Pennsylvania's Solar Share

MANDATED SOLAR PV INSTALLATIONS
IN THE COMMONWEALTH OF PENNSYLVANIA

The Commonwealth of Pennsylvania recognizes the value and potential of solar photovoltaics (PV) to provide reliable, emissions-free, distributed electricity. As a result, the Pennsylvania General Assembly passed a law, Act 213 of 2004, requiring Pennsylvania's utilities to acquire a percentage of their electricity from solar photovoltaics over the next fifteen years and beyond (see chart below).

- Utilities may meet their mandated solar PV requirements by acquiring bundled electricity along with solar renewable energy credits (S-RECs) or by simply purchasing S-RECs from solar PV projects. In either case, a long-term contract for S-RECs creates a revenue stream that can be used to finance solar PV installations. Utilities are able to recover the cost of S-REC purchases from their customer rate base, thus creating a certain, risk free revenue stream to support solar PV installations in the Commonwealth of Pennsylvania.
- Pennsylvania's solar mandate, what we refer to as our "solar share," is among the largest in the United States and will require the installation of over 860 MW of solar PV in the next 15 years.
- The Pennsylvania solar share mandates the following amount of electricity generation from solar photovoltaics:

Year	Generation Requirement (MWh)	Estimated Capacity (MW)
2007 (1)	1,981	2
2008 (2)	4,673	4
2009 (3)	10,029	8
2010 (4)	19,525	16
2011 (5)	33,758	28
2012 (6)	55,241	46
2013 (7)	88,605	74
2014 (8)	149,173	124
2015 (9)	261,400	218
2016 (10)	463,906	387
2017 (11)	556,365	464
2018 (12)	659,321	549
2019 (13)	773,151	644
2020 (14)	898,445	749
2021 (15)	1,036,024	863

* Presumes a current availability factor of 1,200 kWh per kW per year

PENNSYLVANIA RENEWABLE ENERGY/SOLAR HIGHLIGHTS

> Pennsylvania's groundbreaking Alternative Energy Portfolio Standard requires that 8% of the electricity sold at retail in the Commonwealth of Pennsylvania come from renewable resources by 2021, including 0.5% from solar photovoltaics.

> Pennsylvania provides strategic and immediate access to the largest mandated solar photovoltaic market in the United States. Pennsylvania and surrounding states – Maryland, Delaware, New Jersey, and New York each have large solar photovoltaic requirements in their Renewable Portfolio Standards. By 2021, Pennsylvania alone will contribute 860 MW.

> Pennsylvania is at the center of a robust renewable energy market. The first utility scale wind energy project installed east of the Mississippi was located in Southwestern Pennsylvania. Pennsylvania continues to be a leader in utility-scale wind with 293 MW of installed capacity, with approximately 1,000 MW in the planning queue. In Pennsylvania alone, Platt's – a leading energy market analyst – projects the development of 4,000 MW of wind energy to meet Pennsylvania's Alternative Energy Portfolio Standard requirements.

> Pennsylvania's state government is leading by example, with nearly 30% of its electricity needs coming from renewable energy sources.

> The Pennsylvania Department of Environmental Protection annually provides over $20 million in grants for alternative energy projects. Loans, loan guarantees, and additional grant opportunities are also available through the Pennsylvania Department of Community and Economic Development on a project-by-project basis with a specific focus on manufacturing opportunities. The bottom line is, the Commonwealth of Pennsylvania will put together highly competitive packages to attract renewable energy manufacturers to our state.

> Legislation providing rebates for residential and commerical solar PV and solar thermal systems is now pending before the Pennsylvania General Assembly.

> The Pennsylvania Department of Community and Economic Development offers low-interest financing programs, as well as access to capital markets through revenue bond financing to help manufacturers locate or expand in Pennsylvania.

> Gamesa Corporation and Conergy AG subsidiaries have chosen Pennsylvania to locate their North American headquarters. Gamesa has operations at four locations in Pennsylvania and, through partnerships with Pennsylvania's wind developers and utilities, is actively pursuing hundreds of megawatts of wind installations in the Commonwealth. Conergy, meanwhile, has its North American headquarters in Pennsylvania, along with its financing and engineering and installation subsidiaries.

FUELING ENERGY SAVINGS

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