

Types of Solar for Granite Cliff, NH Town Discussion Meeting (NHE webinar 2024)

	Rooftop Solar	Canopy Solar	Small Ground Mounted Solar Facility	Large Ground Mounted Solar Facility
Cost	\$3.46/watt - Reduces electricity cost to homeowner.	\$3.31/watt	\$2.95/watt	\$2.31/watt -The most cost-effective solar production.
Additional Land requirement	None. It is built on an already existing infrastructure.	Requires construction on previously built infrastructure (like a parking lot)	Requires <1 acre of land. Can require conversion of land.	Requires >1 acre of land. On average large solar facilities are 5 acres and some of the largest are 20 acres. Also often requires conversion of land.
Environmental Considerations	- Solar panels can sometimes confuse birds due to their reflectivity and they may fly into a panel and get injured - Lowest environmental impact since it's built on already existing infrastructure.	- Solar panels can sometimes confuse birds due to their reflectivity and they may fly into a panel and get injured - Co-benefits by shielding the ground from sun, rain and snow, reducing temperatures for cars and people. - Low environmental impact since it's built on already existing infrastructure.	- Solar panels can sometimes confuse birds due to their reflectivity and they may fly into a panel and get injured. - Easier to coordinate access to land at a smaller scale compared to large facilities.	- Highest potential environmental impact due to its large land requirement - Strip soil and vegetation during the construction process. After the panels are installed, the ground is covered with vegetation or gravel. The land is fenced off which blocks large wildlife from entering. - Solar panels can sometimes confuse birds due to their reflectivity and they may fly into a panel and get injured - Solar companies could mitigate their significant environmental impact by implementing dual-use solar (agrivoltaics, native species conservation, pollinator- friendly practices, etc.)
Equity considerations	- High installation cost could affect its distribution where only those who can afford it (high income communities) and have strong roofs can add it to their home / property, though NH has some low-moderate income solar programs as well as rooftop solar financing .	- The upfront cost of installation can be a significant limiting factor in who can afford to install this type of solar and this limits their ability to receive the co-benefits.	- Ground mounted solar has a perceived aesthetic value, where some people find them unsightly. Because of this, energy companies market and target their development towards specific communities that they feel might be more accepting of solar. This has significant equity implications regarding who is being targeted and who has the political power.	- Ground mounted solar has a perceived aesthetic value, where some people find them unsightly. Because of this energy companies market and target their development towards specific communities that they feel might be more accepting of solar. This has significant equity implications regarding who is being targeted and who has the political power.
Other considerations	- Many commercial buildings are not built to support the weight of rooftop solar systems, so the panels can't be installed on all buildings. Similarly, older roofs can't support the solar infrastructure.	- Canopies have a higher-than-average cost compared to other types of solar due to the additional labor and materials required to elevate the solar panels.	- There are land conversion considerations from the surrounding community. For example, some may argue that the land "should" remain farmland or forest or be urbanized.	- There are land conversion considerations from the surrounding community. For example, some may argue that the land "should" remain farmland or forest or be urbanized.

On March 1, 2024, the New Hampshire Department of Environmental Services (NHDES) submitted the Priority Climate Action Plan (PCAP) to the U.S. Environmental Protection Agency (EPA).

You can download a copy of the PCAP at the following NHDES website:

- [State of New Hampshire Priority Climate Action Plan \(nh.gov\)](#) or
- <https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/state-of-new-hampshire-priority-climate-action-plan.pdf>

For more information related to the development of the PCAP, please visit the following NHDES website:

- [Climate Pollution Reduction Grants | NH Department of Environmental Services](#) or
- <https://www.des.nh.gov/climate-and-sustainability/climate-change/climate-pollution-reduction-grants>