



## Choosing a Greenhouse Gas Offset Program

At STI, as a public service, we have researched the leading credible greenhouse gas (GHG), or carbon offset programs, as they are commonly known, available in the marketplace. The following is a brief synopsis of factors to consider in choosing a program, including STI's offset program portfolio, as well as information on reforestation and afforestation programs and related definitions.

We've also detailed a synopsis of other quality offset programs, affording consumers, non-profits, businesses and other organizations an opportunity to compare and contrast each and find the program that best meets their needs.

### Factors to Consider in Choosing a Program

Many carbon offset and emissions reduction credits (often called green tags) are of quality while others are not, so there are some important factors to consider and questions to ask when choosing the most appropriate program:

- *Cost Efficiency.* For green tags, how much does the company charge to produce the equivalent of a single kWh from a renewable source? For carbon offsets, does the company offset full greenhouse gas impacts or just carbon dioxide emissions? How much does the company charge to offset a ton of carbon dioxide? How about a ton of greenhouse gases? Are volume discounts available?
- *Credibility.* Are any, all or only some of the company's projects certified by an independent third-party in a way that addresses issues related to accounting, accountability, verification and true environmental benefits? Currently, the most respected certifiers of carbon offsets and green tags include Green-e ([www.green-e.org](http://www.green-e.org)) for domestic green tags and the CDM Gold Standard ([www.cdmgoldstandard.org](http://www.cdmgoldstandard.org)) for international offset projects.
- *Transparency.* Is the percentage of funds that are allocated to projects divulged publicly? Do they avoid double counting? Are offsets or emissions reductions delivered upon delivery, within a short time frame, or in the future?
- *Business / Organizational Support.* What type of support does the company provide its business clients? Does the program provide custom greenhouse gas or carbon calculators, consumer-oriented educational materials, employee training, and / or marketing and public relations support within the relevant industry?
- *Philanthropic and Humanitarian Benefits.* Are projects based in first-world or third-world countries? Do they support renewable energy, energy efficiency, reforestation and / or afforestation? How about community development and environmental conservation? Do they provide local communities with opportunities for energy independence?

### STI's Offset Program Portfolio

STI is taking a holistic approach in offering international GHG offsets and domestic Green Tags within the travel and tourism industry, the consumer marketplace, and for non-profits and corporate America.

Specifically, STI offers some of the highest quality offsets and green tags available in the marketplace that support national and international standards of certification and verification. We also offer custom greenhouse gas calculators, education and training materials, and PR and marketing support services.



### **STI's Offset Program Portfolio (continued)**

MyClimate ([www.my-climate.com](http://www.my-climate.com))

- Non-profit organization, an average of 80%+ of revenue is reinvested in its diverse project portfolio
- Projects are developed in accordance with procedures, criteria and methodologies from the clean development mechanism (CDM) of the Kyoto protocol and the criteria of the Gold Standard.
- Projects in developing countries include renewable energy and energy efficiency projects focused on sustainable development, combining environmental benefits with community economic development.
- Projects provide environmental additionality that otherwise wouldn't exist, avoid double counting, and are inspected, verified and certified by independent, third-party organizations.
- STI is the exclusive North American distributor of MyClimate for retail and wholesale offsets

Bonneville Environmental Foundation ([www.b-e-f.org](http://www.b-e-f.org))

- Non-profit organization, 80%+ of revenue is reinvested in its diverse project portfolio
- U.S.-based renewable energy and energy efficiency projects
- All projects are Green-e Certified. Green-e is the nation's leading independent certification program for renewable energy products. This third-party verification program is designed to help consumers identify superior, certified renewable energy products.
- Projects go above Green-e benchmark to meet internal and external, third party audited environmental criteria, as supported by credible NGOs.
- Green Tag projects include renewable energy and energy efficiency projects.
- STI offers B-E-F retail and wholesale green tags internationally.

### **Other Quality Programs in the Marketplace**

Atmosfair ([www.atmosfair.de](http://www.atmosfair.de))

- A German initiative including a consortium of German tour operators under the umbrella of Forum Anders Reisen.
- Projects meet the CDM Gold Standard.
- 60% of funds invested go to projects, 5% goes to UN Climate Adaptation fund, and up to 5% to local environmental projects.

Carbon Counter ([www.carboncounter.org](http://www.carboncounter.org))

- A collaborative project between The Climate Trust, a non-profit organization that invests in projects that reduce or avoid greenhouse gas emissions, and Mercy Corps, an international relief and development agency.
- Carbon Offset projects include renewable energy, reforestation, afforestation and innovative wind energy financing in the U.S. Pacific Northwest.
- Partners invest in humanitarian programs such as cogeneration, family housing, material substitution and transportation efficiency.
- There are currently no internationally accepted certification or verification standards related to reforestation and afforestation projects (see Reforestation and Afforestation below).

