



# Climate and Climate Finance Definitions



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## Purpose of This Tool

The Climate and Climate Finance Definitions tool provides important terms and definitions related to climate projects and real estate finance. This overview is applicable to all roles in climate finance and helps foundations develop an understanding of climate terminology and prepare for more technical discussions with stakeholders. This tool serves as a comprehensive reference for capacity building, internal communications about organizational strategy, and external conversations regarding Community Foundation (CF) value-add.

## Climate Terms

### Climate Terms (General)

#### Clean Energy

Carbon-free energy that is produced from natural sources or processes that are constantly being replenished. Examples of clean energy sources include solar, wind, and geothermal. Distributed energy generation and storage is a subset of clean energy.

#### Energy Efficiency

The use of less energy to perform the same task or produce the same result. Energy-efficient homes and buildings, including net-zero emissions buildings, use less energy to heat, cool, and run appliances and electronics.

#### Greenhouse Gas Emissions

Emissions of greenhouse gases, defined in Section 134(c)(2) of the Clean Air Act as: carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons, and sulfur hexafluoride.

#### Energy Burden

The percentage of gross household income spent on energy costs, as defined by the Department of Energy. It is calculated by dividing the average housing energy cost by the average annual household income. A household with 6% or greater energy burden is a high energy burden household.



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| <b>Resilience</b> | Ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events, as defined by the National Academy of Sciences. |
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| <b>Adaptation</b> | Taking action to prepare for and adjust to the current and projected impacts of climate change, as defined by the Global Center on Adaptation. |
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## Climate Terms (Buildings)

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| <b>Building Decarbonization</b> | The critical goals of decarbonization are to reduce greenhouse gas emissions while simultaneously addressing housing cost burdens and improving housing quality. Decarbonization stems from more traditional concepts such as energy efficiency and resiliency. The fundamental characteristics of decarbonization include reducing energy load with high-performance envelopes and improving indoor air quality through indoor air movement; installing highly efficient, all electric equipment and appliances; and utilizing demand controls, on-site renewables, and energy storage to manage electric energy consumption. |
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| <b>Electrification</b> | Replacing technologies or processes that use fossil fuels, like internal combustion engines and gas boilers, with electrically powered equivalents, such as heat pumps and induction cooking. These replacements are typically more efficient, reducing energy demand and emissions as electricity generation is decarbonized. |
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| <b>Energy Retrofit</b> | Involves modifications to existing buildings that may improve energy efficiency or decrease energy demand. In addition, retrofits are an opportune time to install distributed generation to a building. Energy-efficiency retrofits can reduce operational costs, particularly in older buildings, as well as help attract tenants and gain a market edge. |
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## Building Climate Project Types (Non-Exhaustive)

### Building Energy / Decarbonization Project

A project that reduces building energy use and/or fossil fuel consumption.

- **Commercial**

A project serving private businesses or commercial buildings.

- **Community Facility**

A building serving the public, such as a community center or nonprofit.

- **For-Sale Housing  
(Single-Family New  
Construction)**

Newly built single-family homes intended for sale.

- **For-Sale Housing  
(Single-Family  
Rehabilitation)**

Renovation of existing single-family homes intended for sale.

- **Rental Housing  
(Multifamily New  
Construction)**

Newly built apartments or multifamily rental buildings.

- **Rental Housing  
(Existing Building  
Rehabilitation,  
Adaptive Reuse)**

Renovation or conversion of existing buildings into rental housing.

- **Small Business**

A project serving a small, locally owned business.

- **Charter School**

A publicly funded, independently operated school building.

## Climate Terms (Renewable Energy)

### Photovoltaic System (PV System)

The complete system that converts sunlight to electricity on a solar farm, from the solar arrays to the remaining necessary components like an inverter.



**Rooftop Solar**

Placement of solar panels on the rooftop of a home or business to generate renewable solar energy for that individual home or business. Rooftop solar requires adequate roof space and access to heavy sunlight, permitting and installation, and maintenance of the solar system by the home or business owner.

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**Community Solar**

A solar energy sharing program in which a solar farm (or solar garden) at an offsite location generates shared electricity. The solar farm is supported by local residents and businesses that subscribe to a portion of the solar farm. In turn, the community members receive solar credits for the solar energy generated by their subscription. The model allows locals to benefit from solar energy and support clean energy generation without taking the steps to install and maintain rooftop panels on their property.

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**Battery Storage**

Battery energy storage systems (BESS) are devices that enable energy from renewables, like solar and wind, to be stored and then released when the power is needed most.

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**Geothermal Heating and Cooling**

Technologies that harness the Earth's heat and its stable ground temperature. The three main types of technologies that take advantage of Earth as a heat source are ground source heat pumps, direct-use geothermal, and deep and enhanced geothermal systems. These heating and cooling sources can be used in residential, commercial, and industrial buildings.

