The Value Stack Compensation for Distributed Energy Resources





REDUCE carbon footprint MANAGE solar energy

development

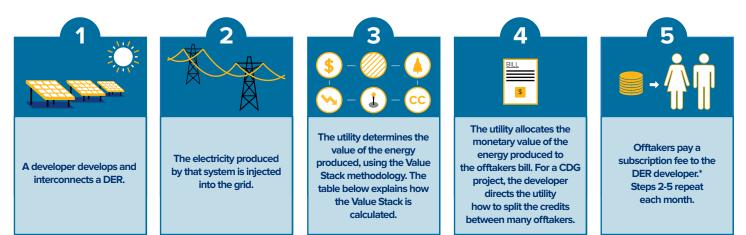
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Accurate, fair, and bankable compensation

The Value of Distributed Energy Resources (VDER), which includes the Value Stack, is a methodology or tariff used to compensate energy created by distributed energy resources (DERs). Compensation under the Value Stack is based on the actual benefits a resource provides to New York's electric grid and is in the form of bill credits. This is determined by a DER's energy value, capacity value, environmental value, demand reduction value, and locational system relief value. The Value Stack methodology applies to onsite non-residential projects larger than 750 kilowatts AC and all remote metered projects including those using a Community Distributed Generation (CDG) configuration. Eligible technologies include solar photovoltaics (PV), stand-alone and co-located energy storage, certain types of combined heat and power (CHP), anaerobic digesters, wind turbines, small hydro and fuel cells.

How the Value Stack works



*Currently, the offtaker will receive a separate bill from the developer. Under consolidated billing, the payment will be made by the utility to the developer "behind the scenes" and offtakers will only see their single electric bill.



Key ideas

- Starting in March 2017, New York State began a transition away from net metering to the Value Stack.
- The Value Stack was developed with robust feedback from utilities, project developers, and other external stakeholders to ensure an accurate and fair compensation model to provide project owners and developers with reasonable revenue certainty and bankability.
- The Value Stack compensates energy producers with monetary credits. Offtakers (customers receiving the bill credits from a DER) will see a dollar credit on their electric bill.

| Value Name | Description | Eligible DERs |
|---|--|--|
| Energy Value (LBMP) | LBMP is the day-ahead wholesale energy price as determined by <u>NYISO</u> . It changes hourly and is different according to geographic zone. | All technologies: PV, storage, CHP, digesters, wind, hydro, and fuel cells. |
| Capacity Value (ICAP) | ICAP is the value of how well a project reduces New York State's energy usage during the most energy-intensive days of the year. Developers can choose from three payout alternatives and most ICAP rates change monthly.* | All technologies receive ICAP. Dispatchable technologies (stand-alone storage, CHP, digesters, and fuel cells) will receive Alternative 3. |
| Environmental Value (E) | E is the value of how much environmental benefit a clean kilowatt-hour brings to the grid and society. The E value is locked in for 25 years.** | PV, wind, hydro, and storage charged exclusively from PV or wind energy. Stand- alone storage is not eligible at this time. |
| Demand Reduction Value (DRV) | DRV is determined by how much a project reduces the utility's future needs to make grid upgrades. DRV is locked in for 10 years.** | All technologies. |
| Locational System Relief Value (LSRV) | LSRV is available in utility-designated locations where DERs can provide additional benefits to the grid. Each location has a limited number of MW of LSRV capacity available. The LSRV is locked in for 10 years.** | All technologies. Project must be on a utility-specified substation. |
| Community Credit (CC) | CC is available on a limited basis to encourage the development of Community Distributed Generation (CDG) projects. CC is the successor to the Market Transition Credit (MTC) and is similar in structure. The CC is locked in for 25 years.** PV projects in utility territories that have fully expended their CC may be eligible for the Community Adder – an upfront incentive administered by NY-Sun. | Available for CDG projects including PV and digesters. Wind, hydro, and fuel cells receive CC at a derated value. Not available for stand-alone storage or CHP. |

How the Value Stack is calculated

*For more information on the three ICAP alternatives, view the most recent Value Stack presentation slides on the Value Stack Resources page at <u>nyserda.ny.gov/value-stack-resources</u>

**Projects will lock in their E, DRV, LSRV, and CC values when they make their 25% upgrade payment to the utility. If no utility upgrade costs are required, the values are locked in when the interconnection agreement is fully executed.

Find additional information and access resources to help you.

- Solar Value Stack Calculator Better estimate compensation for specific solar jobs: nyserda.ny.gov/value-stack-calculator
- Stand-alone Storage Value Stack Calculator Estimate compensation for stand-alone storage projects in Con Edison's service territory: nyserda.ny.gov/storage-technical-assistance
- Value Stack Historic Data and Rates Find compiled rates updated monthly by the New York State Department of Public Service (DPS): nyserda.ny.gov/vder

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