Table 4.1. RPS Compliance by State

State[30]	Compliance Year	Target (Class I) (Class II)	Compliance Achieved Through		Credits Banked for Future Compliance
			RECs	ACPs	
Connecticut	2004	1.0% - 301,000 MWh	301,000 MWh		
		3.0% - 903,000 MWh	903,000 MWh		
	2005	1.5% - 465,000 MWh	465,000 MWh		
		3.0% - 929,000 MWh	929,000 MWh		
	2006	2.0% - 591,000 MWh	488,651 MWh	102,349 MWh $5,629,220	
		3.0% - 887,000 MWh	861,000 MWh	26,000 MWh $1,430,000	
New Jersey	2005	.74% - 532,973 MWh	527,160 MWh		
		.01% - 5,714 MWh (Solar)	5,714 MWh	2,640 MWh $792,132	
	2006	.983% - 834,832 MWh	845,702 MWh	19 MWh $950	
		.017% - 10,450 MWh (Solar)	10,723 MWh	163 MWh $48,900	
	2007	2.037% - 1,697,054 MWh	1,340,428 MWh	492 MWh $24,600	
		.0393% - 32,742 MWh (Solar)	31,541 MWh	1,231 MWh $369,300	
New York[32]	2006	1,121,247 MWh	582,000 MWh		
	2007	2,326,171 MWh	1,921,562 MWh[33]		
	2008	4,767,994 MWh	824,550 MWh[34]		
Pennsylvania	2007	1.4987% - 21,784 MWh (Tier I)	21,784 MWh		
		.0013% - 26 MWh	26 MWh		

State[30]	Compliance Year	Target (Class I) (Class II)	Compliance Achieved Through		Credits Banked for Future Compliance
			RECs	ACPs	
Maine	2000	30% - 3,529,000 MWh	3,529,000 MWh		
	2001	30% - 3,532,000 MWh	3,532,000 MWh		
	2002	30% - 3,308,000 MWh	3,308,000 MWh		
	2003	30% - 3,361,000 MWh	3,361,000 MWh		
	2004	30% - 3,615,000 MWh	3,615,000 MWh		
	2005	30% - 3,598,000 MWh	3,598,000 MWh		
	2006	30% - 3,436,000 MWh	3,436,000 MWh		
Maryland	2006	1.0% - 525,000 MWh	525,000 MWh		
	2006	2.5% - 1,313,000 MWh	1,313,000 MWh		
	2007	1.0% - 434,171 MWh,	433,592 MWh	579 MWh $11,580	
	2007	2.5% - 1,085,419 MWh	1,083,970 MWh	1,449 MWh $21,735	
Massachusetts	2003	1.0% - 498,344 MWh	559,181 MWh[31]	181 MWh $9,050	60,353 MWh
	2004	1.5% - 750,954 MWh	444,680 MWh	265,424 MWh $13,645,448	61,147 MWh
	2005	2.0% - 1,031,449 MWh	644,849 MWh	367,858 MWh $19,566,367	19,531 MWh
	2006	2.5% - 1,253,600 MWh	938,772 MWh	322,625 MWh $17,786,316	1,661 MWh
	2007	3.0% - 1,529,359 MWh	1,606,396 MWh	10,920 MWh $623,750	80,559 MWh

