

# Shining Rewards

## The Value of Rooftop Solar Power for Consumers and Society

*Recent value-of-solar analyses show that net metering provides fair compensation for rooftop solar owners.*

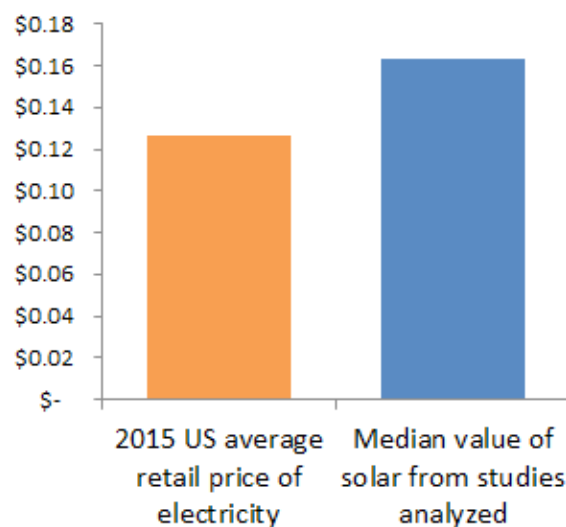
### The Value of Rooftop Solar Power

More American households and businesses are “going solar” every year. And by doing so, they’re delivering benefits to all of us.

The new report *Shining Rewards: The Value of Rooftop Solar Power for Consumers and Society* reviewed 16 recent analyses of solar energy’s value to ratepayers, finding that in all but four cases, the value of solar energy exceeded the average residential retail electricity rate. In other words, people who install solar power on their homes or businesses often provide greater benefits to ratepayers, society and the environment than they receive in compensation through programs such as “net energy metering.”

Among the benefits of rooftop solar energy are:

- **Avoided Energy and Capacity Costs:** Solar energy systems reduce the amount of electricity utilities must generate or purchase, and the need for investment in new power plants.
- **Reduced Energy Losses:** About \$20 billion worth of electricity is lost each year as heat in transmission from power plants to our homes. By producing electricity where it is used, solar panels reduce these losses.
- **Reduced Financial Risk:** Solar panels reduce exposure to sudden swings in the price of fossil fuels or wholesale electricity.
- **Avoided Environmental Compliance Costs:** Adding solar energy to the grid allows local utilities and municipalities to avoid some costs of compliance with environmental regulations.



Recent value-of-solar analyses find that energy produced by rooftop solar is more valuable than the retail rate of electricity.



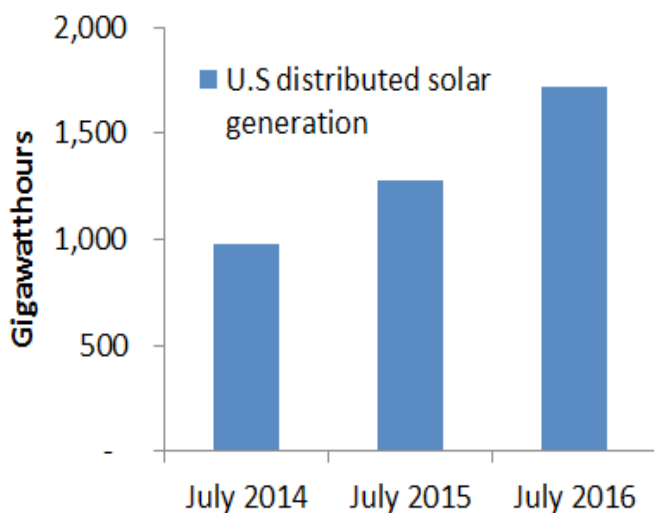
Rooftop solar reduces the need for buying energy from and investing in fossil-fuel power plants.

# Solar Energy Is Reducing Global Warming Emissions

Rooftop solar's value to society increases considerably when taking into account benefits beyond the grid. Distributed solar energy, including rooftop solar, now averts more than 8.4 million metric tons of greenhouse gas pollution every year in the U.S. – equivalent to taking nearly 2 million passenger vehicles off the road. Rooftop solar installations are also helping grow the economy, while cleaning the air and paving the way toward a clean energy future. Solar cost-benefit studies that take environmental and economic benefits into account tend to show that policies like net metering are an even better deal for ratepayers.

## A Clean Energy Future Depends on Strong Solar Policies

To prevent the worst impacts of global warming, we need to transition away from fossil fuels and toward 100 percent clean energy. To get there, we need good policies, including policies that compensate people who invest in solar for the benefits they deliver to society. Public officials should support and strengthen net metering and other programs to encourage rooftop solar, alongside other policies to rapidly reduce carbon emissions.



U.S. distributed solar generation has increased by more than 75 percent since 2014.

## Utilities Are Leading Attacks on Rooftop Solar

In recent years, utilities have undertaken a series of attacks against net metering and other policies that allow solar homeowners to get fair compensation for their investment, including:

- Nevada's biggest utility, NV Energy, led a successful campaign to dramatically weaken the state's net metering policy, resulting in slowed rooftop solar growth, and solar industry layoffs.
- Since the Arizona utility Salt River Project instituted a demand charge on its net metering customers equaling approximately \$29 per month, the utility's territory has seen minimal rooftop solar growth.
- As the state of California worked to update its net metering policy, major utilities PG&E, SCE, and SDG&E submitted proposals that would have slashed net metering compensation for solar owners. Policymakers ultimately decided to keep strong net metering policy in place.

These utilities often claim that rooftop solar owners are subsidized by other ratepayers through net metering and other policies. Yet the majority of solar cost-benefit analyses reviewed for *Shining Rewards* show that, in fact, solar owners provide a net benefit to fellow ratepayers – while three of the four studies showing otherwise were commissioned by utilities.



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