## Energy Climate Project Types (Non-Exhaustive)

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| <b>Resilience Hub</b>                                              | A community facility that provides services and power during emergencies.                                                                                                     |
| <b>Renewable Energy Backup and Storage</b>                         | Batteries or other systems that store clean energy for use during outages or peak times.                                                                                      |
| <b>Solar Development</b>                                           |                                                                                                                                                                               |
| • <b>Community Solar</b>                                           | A shared solar project that provides electricity credits to multiple users.                                                                                                   |
| • <b>Direct Ownership</b>                                          | The building or organization owns the energy system outright.                                                                                                                 |
| • <b>Rooftop Solar</b>                                             | Solar panels installed on a building's roof.                                                                                                                                  |
| • <b>Solar Carport</b>                                             | Solar panels installed over parking areas.                                                                                                                                    |
| • <b>Solar Field / Utility-Scale or Small-Scale</b>                | Ground-mounted solar installed on open land, at small or large scale.                                                                                                         |
| • <b>Solar Power Purchase Agreement (PPA)</b>                      | Financial agreement where a developer arranges for the design, permitting, financing and installation of a solar energy system on a customer's property at little to no cost. |
| <b>Infrastructure Scale or Economic Development Sustainability</b> | Large-scale projects that support economic development and long-term sustainability (e.g., district energy or major facilities).                                              |

# Climate Finance Terms

## Basic Types of Energy Loans and Grants

|                                                  |                                                                                                                                                                                                                           |
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| <b>Predevelopment</b>                            | Borrower needs capital to plan and scope sustainability project(s); can be termed out or built into takeout with subsequent loan type(s) below.                                                                           |
| <b>Bridge</b>                                    | Borrower needs upfront capital that will be backfilled with incentives or rebates upon project completion.                                                                                                                |
| <b>Construction / Implementation</b>             | Borrower needs capital to install sustainability elements, with defined takeout in the form of refinancing / sale / term loan.                                                                                            |
| <b>Permanent / Term</b>                          | Green mortgage or other ongoing debt obligation (e.g., subordinate mortgage or PACE) that becomes a replacement or fixture within an existing capital stack.                                                              |
| <b>Other / Combined / Parent Entity Facility</b> | Borrower is looking for a financing entity that can support them through multiple phases of the project life cycle or wants to perform a series of sustainability projects at multiple properties within their portfolio. |
| <b>Recoverable Grant</b>                         | Funding provided upfront that must be repaid only if the project meets specified success or financial performance conditions, otherwise, it may be forgiven.                                                              |

## Basic Types of Impact Investing Fund Loans

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| <b>Mission-Related Investments (MRIs)</b> | From the endowment, market rate loans that focus on impact and returns. For example, private debt funds (e.g., housing, small business, climate, or CDFIs), private equity place-based or thematic focus, and public market thematic funds (e.g., local housing, climate, or health). |
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| <b>Program-Related Investments (PRIs)</b>           | From charitable assets, low-interest loans that focus on impact. For example, low-interest loans to nonprofits or social enterprises, recoverable grants, and loan guarantees or credit enhancements.                                                                                          |
| <b>Direct Loan Funds / Revolving Loan Funds</b>     | Direct loans from board designation, DAFs, or public / co-philanthropic capital with a local focus. For example, affordable housing loan funds, small business or BIPOC entrepreneur loan funds, climate / energy efficiency / predevelopment loan funds, and nonprofit working capital funds. |
| <b>Donor-Advised Fund (DAF) Impact Options</b>      | Alongside grantmaking, donor funds used for impact loans. For example, impact-screened investment pools, thematic DAF portfolios (e.g., climate, housing, or racial equity), and DAF-backed PRIs or loan participations.                                                                       |
| <b>Co-Investment &amp; Participation Structures</b> | Provide loans or capital with participation. For example, loan participations alongside CDFIs or banks, first-loss or catalytic capital tranches, and sidecar funds for specific initiatives (e.g., housing, climate, or workforce).                                                           |
| <b>Guarantees &amp; Credit Enhancements</b>         | Grant-like capital / equity for impact on balance sheets of partners. For example, loan guarantees for nonprofit facilities, debt service reserves, and first-loss capital in blended finance structures.                                                                                      |
| <b>Recoverable &amp; Structured Grant Products</b>  | A grant product with repayment expectations. For example, recoverable grants tied to project milestones, revenue-based repayment grants, and conditional grants that convert to loans if projects succeed.                                                                                     |



## Impact Investing Fund Development Stages

|                                           |                                                                                                                                                                                                                                                                                                                                                                                                                      |
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| <b>Strategy Concept</b>                   | Define the fund's mission, target markets, impact goals, and return profile to clarify what the fund exists to do and why.                                                                                                                                                                                                                                                                                           |
| <b>Market and Pipeline</b>                | Identify and confirm real demand and investable opportunities by validating the market and building an initial pipeline of projects.                                                                                                                                                                                                                                                                                 |
| <b>Fund Structuring and Capital Stack</b> | In the design stage, create a legal structure for the fund, including subsidiary of the foundation, on-balance sheet, impact investing vehicle, and revolving loan fund. Then identify financial products—PRIs, MRIs, long-term loans at low interest rates for construction, predevelopment, bridge financing, etc.—and existing capital stack or sources in the fund to attract capital and deploy it effectively. |
| <b>Raise Capital and Partnerships</b>     | Formalize partnerships, governance, and operating policies to launch the fund.                                                                                                                                                                                                                                                                                                                                       |
| <b>Manage and Scale</b>                   | Identify fund and invest the capital, manage the portfolio and impact, then refine and scale.                                                                                                                                                                                                                                                                                                                        |

## Climate Project Development Stages

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| <b>Concept</b>                      | The initial stage where a climate project idea is identified and evaluated at a high level for potential viability and impact.                              |
| <b>Feasibility / Early Planning</b> | Detailed analysis is conducted to assess technical, financial, and regulatory requirements while developing preliminary project designs and cost estimates. |
| <b>Site Control Secured</b>         | The project developer has obtained legal rights to use the land or location through purchase, lease, or other agreements necessary for project development. |



**Permits Underway**

The project team is actively pursuing required environmental, construction, and operational approvals from relevant regulatory authorities.

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**Construction-Ready**

All necessary permits, financing, and contracts are in place, allowing physical construction activities to begin immediately or according to the schedule.