Figure 3.3 Incremental Installed Solar Capacity, 1998–2007

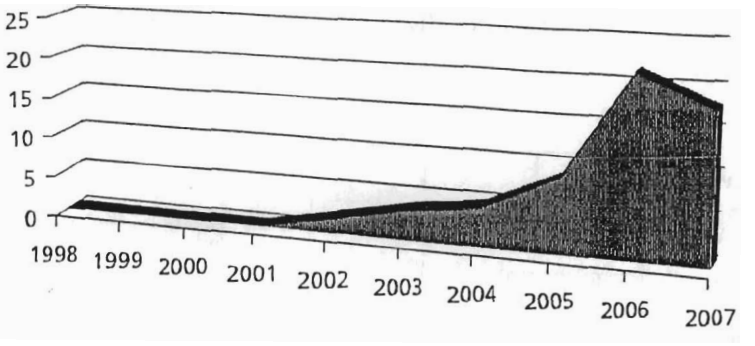
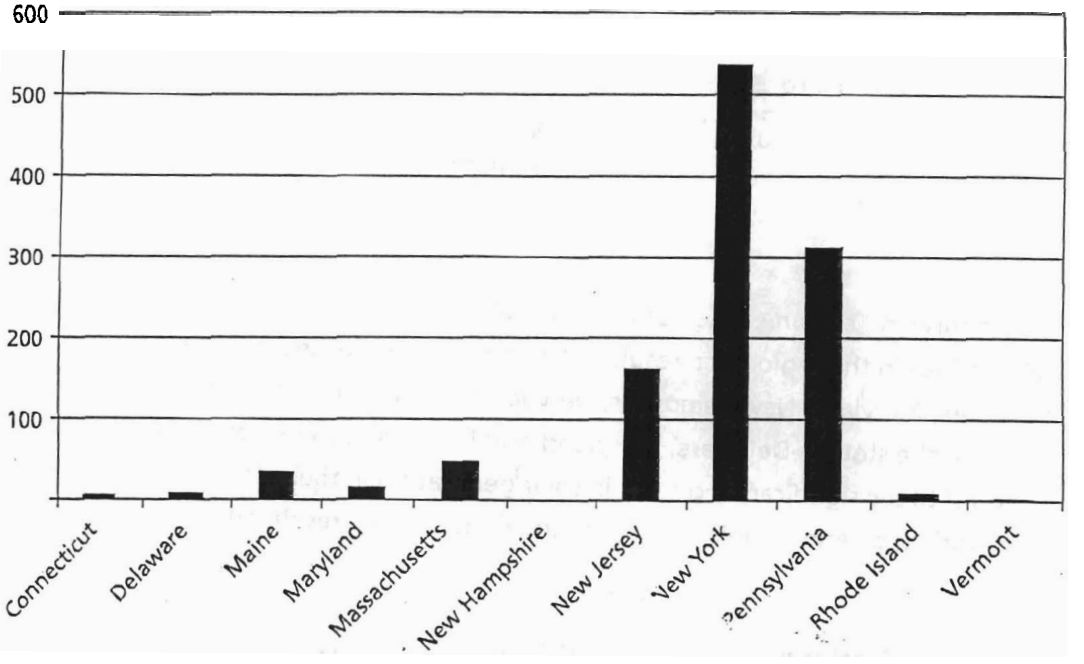


Figure 3.4. Total Incremental Renewable Energy Capacity Additions (MW), 1998–2007



New England RPS Demand Growth by State, 2007-2015

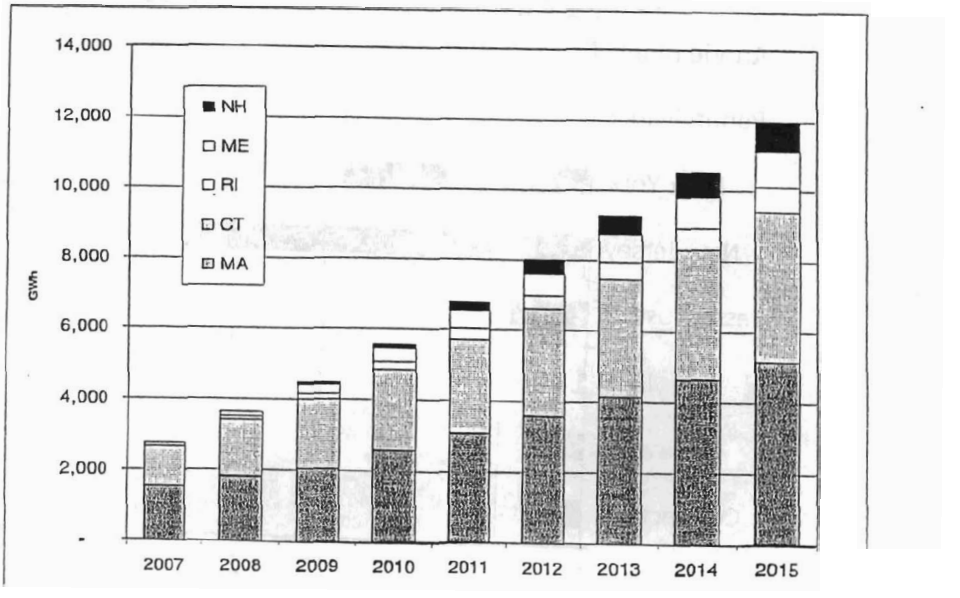
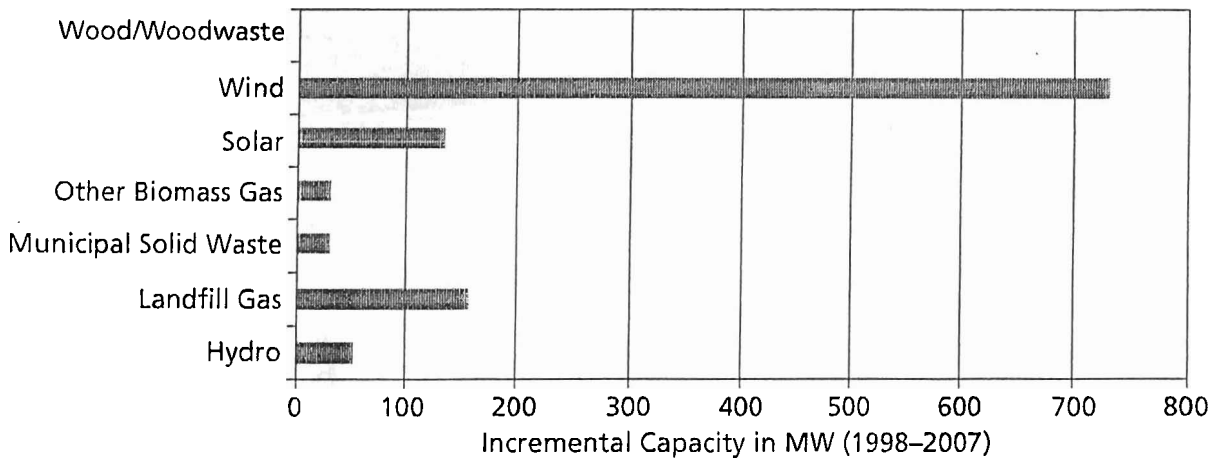


