party verification:** The University will evaluate the quality of each offset project it uses, involving a peer review process overseen by the Carbon Abatement Technical Committee (CATC).

Important considerations when buying offsets:

1. **Holistic:** Offsets should only be considered in conjunction with reducing emissions through other initiatives.
2. **Last Resort:** Offsets can be used to reduce emissions from sectors which are lacking other viable reduction options.
3. **Localized Impact:** Consider offsets which are local to the university to provide opportunities for education and collaboration.
4. **High Quality Credits:** Use high quality, certified offsets that are verifiable, long-term, and transparent.
5. **Additionality:** Check for offsets that are additional to business as usual, i.e. the underlying carbon reduction or removing activity would not have occurred otherwise.
6. **Permanence:** Offsets should have a low risk of being undone. For example, a forest should not be destroyed after it has been sold as an offset.
7. **Ecojustice:** Ensure the offset is ethical and sustainable and does not negatively impact indigenous or marginalized communities. Examples of this occurring is when the land available for offsets is exploited for profits which leaves the inhabitants of the land vulnerable to food shortages and eviction.

8. **Transparency:** Ensure transparent disclosures of current emissions, accounting practices and targets to reach net zero.

These suggestions have been lifted from [UN Sustainable Development Solutions Network \(SDSN\)](#)'s [guide](#) on reaching net zero on college campuses.