

Net Metering

New Energy & New Investment for New York State



Net metering can save New Yorkers money.

However, New York currently has one of the most restrictive policies in the Northeast when it comes to allowing consumers to sell excess electricity back to the grid, or “net meter.”

Net metering measures the difference between electricity bought from a utility and electricity produced by a consumer. Under net metering, excess clean electricity produced by a consumer can flow into the grid, spinning the meter backward. This provides the customer with full retail value for the electricity they produce themselves.

While New Yorkers with small-scale residential systems can already net meter, commercial businesses cannot, even though the commercial and industrial sectors are responsible for two-thirds of the state’s electricity usage.¹

An expanded net metering policy will make additional power available during times of peak demand, reduce stress on transmission lines, and save New Yorkers from the pollution generated by traditional power plants and diesel generators.

New York’s restrictive net metering policy is the biggest impediment to renewable energy expansion in the state. It limits my company, which installs solar electric systems, and other installers to mostly small residential systems, whereas our out-of-state competitors can include larger and non-residential systems in their growth. Furthermore, while commercial customers in New York are demanding solar systems, the lack of net metering makes them impractical. This is not good for industry or job creation in New York.

*Jeff Irish
Hudson Valley Clean Energy, Inc.*

Net metering encourages clean energy investment and development.



Net Metering Encourages Clean Energy Development

Net metering provides consumers with incentives to invest in clean energy. Net metering allows customers to receive full value for the electricity they produce without installing expensive battery systems to store excess power or a second energy meter to keep track of electricity produced. This is important because it directly affects the pay back period for the investment. Once installed, many systems will pay for themselves in less than a decade and will then go on to produce cost-free power for another 15 years or more, greatly reducing long-term energy costs.²

Net metering will help New York meet rising energy demand. According to the New York Independent System Operator, without a reduction in energy demand New York will need to produce an additional 400 MW of power each year to meet projected increases. By encouraging on-site clean energy production, net metering can help meet new demand without building new power plants.

Net metering will help reduce our reliance on imported fossil fuels and keep our energy dollars at home. More than half of New York's electricity is produced by imported fossil fuels. As the largest source of industrial air pollution, power plants burning oil, gas, and coal produce emissions that jeopardize our health and natural heritage. Net metering will diversify our energy mix and reduce our dependence on these imported fuels funneling money out of state.



Growing Businesses, Creating Jobs

Neighboring states with progressive net metering policies are benefiting from a booming renewables industry creating high-paying jobs. Prior to increasing its net metering capacity limit to 2 MW five years ago, New Jersey had three solar companies. Today, the state is home to more than 100 solar power companies and has increased the number of installed solar systems five-fold.³

Net metering will make the grid more stable.

Generating power on-site helps reduce stress on the state's aging distribution and transmission infrastructure. For example, during the summer of 2006, the additional power from net-metered on-site generation could have helped to meet increased peak energy demand while reducing reliance on diesel generators. Net metering is the most efficient, simple and cost-effective method of capturing and making use of clean electricity produced during these periods.

Net metering will grow the clean energy industry and create high-quality jobs. Business leaders statewide have identified our restrictive net metering law as one of the biggest impediments to renewable energy development in New York. Instead of funneling dollars out of state for fossil fuel imports, products and industries can be developed in state, adding to our economy and the tax base.

Saving Money & Energy Across the U.S.

More flexibility means more clean energy. Forty states and the District of Columbia offer some form of net metering to utility customers. New York should join states such as New Jersey and California that are allowing all customers, including commercial and industrial consumers, to net meter and increase the size of the clean energy systems eligible. Increasing system size limits will also benefit New York homeowners and farmers already permitted to net meter on a limited basis.

States that have increased the maximum customer-generator capacity limit are reaping the benefits in the form of growing industries that are producing jobs while helping to conserve our natural resources.

