

How Do You Get Carbon Credits?



Wondering how you can get carbon credits?

You're not alone. Many do – especially after seeing just how rapidly the industry has grown.

There are many reasons carbon credits are booming: increased regulation, improved standards, and accessibility are just a few.

So really, if you're interested in getting carbon credits, it's a great time to do so.

First of all, what are carbon credits exactly?

Carbon credits essentially represent metric tons of carbon. Simply put, *one carbon credit allows or offsets one metric ton of carbon emissions.*

The carbon market is where carbon credits are bought and sold.

There are two kinds of carbon markets: *Compliance Carbon Markets (otherwise known as Regulatory Markets)* and *Voluntary Carbon Markets (VCM)*.

Compliance Carbon Markets (Regulatory Carbon Markets)

Compliance markets are government regulated. The largest carbon compliance markets are in the European Union, China, Australia, and Canada.

With the compliance carbon market, the government tells various industries how much carbon they can emit. It's then up to a company within that industry to stay under their allotted carbon amount.

The problem is, for some companies, staying within their permitted carbon threshold is simply not possible.

This doesn't mean that they're not committed to reducing their carbon emissions.

It just means that they can't. Perhaps the tech to reduce or eliminate emissions isn't available yet, or the tech to reduce or eliminate emissions isn't accessible (it is too expensive to utilize, at least for now). It could be as simple as the electricity in their country being largely provided by fossil fuels.

That's where carbon credits come in.

For example, Company A emits 150 metric tons of carbon into the atmosphere, but its government only allows it to emit 50. So, company A must do something to neutralize those extra emissions. It purchases 100 carbon credits (1 carbon credit = 1 metric ton of carbon) to offset that carbon.

Companies can purchase two different types of carbon credits on the compliance carbon market:

- Permits to pollute; or

- Project-based reduction credits.

A **permit to pollute** essentially says, "Hey, we went over our emissions, so we're paying a fee for every metric ton of carbon above what we were allowed."

It's important to note that the fees can be pretty excessive, so this isn't necessarily a get-out-of-jail-free card. The price for permits increases annually, and the permitted amount also shrinks each year to push industries to go green. The government aims to reduce carbon emissions – not for companies to continue emitting them. So, when companies must purchase permits to pollute, it isn't exactly favorable for them to do so.

Project-based reduction credits work differently.

With a project-based carbon credit, a company offsets its carbon emissions by investing in environmental projects such as forestry and conservation, improved agriculture practices, and renewable energy. Take a look at the table listed below from [Offsetsguide.org](https://www.offsetsguide.org) to get an idea of how carbon offset projects work:

Offset Project Type		Offsets Issued, Median (Min – Max) (metric tons CO ₂ e in 2013)	Location and Number of Projects (as of 2013)	Offset Project Example Project Title – Project Start Date Project Developer – Location Project Description	Cost Range (\$/t CO ₂ e)
Methane Destruction	Landfill Gas	25,596 (217 – 140,053)	88 projects MN, NC, VA, NE, FL, LA, CA, KT, WV, WA, GA, OR, TX, SC, MD, CO, MO, PA, TN, OH, AL, WI, NE, MT, MS, UT	Kimble Sanitary Landfill Gas Project – 2009^d <i>Kimble Company – Ohio</i> Collection of landfill gas from old closed portion of landfill operation beginning 12/28/2009. Gas is collected and destroyed using an open flare system.	\$1/2 – 3/4j
	Livestock	10,011 (511 – 46,703)	44 projects IN, WI, OH, MI, VA, WA, NC, NY, CA, ID, MN	Farm Power Rexville Regional Digester - 2009^e <i>The Climate Trust – Washington</i> Installation of new manure digester that will capture and combust methane and generate electricity sold to the grid. Under the project manure from two dairy farms is collected in the digester. Previously the farms collected manure in uncovered lagoons where methane was released to the atmosphere.	[TBD]
	Coal Mine Methane	60,854 (227 – 134,940)	5 projects WY, CO, AL, WV	Elk Creek Coal Mine Methane Destruction & Utilization Project – 2012^f <i>Vessels Coal Gas, Inc. – Colorado</i> Previously methane drained from the coal mine was vented to the atmosphere. Under the project, methane is collected and combusted to generate electricity.	[TBD]
Industrial Gases	Ozone Depleting Substances (ODS)	100,189 (23,276 – 130,010)	14 projects AK, OH, CA	EOS 2013 Domestic – 2011^g <i>EOS Climate Inc. – Arkansas</i> The project collected ODS refrigerant gases and destroyed them in an incineration plant in Arkansas.	[TBD]
	N ₂ O abatement at Nitric Acid facilities	207,493 (503 – 568,560)	6 projects MS, TX, OK, IL	El Dorado Nitrogen, LP - Nitrous Oxide Abatement Project – 2010^h <i>LSB Industries, Inc. – Texas</i> The project involves the installation of a catalyst to reduce N ₂ O emissions generated as a byproduct of nitric acid production at a facility in Texas. The installation of the catalyst results in a reduction in N ₂ O emissions that would have otherwise been vented to the atmosphere.	[TBD]
Forestry	Avoided Conversion	13,042 (5,493 – 67,592)	5 projects NC, SC	Pungo River Forest Conservation Project - 2003 <i>Blue Source – North Carolina</i> Avoided conversion of 704 acres of mixed pine and bottomland hardwoods. Land was cleared, ditched, drained, and used for agriculture 40 years ago. Forests have naturally regenerated since. Conservation easement signed with USDA in 2003. ^b	
	Improved Forest Management	5,633 (564 – 2,163,951)	17 projects CA, ME, NH, VA, TN, MI	Virginia Conservation Forestry Program - Clifton Farm – 2003^c <i>The Nature Conservancy – Virginia</i> Ownership and management of the timber resources on the 4069 acre mixed pine hardwood forest property was transferred to the Nature Conservancy in 2003. The land was intensively managed for timber and livestock production before the conservation easement was acquired by the Nature Conservancy in 2003	\$8 – 11/12 ⁱ
Renewable Energy	Biomass/ Biogas	10,146 (2,278 – 589,125)	95 projects China, Honduras, India, Indonesia, Vietnam	Sichuan Rural Poor-Household Biogas Development Programme The project will install household biogas digesters in low-income homes in the Sichuan province. Currently, households in the area use coal cooking. The biogas digesters will recover methane from animal manure and use it for cooking to replace coal use.	[TBD]
	Solar/Wind/ small-hydro	55,000 (1461 – 57230)	125 projects Bolivia, China, India, Indonesia, Madagascar, Malawi, Nepal, Nicaragua, Peru, Turkey	Rural Education for Development Society (REDS) CDM Photovoltaic Lighting Project – 2009 <i>India</i> This project installed 180,000 Photovoltaic Lamps in 60,000 non-electrified homes in rural India.	[TBD]
Energy Efficiency	Improved Cookstove	26,696 (4,000 – 3,194,906)	60 projects Brazil, Cameroon, Eritrea, Ghana, Guatemala, Honduras, India, Kenya, Lesotho, Mali, Mongolia, Nepal, Nigeria, Peru, Rwanda, South Africa, Sudan, Tanzania, Uganda	Darfur Efficient Cook-stove Project The project replaces traditional wood and charcoal stoves with energy-efficient liquefied petroleum gas (LPG) cook stoves.	\$8 - 12

One metric ton of carbon is offset from the atmosphere through environmental projects for every project-based carbon credit purchased. Therefore, these types of carbon credits are also known as **carbon offsets**.

This allows companies to do more than just buy permits to pollute. It enables them to do something positive to negate the extra emissions into the atmosphere. In other words, they're becoming "carbon neutral."

The good news is that project-based reduction credits aren't just available on the compliance carbon market. Carbon offsets are the sole credit offered on the voluntary carbon market.

Voluntary Carbon Market (VCM)

What's great is that when it comes to VCM, it isn't just limited to companies in regulated areas.

Individuals and NGOs across the globe can purchase offsets too. That means that offsets are available to everyday consumers.

The VCM works differently because it is entirely voluntary. So, no government regulation or government mandate causes companies (or individuals) to purchase credits on the VCM. They're simply doing so because they want to. They see the value carbon credits and offsets can bring to their organization and lives by making them carbon neutral.

Here is a chart from Climate Care that maps out the different carbon credits and market types.

