



2022 REI CARBON CREDIT PORTFOLIO SUMMARY

In designing our carbon credit portfolio, we worked with [3Degrees](#) to create a blend of international and domestic projects that, in addition to documenting verified removal or avoidance of greenhouse gases from the atmosphere, provide broader social and environmental co-benefits. We also crafted our portfolio to align with [project portfolio allocations](#) required for Climate Neutral Certification.

From an investment standpoint, nearly half of our total portfolio spend (49%) is dedicated to U.S.-based projects, with the remaining (51%) dedicated to international projects. We invested more than a quarter (26%) of our offsets spend in U.S. forest management projects.

The following is a summary of the projects within REI's 2022 carbon credit portfolio:

WINSTON CREEK FOREST CARBON PROJECT

REI 2022 credit portfolio cost allocation: 13%

Project Type: Improved Forestry Management

Standard: American Carbon Registry (ACR)

Location: Washington State, USA

The Winston Creek Forest Project is a 10,000-acre forest located in Lewis County, Washington, managed by a family-owned company dating back five generations. The forest is located between two separate blocks of the Gifford Pinchot National Forest and serves as a bridge for owls traveling from nesting locations, which forms the basis of the Safe Harbor Agreement with the U.S. Fish and Wildlife Service.

Because a forest's abilities to capture carbon from the atmosphere increases exponentially between 35 and 60 years of growth, the Winston Creek forest project only harvests trees after they've had a chance to mature and add considerable mass. Many forests in the industry harvest trees after 35 years of growth, but the Winston Creek Forest waits almost twice that period of time. Adding almost two decades increases each tree's ability to sequester carbon exponentially and improve local air quality for the surrounding communities. The project also adheres to long-term sustainable forest management practices by harvesting less than 1.5% of the acreage each year.

Co-benefits:

Clean Water:

- The streams that run through the protected area are under careful management, ensuring the continual flow of clean water, and all stream crossings were upgraded to meet the highest standards well ahead of state sanctioned deadlines.
- The project also voluntarily upgraded the Oregon stream crossings to meet stricter Washington standards.

Wildlife Habitat:

- A mosaic approach to forest management allows this project to provide a diversity of trees and plant life, offering a safe habitat for several endangered species.

Education/Recreation:

- Those who visit the forest can see first-hand the many benefits of improved forest management. More than 80,000 4th graders have been through the forest education program, with more taking part in the experience each year.
 - The forest area also provides recreational opportunities for local communities and visitors such as hiking, hunting, fishing, biking, berry picking, and bird watching
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UPM BLANDIN NATIVE AMERICAN HARDWOODS CONSERVATION PROJECT

REI 2022 credit portfolio cost allocation: 13%

Project Type: Improved Forest Management

Standard: American Carbon Registry (ACR)

Location: Minnesota, USA

The Blandin Forest is comprised of 187,876 acres of native, mixed hardwoods that are owned and managed by the Blandin Forestry Company. Blandin’s SmartForestry practices involve maintaining the diversity of natural forest communities and aligning management with ecological regimes, as well as reducing harvest impacts. In 2010, working with non-profit partners and the state of Minnesota, Blandin signed a conservation easement that guarantees the property will always remain forest and will be managed under sustainable practices. This sustainable practice improves carbon dioxide sequestration by the forest which in turn is credited under the methodology.



Additional Certifications: Sustainable Forest Industry Certified: the Blandin forest is managed using sustainable practices that incorporate protection of biodiversity, species at risk and wildlife habitat, sustainable harvesting, and protection of water quality. All Blandin products are FSC or PEFC certified.

Co-benefits:

Environmental:

- Improved local air quality, public use and recreation, and habitat. This forest provides important water quality, habitat, and public recreation benefits for the people and wildlife in northern Minnesota.
 - The Blandin Forest also protects critical wildlife habitat including 30 miles of state-designated trout streams, 47 species of birds, and more than 30 species of mammals including black bear, grey wolf, and moose.
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BIOLITE IMPROVED STOVE PROGRAMME, UGANDA

REI 2022 credit portfolio cost allocation: 26%

Project Type: Energy Efficiency

Standard: Gold Standard

Location: Uganda, East African Plateau

The BioLite Improved Stove Programme distributes approximately 2,500 domestic fuel-efficient cook stoves to Ugandan households. A BioLite HomeStove is an ultra-clean burning fan-assisted wood stove that cuts toxic pollutant emissions by 90% for a cleaner planet and a healthier household, and reduces fuel use by 50%. In addition, utilizing BioLite's patented Direct Conduction Thermoelectric System (DCTS), the HomeStove also generates its own



electricity, providing users with enough reliable, on-demand electricity in a day's cooking to fully charge a mobile phone and provide an evening's worth of bright, LED light.