	New York	New Jersey	California
Eligible Technology	Photovoltaics ♦ Biogas digesters ♦ Wind	Solar thermal electric ♦ Wind ♦ Fuel cells ♦ Photovoltaics ♦ Landfill gas ♦ Biomass ♦ Hydroelectric ♦ Tidal energy ♦ Geothermal electric ♦ Anaerobic digestion ♦ Wave energy	Photovoltaics ♦ Landfill gas ♦ Wind ♦ Fuel cells ♦ Anaerobic digestion
Size Limits	Photovoltaics-10 kW ♦ Residential wind-25 kW ♦ Agricultural wind-125 kW ♦ Biogas digesters-400 kW	All systems- 2 MW	1 MW (10MW for as many as three biogas digesters)
Enrollment Limits	PV-0.1% (of utility's 1996 demand) ♦ Wind-0.2% (of utility's 2003 demand) ♦ Biogas-0.4% (of utility's 1996 demand)	None	2.5% of a utility's peak demand ♦ Statewide limit of 50 MW for biogas digesters
Sectors Allowed	Residential ♦ Agricultural	Residential ♦ Commercial	Residential ♦ Commercial ♦ Industrial

Source: DSIRE www.dsireusa.org

Putting the numbers in perspective:⁴

A 10 kilowatt (kW) system is adequate for most homes and farms. Fifty to 100 kW systems allow consumers, including small- to medium-sized businesses and schools, to benefit. One MW+ systems allow large commercial operations or manufacturing plants the opportunity to net meter.

Net metering lets clean energy pay for itself. According to the Public Policy Institute of New York State, the average overall cost of electricity in New York is the second highest in the nation, after Hawaii; commercial users of electricity pay an average of 43 percent more than businesses in other states.⁵

Thanks to advances in clean energy technologies, commercial-scale installations are ready to help relieve the burden on the power grid that leads to blackouts and lessen our reliance on dirtier forms of power, such as small-scale electricity generators.⁶ Expanding net metering will allow New York businesses to generate their own clean power, helping to grow their bottom lines and protect our environment.

Small Investment, Big Benefits

In Farmingdale, NY, Fala Marketing's 1.01 MW solar system is expected to produce 20% of the company's energy needs. According to Fala, over the next 25 years the company could save as much as \$12 million in energy costs.⁷

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What is Net Metering?

Net metering measures the difference between the electricity bought from a utility and the amount produced by a consumer. Under net metering, excess electricity produced by a consumer's clean energy system can flow into the grid, spinning the meter backward. This provides the customer with full retail value for all of the electricity produced.

Energy Savings & Community Benefits

A 250-kW wind turbine installed at an elementary school in Spirit Lake, Iowa, provides an average of 350,000 kWh of electricity per year. Under Iowa's net metering law, excess electricity produced by the school is fed back into the local utility system, earning the school district more than \$25,000 since 1998. The district added another 750-kW turbine in 2001 (AWEA).

"The wind turbine at our company allows us to predict a portion of our energy costs 25 to 30 years into the future. An expanded net metering law would make it cost effective to do a larger portion, or all of our energy needs, renewably."

Bob Bechtold
Harbec Plastics, Inc.



Photo courtesy of Bob Bechtold

Spurring Innovation & Industry

To meet the future demand for skilled workers in the renewables industry, several of New York's colleges and universities are conducting cutting-edge research and creating new programs. Groups such as the Renewable Energy Network of Entrepreneurs in Western New York (www.renew-ny.org), New Energy New York (www.neny.org), and Alliance for Clean Energy New York (www.aceny.org) have also formed to support renewable energy companies and policies that will establish the state as a leader in these technologies.⁸

Helping New York Meet Federal Standards

As part of the Energy Policy Act of 2005, all public electric utilities are required to offer net metering on request to all of their electricity customers. Utilities have three years to implement this requirement. Restrictive policies in New York may fail to meet these criteria.

For more information

Environmental Advocates of New York
www.eany.org

New York State Energy Research and Development Authority
www.powernaturally.org

U.S. Department of Energy
www.eere.energy.gov/greenpower/markets/netmetering

Alliance for Clean Energy New York
www.aceny.org

DSIRE - Database of State Incentives for Renewable Energy
www.dsireusa.org