THE DIFFERENT TYPES OF CARBON CREDITS



Market	Compliance		Voluntary
Credit Type	Permits to Pollute	Project- Based Emission Reduction Credits	Project-Based Emission Reduction Credits
Description	A 'certificate to pollute' one tonne of CO2e. Number issued corresponds to the emissions cap of the trading scheme	A carbon credit of 1 tonne generated from an emission reduction project	A carbon credit of 1 tonne generated from an emission reduction project
Issued by	National Governments/Agencies	Certification body recognised by the Compliance Scheme e.g. UN Clean Development Mechanism (CDM), California Climate Action Reserve	Independent certification bodies e.g. Verified Carbon Standard (VCS), Gold Standard
Examples	European Union Allowance (EUA)	Certified Emission Reduction (CER)	Verified Carbon Unit (VCU), Gold Standard Verified Emission Reductions (GS VER)

(Climate Care is based in Oxford and Nairobi. They finance, develop, and manage carbon reduction projects globally.)

How are carbon credits and offsets verified?

While carbon credits for the compliance market are government regulated, carbon offsets for the VCM are not. That doesn't mean that they're not vetted – simply that they're just verified by third parties.

Critics felt this process wasn't stringent enough in the past, but verification methods have changed. It has become far more accurate due to new regulations agreed upon at COP26, standardized across the globe.

Third-party entities are non-profit organizations that ensure that customers receive what they are paying for. They measure the amount of carbon offset through an environmental project and interpret the data, giving any offset project with their seal a green light for approval.

Third-party verifications include the Verified Carbon Standard (managed by Verra), the Gold Standard, the American Carbon Registry (managed by Winrock), and Climate Action Reserve.

They're committed to ensuring that offset projects are high-quality, so that those purchasing offsets aren't throwing their money into something that isn't real. Below are some of their standards.

CARBON CREDIT STANDARDS



Standard	Region(s) of Activity	Category
Verified Carbon Standard (VCS) v-c-s.org "The Verified Carbon Standard (VCS) Program provides a global program and standard for GHG emission reduction and removal projects and programs."	Global	
The Gold Standard goldstandard.org "Gold Standard projects must be implemented following our best practice rules, consult with local stakeholders, continually reduce greenhouse gas emissions and improve the environment and people's lives."	Global	
Climate Action Reserve (CAR) climateactionreserve.org "Promote the reduction of greenhouse gas emissions by pioneering credible market-based policies and solutions."	North America	
American Carbon Registry (ACR) americancarbonregistry.org "The first private voluntary GHG registry in the world and an approved California Offset Project Registry."	Global	
Clean Development Mechanism/Joint Implementation (CDM/JI) cdm.unfccc.int ji.unfccc.int "Linking mechanisms under the Kyoto Protocol used to help committed countries meet part of their emission reduction targets." "While developed for the compliance market, some CDM offsets also transacted by voluntary buyers."	Global	
Clean Development Mechanism/Joint Implementation (CDM/JI) + The Gold Standard	Global	

Source: Ecosystem Marketplace

Let's look at Verra for a moment since many consider them to be the premier standard.



Verra has a network of auditors on hand to follow up on all Verra-approved offset programs. They oversee all operational aspects, aligning them with stringent standards as set by Verra. More importantly, these auditors are assigned to projects that align with their area of expertise. Because of this process, to date, **more than 1,775 certified VCS projects have collectively reduced or removed more than 865 million tons of emissions from the atmosphere.**

Where can you purchase carbon offsets?

As an individual, it's unlikely that you'll be able to purchase carbon credits directly from the source (ex: a farmer). However, you can buy credits through a third party (through the VCM), so you have a few options

- **You can choose to offset carbon when you make a purchase.**

Many companies allow consumers to add "offsets" to their purchases to offset their emissions. For example, numerous commercial airlines are doing this so that their customers can fly in a green way.

Look at American Airlines, for example. Their non-profit, *Cool Effect*, allows customers to purchase offsets to reduce the impact of their flight. This is done during the checkout process, making it quite simple for any customer to use.



Together We Can Help Protect Our Planet

American Airlines is proud to partner with the nonprofit Cool Effect to help you offset the carbon emissions of your flight.

When you buy a carbon offset through Cool Effect, you're supporting high-quality, verified carbon reduction projects that help protect and conserve our planet's resources. As an airline, we recognize that connecting you with the world has an impact on the environment, and carbon offsetting is one element of our strategy for reducing that impact.

Our purpose is to take care of people on life's journey each and every day. We also take pride in doing our part to take care of the planet — and we value your commitment to joining our efforts.