CarbonFund.org Foundation ([www.carbonfund.org](http://www.carbonfund.org))

- Non-profit organization based in the US.
- CarbonFund.org neither sells nor trades emission reductions; supporters donate to the organization, and they purchase and retire carbon offsets and green power on their behalf.

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- Renewable energy projects are certified by Green-e and the Environmental Resources Trust, whereas energy efficiency, reforestation and international projects are not certified.

Climate Care Ltd. ([www.climatecare.org](http://www.climatecare.org))

- Non-profit organization based in the UK.
- Projects include energy efficiency, reforestation and afforestation and claim to provide financial additionality.
- Projects avoid double counting and are not certified but are verified by a third-party.

Native Energy ([www.nativeenergy.com](http://www.nativeenergy.com))

- For-profit organization based in the U.S.
- Projects include establishing Native American-owned wind farms on Native lands and establishing methane generators on farms.
- The Green Tags purchased by consumers are donated to Clean Air-Cool Planet, an independent non-profit environmental organization.
- Funds received are being reinvested in turbines, which will be built in the future. This approach makes it more difficult to calculate a future amount of "offset" for a current level of investment.
- It should also be noted that future offsets are not currently eligible for Green-e certification.

Terra Pass ([www.terrapass.com](http://www.terrapass.com))

- For-profit organization based in the U.S. whose primary focus is offsetting automobile travel-based emissions. The company also offers offsets for air travel and businesses.
- Projects include renewable energy, biomass such as dairy farm methane, and industrial efficiency.
- TerraPass is audited by the non-profit Center for Resource Solutions. Some of its projects are Green-e certified but many projects offered are not certified or verified by a third party.

## **Reforestation and Afforestation**

There are two primary issues regarding reforestation (planting trees in an area that previously contained forest) and afforestation (planting trees on lands that have not been recently forested) as a means to sequester carbon and offer it as an offset.

First, there is concern about the permanence of reforestation and afforestation projects (i.e., trees are temporary carbon storage sinks which release carbon when they die or when they are cut down), but these arguments could be applied to other types of emission reduction projects as well. Second, there are technical concerns regarding reforestation and afforestation related to the science of calculating the carbon offsetting amounts, accounting, verification, etc., but methodologies are being developed to address these concerns and ensure that related projects satisfy international standards.

Stakeholders are now beginning to realize the need to address all human-related sources of greenhouse gas emissions simultaneously to help more rapidly address human-induced global climate change. This includes adding reforestation and afforestation into emission reduction portfolios since these types of projects have proven to be a cost effective approach that delivers value-add benefits like protecting biodiversity and creating jobs.

As international standards for certifying the carbon offsetting amounts related to reforestation and afforestation are developed and globally accepted by those organizations that certify the quality of emission reduction projects, STI will offer select, best-in-class projects upon request.

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## Definitions

*Clean Development Mechanism:* International standards developed under the Kyoto Protocol to ensure that an emission reduction project is a good investment, makes a genuine reduction in carbon emissions as well as being of benefit to the host country and sustainable development. It is not an actual offset project.

*Green Power:* Electricity produced by sources that are less harmful to the environment than fossil fuels. While there is no strict definition of green power, generally renewable sources such as solar, wind power, geothermal, biomass, and small hydroelectric are considered green power sources (source PPL Corporation). There is a physical connection between the buyer and the generating renewable energy asset. You are buying and paying for kWh directly from a renewable source.

*Greenhouse Gas (GHG) / Carbon Offset:* A mechanism by which the impact of emitting a ton of GHG or CO<sub>2</sub> can be negated or diminished by avoiding the release of a ton elsewhere, or absorbing a ton of GHG or CO<sub>2</sub> from the air that otherwise would have remained in the atmosphere. Green Tags / Renewable Energy Certificates are one many strategies for offsetting; others include reforestation and afforestation.

*Green Tags / Renewable Energy Certificates (REC):* A REC is a tradable commodity representing the environmental benefits of 1 Mega Watt hour of energy from a renewable source. They're quantified as 1400 pounds of greenhouse gases being offset. There is a direct connection between the buyer and the generating renewable energy asset if the buyer purchases BEF green tags and is using electricity off of the grid in the U.S. (i.e., their dollars help get more renewable energy into the grid). If the buyer is not based in the U.S., there is not a direct connection between the buyer and the generating renewable energy asset, but they're still buying and paying for the incremental cost of producing kWh from a renewable source.

*Additionality:* Based on the Kyoto Protocol, additionality refers to offset projects that achieve reductions that are "additional to those that otherwise would occur".

*Environmental Additionality:* Emission reductions represent a physical reduction or avoidance of emissions over what would have occurred.

*Financial Additionality:* Projects that generate funding additional to existing commitments that is specifically allocated to achieving greenhouse gas reductions.

*Reforestation and Afforestation:* Reforestation is the re-establishment of a forest by planting or seeding an area where forest vegetation has been removed, whereas afforestation is the establishment of trees in an area that has lacked forest cover for a long time or has never been forested.

## For More Information

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