Co-benefits:

Environmental:

- According to the United Nations, Uganda lost 26% of its forest cover between 1990 and 2005, and is still seeing a deforestation rate of over 2% each year.
- A typical Ugandan family uses wood or charcoal as their primary fuels for cooking. Because these new stoves rely on biomass and not wood, surrounding forests are being significantly less affected, protecting ecosystems and local wildlife habitats.
- The introduction and widespread adoptions of these HomeStoves will further reduce deforestation for fuel consumption, therefore decreasing erosion and nutrient loss. The protection of standing forests will ensure the maintenance of watersheds that regulate water table levels and prevent flash flooding.

Health:

- Traditional wood and charcoal burning stoves emit an extensive amount of harmful toxins. In contrast, biomass stoves emit fewer indoor air pollutants, particularly carbon dioxide and carbon monoxide.
- Safety in the home is improved, with fewer injuries, burns and respiratory diseases. While cooking, the HomeStove also generates its own electricity, providing users with the ability to charge a phone or provide light.

Economic:

- The presence of HomeStoves increases the standard of living for each household, as families can spend less time cooking and searching for firewood, and more time pursuing opportunities for economic development.

- The importation, sale, distribution, maintenance and monitoring of the HomeStoves also create employment opportunities throughout Uganda.
 - The increased thermal efficiency of HomeStoves provides an economic benefit, allowing households to spend more money on essentials such as food, healthcare, and education.
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GLOBAL RENEWABLE ENERGY AND WASTE HEAT RECOVERY PROJECTS

REI 2022 credit portfolio cost allocation: 25%

Project Type: Renewable Energy

Standard: Gold Standard, Verra

Location: India, Indonesia, South Korea

Renewable energy projects generate clean electricity using either solar or windpower, and sell the renewable energy to the local grid. Other projects utilize waste gases from an industrial process that would have been emitted into the atmosphere to generate electricity onsite. The power generated from the projects displaces the electricity generated from coal, diesel, furnace oil, and gas combustion at thermal power stations otherwise feeding into the electricity grid. In all cases, the revenue from the sale of carbon offsets is necessary to build, operate, and maintain the project.

Co-benefits:

Environmental:

- Renewable energy projects both displace the use of traditional fossil fuels and disincentivize building new plants reliant on fossil fuels.

Community and Infrastructure:

- International renewable energy projects create local employment opportunities during the construction and operation phases.
 - The projects provide access to clean energy in communities, some of which may not have 100% electrification.
 - Renewable energy projects often lead to regional infrastructure development, such as the expansion of roads and promotion of local businesses due to increased access to improved power generation.
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LANDFILL GAS PROJECTS

REI 2022 credit portfolio cost allocation: 23%

Project Type: Landfill Gas

Standard: Verra, Climate Action Reserve

Location: United States

In the United States, municipal solid waste landfills are the third-largest source of human-related methane emissions, responsible for approximately 15% of total U.S. methane emissions ([EPA 2020](#)). And, as populations rise, so, too, does solid waste. According to the [World Bank](#), global waste could grow by 70% by the year 2050.

As organic material buried within the landfill decomposes, methane is released. A potent greenhouse gas when released into the atmosphere, Methane has a global warming effect at least 25 times that of carbon dioxide.

To address these greenhouse gas emissions, reduce landfill gas odor within local communities, and leverage the potential of landfill biogas as a clean, local energy source, landfills can choose to install a gas collection system. Unfortunately, in the absence of regulations for small- to mid-sized landfills, there are no incentives for landfills to install such systems. Furthermore, because of the high costs of project construction and management, project developers rely on the revenue generated from the sale of carbon credits for project funding. 3Degrees is responsible for the project identification, origination, due diligence, and, in many cases, ongoing monitoring and reporting of many voluntary carbon offset projects at landfills across the U.S.

Landfill gas projects can vary based on the application of the methane captured from the system. In all cases, as the waste decomposes, the system collects the methane gas through a series of extraction wells and pipelines. Often, the methane captured is combusted by a flaring system which converts the gas to carbon dioxide. In other applications, the system pumps the gas to an on-site electric generator to convert the methane into a usable energy source. In both instances, these projects work to reduce methane emissions to mitigate the landfill's environmental impact.

Co-benefits:

Environmental:

- These projects prevent methane from escaping into the atmosphere and further contributing to climate change.
- The U.S. EPA estimates that methane capture projects prevent roughly 60-90% of total methane produced at landfills from being emitted into the atmosphere.

Economic:

- The construction and ongoing management of landfill gas projects supports the economic growth of largely rural and lower income communities by creating jobs.
- The biogas generated from these projects provides a local, clean energy source for neighboring communities.

Health and Safety:

- The improvement in air quality and the reduction in odor are direct health benefits to the project's surrounding population.
- These projects also reduce emissions of several other toxic volatile organic compounds (VOCs) and prevents potential gas migration into the air, soil, and water table, thereby improving community safety.