

2016 Annual Greenhouse Gas Impact Report

Infrastructure Credit, Alliance I & II Funds



NEW ENERGY CAPITAL

Executive Summary

In 2016, the solar, landfill gas, and fuel cell projects funded by New Energy Capital offset over 1,345,000 metric tons of carbon dioxide equivalents. This figure represents investments from the Infrastructure Credit Fund, the Alliance I Fund, and the Alliance II Fund, and is more than double that of 2015.

\$215M

Investments
contributing to 2016
GHG Inventory

1.19M

Metric tons of carbon
dioxide equivalents
offset

1.47

Terawatt-hours of
electricity generated
by portfolio projects

13

Active portfolio
companies across the
Infrastructure Credit
and Alliance Funds

30.8M

Trees planted
(equivalent GHG
abatement)

2.8M

Barrels of oil saved
(equivalent GHG
abatement)

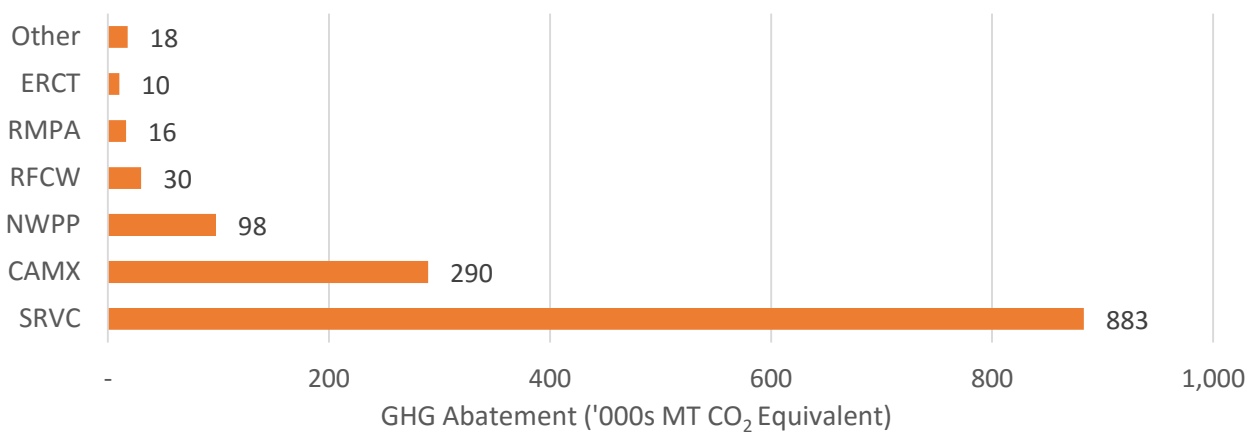
Maximizing Returns in the Clean Energy Industry

Since 2004, New Energy Capital has created portfolios of clean energy assets that offer strong, stable, and predictable financial returns. By investing in a high-growth market with significant environmental and social benefits, investors can maximize returns while investing in a socially responsible way.

Greenhouse Gas Impact by Region

New Energy Capital collected or calculated megawatt hour generation data for each portfolio project and used region-specific Emissions & Generation Resource Integrated Database (eGRID) emissions factors maintained by the U.S. Environmental Protection Agency (EPA) to determine the greenhouse gas (GHG) offset. This region-specific data provides a meaningful insight into New Energy Capital's investments.

CO₂ Equivalent Offset by eGRID Region



The areas covered by each region are outlined below:



Solar Greenhouse Gas Emission Offsets

981_K

Metric tons of carbon dioxide equivalents offset by solar projects

The majority of New Energy Capital's investments are in the solar sector, including solar developers, solar farms, community solar programs, and solar storage. New Energy Capital's portfolio of solar projects and developers offset 981K metric tons of carbon dioxide equivalents by generating more than 1.4 TWh of clean electricity in 2016.

The CO2 offset generated by New Energy Capital's Solar portfolio is equivalent to...



Planting 25.4M trees



Energy for 104K family homes for a year



Replacing 110M gallons of gasoline



Removing 207K cars from the road for a year

Spotlight | Cypress Creek

Cypress Creek had just 46MW of solar deployed in 2015 when New Energy Capital made its first investment. After a total of four investments and follow-ons from New Energy Capital, Cypress is now the largest and fastest-growing provider of local solar farms in the US. With over 1GW of solar in the ground, Cypress Creek, with the support of New Energy Capital, generated 705K MWh of clean energy in 2016 and realized 472K MT CO₂-Eq. of corresponding GHG savings.



Biofuels Greenhouse Gas Emission Offsets

207_K

Metric tons of carbon dioxide equivalents offset by biofuels projects

Biofuels are fuels that are produced through biological processes. New Energy Capital biofuel projects produce fuels that power heavy equipment, airliners, and the United States Navy's Great Green Fleet. The fuels also replace natural gas to generate electricity. In 2016, New Energy Capital funded biofuels projects that offset 207K metric tons of carbon dioxide equivalents and 479K barrels of oil.

Spotlight | AltAir

AltAir jet fuel reduces CO₂ emissions by more than 60% compared to traditional jet fuel, while remaining price competitive. AltAir powered the equivalent of 1,100 flights from Los Angeles to San Francisco through a historic partnership in 2016 with United Airlines.



Energy Efficiency Greenhouse Gas Emission Offsets



Ygrene has a PACE asset financing capacity of \$280M in 2016

In October 2016, New Energy Capital made its first investment in the energy efficiency sector with the Ygrene Energy Fund. Ygrene is a national provider of property assessed clean energy (PACE), a financing mechanism that allows broader capital markets to invest in energy efficiency and solar energy through asset-backed securitizations.

Methodology

Where possible, NEC collects quarterly MWh generation data from its portfolio assets and investments. To calculate 2016 emissions abatement for these projects, NEC took the realized MWh generation data and applied a regionally specific, non-baseload eGRID emissions factor to yield a total CO₂ equivalent abatement amount for each project. For biofuel projects reporting generation in BTUs, NEC converted BTUs to MWhs using a technology-specific heat rate.

To calculate the 2016 emissions abatement from developer investments, NEC compiled all of the assets that had served as collateral in NEC's investment. Using the MW size, location, and capacity factor from NREL's PVWatt Calculator for each installation, NEC estimated the number of MWh's generated by each installation. For solar installations over a year old, NEC assumed a 0.5% annual degradation factor, and for installations that had become operational during 2016, the team prorated the MWh output based on the installation's COD date. NEC then applied the appropriate regional, non-baseload eGRID emissions factor to determine the total 2016 CO₂ equivalent offset.

For the portfolio companies with installations spread out across the U.S., NEC followed a similar methodology as above, but ensured that each installation used a location-specific solar capacity factor and a location-specific eGRID emissions factor.

Resources

To complete this report, New Energy Capital utilized a variety of resources from the Environmental Protection Agency (EPA), the Energy Information Administration (EIA), and the National Renewable Energy Laboratory (NREL). These include the EPA's greenhouse gas equivalencies calculator, the 2014 EPA eGRID database, the EIA's Electric Power Monthly report, and the NREL PVWatts calculator. NEC used these resources in conjunction with project and portfolio data to estimate carbon dioxide equivalent emissions offsets.

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