Other airlines, such as Delta, United, and British Airways, are doing the same.

- **You can buy carbon offsets individually, picking and choosing on websites such as Nori, Gold Standard, and South Pole.**

Nori.

Nori works with individuals, companies, and NGOs, making purchasing offsets simple. For example, on Nori's website, once you select "remove carbon" on the Nori homepage, you can enter the number of credits you would like to buy. Currently, they cost \$15 each, with an additional 15% fee for processing.

Buy Carbon Removals

The average American emits 16 tonnes a year. 1 NRT (Nori Carbon Removal Tonne) represents one tonne of removed CO₂e stored for a minimum of ten years.

\$15.00 per NRT + fees ⓘ

16 NRTs

Select NRTs to buy now

If you're a business owner, you can even use various tools that Nori has available to calculate your carbon emissions and purchase a subscription of offsets each month.

Which Monthly Subscription is Right For You?

Subscriptions are fulfilled the first week of each month. Cancel or modify anytime.

<p>10 NRTs</p> <p>Most popular!</p> 	<p>100 NRTs</p> 	<p>Custom</p> 
<p>10 NRTs/month</p> <p>Consistently purchase a steady amount of carbon removals.</p> <p>Sign Up</p>	<p>100 NRTs/month</p> <p>Make a large impact by purchasing more carbon removals each month.</p> <p>Sign Up</p>	<p>Customize</p> <p>Calculate your carbon footprint and customize a subscription to match.</p> <p>Sign Up</p>

To date, 75,553 metric tons of carbon have been offset through Nori.

Gold Standard.

Gold standard is one of the oldest marketplaces, developed over a decade ago. They have created 2,300 projects in over 98 countries and have reduced 191 million tons of carbon.

How it works

Individuals can keep it simple and use average monthly estimates* for their country or use the WWF UK footprint calculator for a more detailed calculation. Businesses can refer to the GHG Protocol's Emissions Calculator to calculate their carbon footprint.

Then simply add the quantity of carbon credits to the cart and follow checkout instructions.



1 tonne/month or less

Most of European countries, emerging economies and developing countries.



2 tonnes/month

Australia, Canada, Estonia, Luxembourg, United States + several oil exporting countries.



3 tonnes/month or more

Curacao, Kuwait, Qatar, Trinidad & Tobago.

*Data from World Bank estimates of CO2 emissions per capita.

What customers love about Gold Standard is the ability to narrow down projects based on what aligns with your own values. This makes the process of purchasing offsets very personalized.

FILTERS: All products



South Pole.

South Pole has developed over 700 climate action projects worldwide. They have carbon calculators for individuals (and organizations) to calculate their carbon footprint that also help find projects that align with their needs.



- **If you're a farmer or own land, you can produce carbon credits yourself to sell.**

Anyone who owns or operates land can produce and sell carbon offsets to increase their profits while helping the environment. This is especially true of farmers and ranchers. This can be done by:

- Conservation tillage or no-tillage practices,
- Nutrient management and precision farming,
- Returning biomass to the soil as mulch after harvest,
- Planting cover crops off-season, as well as rotating crops,

- Promoting forest regrowth and converting acreage into grasslands or woodlands,
- Using flood irrigation systems instead of surface irrigation systems,
- Alternating manure management and feeding schedules; and
- Switching to alternate, renewable fuels that are low carbon.

A third-party expert from one of the verification sites listed above can then verify data from your property and conduct a site visit to see how many offsets your project is eligible to receive. Since the VCM is expected to expand rapidly over the next ten years (and through 2050), these projects have excellent earnings potential.

The price of carbon offsets is increasing.

With most of the world focused on hitting net-zero by 2050, carbon offsets are at an all-time high.

The reason why is that net-zero and neutrality goals can only be achieved with the help of massive carbon offset purchases. Demand is up, and supply is low. As such, the prices continue to increase. In fact, the current E.U. price for carbon offsets is at more than €80/ton.

