

SolarInnovate Energy Solutions

Solar Panel Network On-site Energy







Overview

How can on-site solar PV & energy storage improve sustainability?

To achieve sustainability goals while meeting the increasing electricity demands of electrification, organizations are pairing on-site solar PV generation with on-site energy storage. These systems, which are considered as "behind-the-meter" (BTM) systems, allow facilities to maximize the benefits of on-site renewable generation.

What are the benefits of an on-site solar PV system?

For the scenario represented in the graph, an on-site solar PV system allows the facility to reduce the amount of electricity drawn from the grid during the middle of the day. Increasing the amount of solar PV production on-site can provide additional cost and emission reductions and resiliency benefits for facilities.

Should solar PV production be reduced on-site?

Increasing the amount of solar PV production on-site can provide additional cost and emission reductions and resiliency benefits for facilities. However, the additional generation that can result from larger systems during peak daylight hours must be exported or managed through curtailment on-site.

Can on-site storage be used alongside solar PV?

If a utility restricts the exports from a facility to the grid, the use of on-site storage alongside solar PV can provide a solution to avoid costly infrastructure upgrades, thus increasing the feasibility of larger on-site PV installations.

What are the advantages and disadvantages of on-site solar generation?

On-site solar generation brings numerous advantages, some of which are as follows- 1. Cost Savings: By generating their own electricity on-site, individuals and businesses can reduce their reliance on the grid and save on energy costs, especially in areas with high electricity rates. 2.



How does a solar PV array affect net load?

Graph showing production from an on-site solar PV array, the charge/discharge of both a battery and thermal storage system, and their effect on the net load. The combination of storage types allows the facility to further reduce excess generation. Net Load (required from grid)



Solar Panel Network On-site Energy



Onsite Energy Technologies, Better Buildings Initiative

5 days ago · Onsite energy can encompass a broad range of technologies suitable for deployment at industrial facilities and other large energy users, including battery storage, combined heat ...

Contact Us

For catalog requests, pricing, or partnerships, please visit: https://institut3i.fr