Figure 3.1. New Renewable Generation (MW) in the Northeast and Mid-Atlantic States (1998-2007)



Going forward, customer-sited and small commercial solar PV facilities stand to benefit significantly from RPS policies in the region as a result of the growing use of technology specific set-asides in six states—Delaware, Maryland, New Hampshire, New Jersey, New York and Pennsylvania—and the District of Columbia. Three of the states—Delaware, Maryland and New Hampshire—established their set-asides in 2007 and have yet to see significant increases in solar generation in their states. However, three states—New Jersey, New York and Pennsylvania—have already begun to see results from their solar policies. This is especially

Figure 3.2 Total Installed Solar Capacity by State (MW)

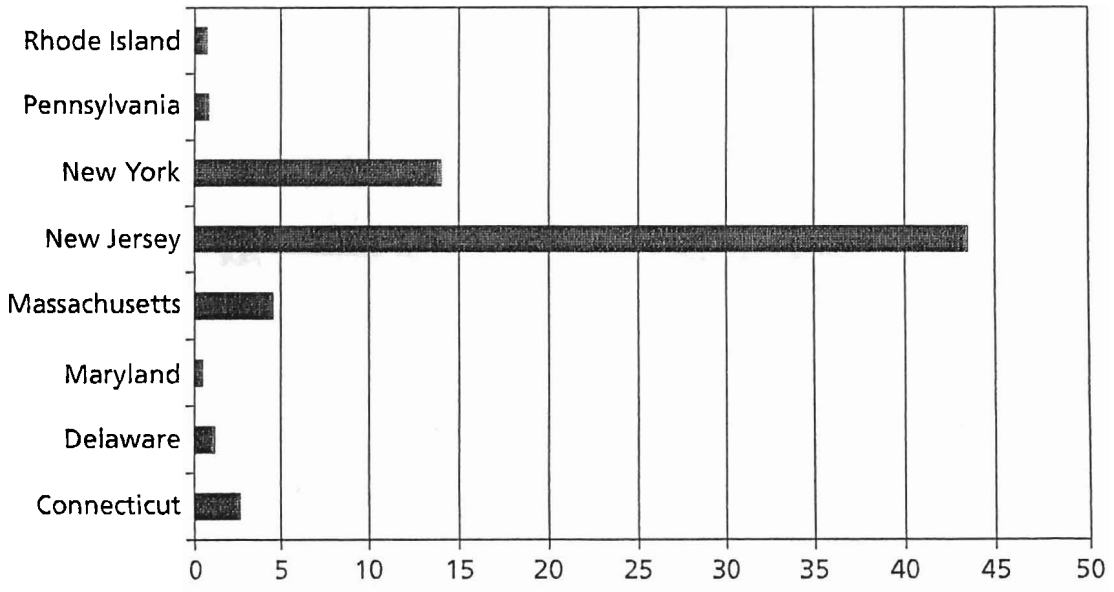
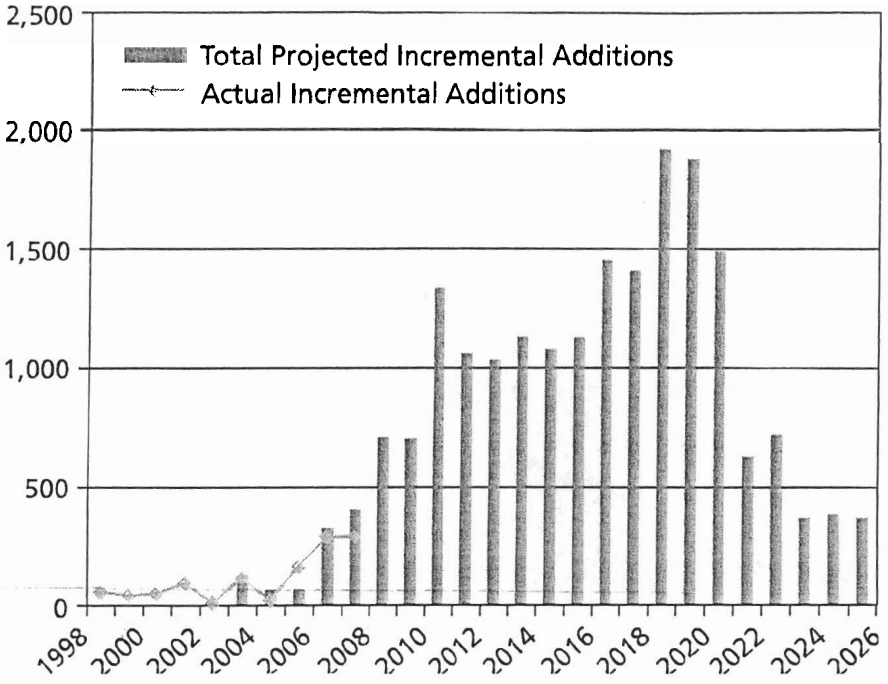
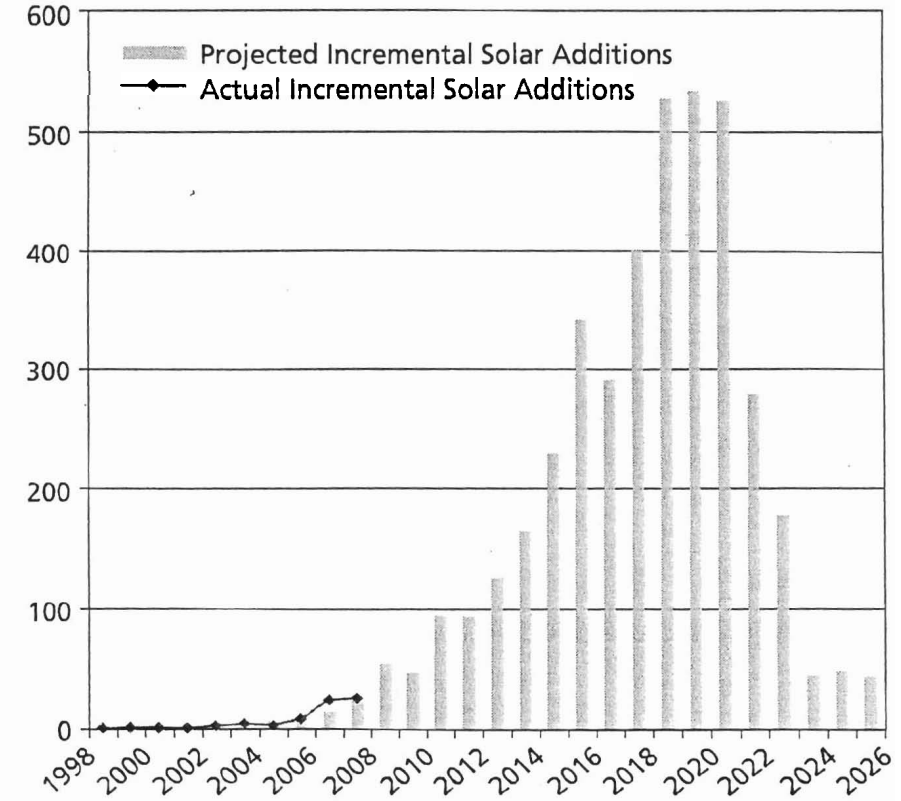


Figure 4.2. Projected vs. Actual RPS Incremental Capacity Additions (MW) in the Northeast and Mid-Atlantic Regions



Data Source: Lawrence Berkeley National Laboratory, 2008.