Check out the volume, prices, and value of the market through August 2021:

	2019			2020				2021 (through August)			
	Volume (MCO2e)	Price per ton (USD)	Value (USD)	Volume (MCO2e)	Volume % Change from Prior Year	Price per ton (USD)	Value (USD)	Volume (MCO2e)	Volume % Change from Prior Year	Price per ton (USD)	Value (USD)
FORESTRY AND LAND USE	38.7	\$4.33	\$159.1M	48.1	30.9%	\$5.60	\$269.4M	115.0	139.4%	\$4.73	\$544.0M
RENEWABLE ENERGY	42.4	\$1.42	\$60.1M	80.3	89.4%	\$0.87	\$70.1M	80.0	-0.3%	\$1.10	\$88.4M
ENERGY EFFICIENCY/ FUEL SWITCHING	3.1	\$3.87	\$11.9M	31.4	921.0%	\$1.03	\$32.3M	16.1	-48.9%	\$1.57	\$24.2M
AGRICULTURE	-	-	-	0.3	-	\$9.23	\$2.8M	3.4	876.8%	\$1.36	\$4.6M
WASTE DISPOSAL	7.3	\$2.45	\$18.0M	8.3	13.0%	\$2.76	\$22.9M	2.7	-67.5%	\$3.93	\$10.6M
TRANSPORTATION	0.4	\$1.70	\$0.7M	1.1	165.2%	\$0.64	\$0.7M	2.1	99.3%	\$1.00	\$2.1M
HOUSEHOLD DEVICES	6.4	\$3.84	\$24.8M	3.5	-45.4%	\$4.95	\$17.3M	1.8	-49.8%	\$5.75	\$10.4M
CHEMICAL PROCESSES/ INDUSTRIAL MANUFACTURING	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.

California is the only state in the U.S. with a rigid carbon market – which is where most offsets are sourced. But other states are starting to take the lead.

So, the income potential is seemingly endless for farmers throughout Europe and the U.S. – where the carbon offset industry is growing.

What about green investments?

Investing in carbon credits, carbon ETFs, and carbon stocks is an excellent way to diversify your investment portfolio and also do something to help the environment.

The **Fossil Free Fund** is a great tool that you can use to help you identify mutual funds and ETFs that are environmentally conscious.

Are your savings invested in fossil fuels?

Search funds from your 401(k), retirement plan, or personal portfolio

Search funds by name, ticker, or manager

See mutual funds and ETFs that avoid fossil fuel investments

[Top-rated funds >](#)

In addition to finding top-rated, green funds, you can search for funds that you currently have within your 401K, retirement plan, or personal portfolio to see if they are invested in the fossil fuel industry. This way, you can make changes if need be.

- Another way you can start to make your investment portfolio greener is by searching for funds through companies committed to green initiatives – such as Tesla (TSLA) and Brookfield Renewable Partners (BEP).

- Funds with carbon credit futures are another option. However, it is the riskiest because it is the least diverse. If you need more information, we have a stock watchlist that you can use. Stocks include:

- **Carbon Streaming Corporation (NETZ.NE)**
- **iPath Series B Carbon ETN (GRN)**
- **iShares MSCI ACWI Low Carbon Target ETF (CRBN)**
- **KraneShares California Carbon Allowance ETF (KCCA)**
- **KraneShares European Carbon Allowance ETF (KEUA)**
- **KraneShares Global Carbon ETF (KRBN)**
- **BlackRock U.S. Carbon Transition Readiness ETF (LCTU)**
- **Black Rock World ex U.S. Carbon Transition Readiness ETF (LCTD)**
- **SPDR MSCI ACWI Low Carbon Target ETF (LOWC)**
- **VanEck Low Carbon Energy ETF (SMOG)**
- **SPDR S&P 500 Fossil Fuel Reserves Free ETF (SPYX)**
- **iShares Global Green Bond ETF (BGRN)**
- **VanEck Vectors ETF Trust – VanEck Vectors Green Bond ETF (GRNB)**

- **Hanetf ETC Securities PLC Spark (CO2.L)**

Carbon Market Growth.

According to experts surveyed by the Taskforce for Scaling Voluntary Carbon Markets (TSVCM):

“Based on stated demand for carbon credits, demand projections from experts... and the volume of negative emissions needed to reduce emissions in line with the 1.5-degree warming goal... the market size [for carbon offsets] in 2030 could be between \$5 billion and \$30 billion at the low end and more than \$50 billion at the high end.”

Some experts even believe the VCM could reach \$100 billion by 2030 – up from just \$300 million in 2018.

Carbon credits help companies and individuals meet emissions goals. They can also help everyday farmers and landowners worldwide earn extra income. So, carbon credits serve both to spark economic development globally as well as a method of fighting climate change.

Carbon credits and offsets are a win for all.