Figure 4.3. Projected vs. Actual Incremental Solar RPS Capacity Additions (MW) in the Northeast and Mid-Atlantic Regions



Data Sources: Interstate Renewable Energy Council and Lawrence Berkeley National Laboratory, 2008.

Observations

As illustrated in Figure 3.2, New Jersey, New York and Pennsylvania are leading the states in new renewable generation capacity additions. Their success in this area may be attributed to various factors. Certainly, a major factor is that all of these states have established fairly aggressive RPS targets. However, all three states also have deployed dedicated clean energy funds to support innovative strategies to encourage renewable energy generation even before an RPS was adopted in their respective state. It also is important to note that historically these states have contributed more than half of the total installed renewable generation capacity in the region; their leadership over the past decade in using the RPS and other support for renewable generation serves to continue that trend.

New Jersey. Almost half of New Jersey's new renewable generation capacity since 1998 is from Tier 1 resources, the majority of which has been installed since 2004 and may be directly attributed to the solar set-aside in the state's RPS. Solar in New Jersey has also been aided by well-designed net metering and interconnection programs, solar rebates, and a supportive clean energy fund.

New York. There are a number of factors that contribute to New York's position as the state with the highest amount of new renewable generation capacity installations in the region. Even before the RPS was adopted in New York, NYSERDA administered a number of programs to encourage renewable energy generation in New York, such as production incentives for new wind projects, rebates and loans for solar systems and various sales and property tax incentive measures.

The New York RPS central procurement approach has allowed the state to invest in the development of new utility-scale renewable energy projects through the use of long-term contracts for renewable energy credits. Removing this investment risk has prompted greater confidence for developers to invest in the New York renewable energy market.

Finally, renewable generation capacity installed in New York serves RPS markets outside of the state. For example, RECs from New York generators are being used for compliance in Maryland and Massachusetts as is illustrated in Figures 4.1 and 4.6.

Pennsylvania. While Pennsylvania's RPS is still in the earlier stages of implementation, the state has seen great success in developing its wind resources, which account for more than half of the 312 MW of installed capacity since 1998.

The reason that Pennsylvania has been successful in developing their wind resources is early action by some LSEs in the state to acquire wind energy in anticipation that a RPS would be enacted, and strategic investments and production incentive auctions by Pennsylvania's public benefit funds, in particular the Sustainable Development Fund of Pennsylvania (SDF). Pennsylvania's relatively streamlined siting process, at least compared to other states in the northeast, also played a role. Pennsylvania relies on local siting and does not have a state siting process.

The Pennsylvania approach indicates the value of complementing an RPS with a clean energy fund. The clean energy funds in Pennsylvania have played a major role in helping to bring wind projects to fruition through production incentive auctions, whereby wind developers compete for the lowest five-year production incentive from funding that the funds made available. As of the end of 2007, seven of the utility-scale wind farms operating in Pennsylvania—representing 257 MW—had received financial support from the SDF.[27]

Regional Markets. However, it does not take an aggressive RPS target for a state to realize increases in their renewable generation capacity. For example, until the recent changes, Maine's RPS was not designed in a way to encourage new renewable capacity additions in the state. In spite of that, Maine had the fifth highest capacity additions in the region. The reason is that RECs from Maine renewable generation facilities were being used for compliance with other state RPS policies. In fact, Maine has been the largest supplier of RECs in the Massachusetts RPS compliance market.

Likewise, a 22 MW wind farm in Pennsylvania was constructed to supply RECs for the New York RPS, and as is illustrated in Figure 4.3, Pennsylvania is the largest supplier of RECs for compliance with the Maryland RPS.

The experiences from Maine, New York and Pennsylvania illustrate how individual state RPS policies have a regional impact on the development of new renewable generation. The states are not isolated and their individual policies have an impact beyond their borders.