

Massachusetts Renewable Energy Portfolio Standard (RPS)

Program Status and Overview of Section 83 Long Term Contracts

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***Massachusetts
Wind Working
Group Meeting***

**Mount Wachusett
Community
College**

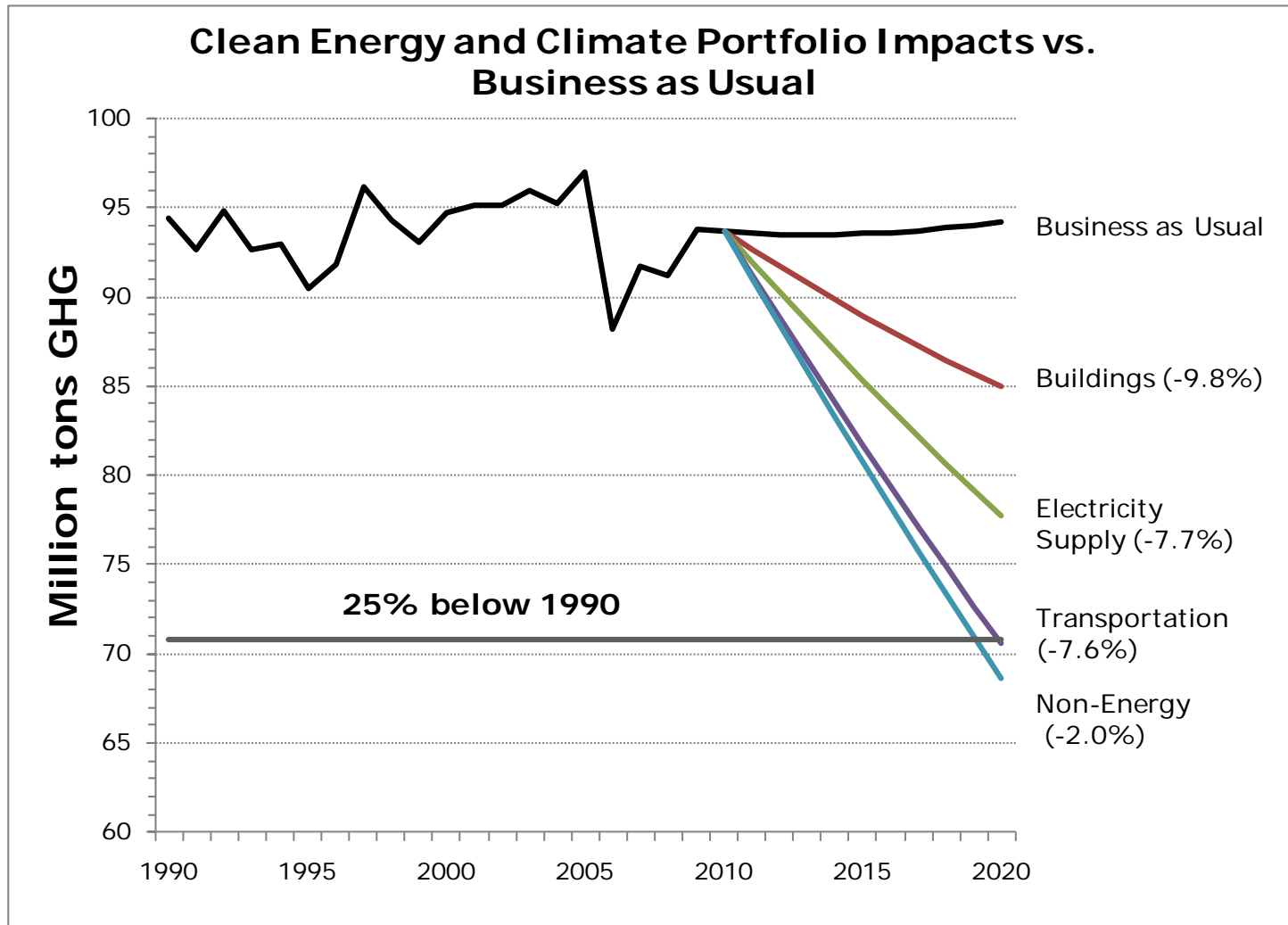
May 11, 2012

DOER Mission

Creating a Cleaner Energy Future for the Commonwealth

- Ensure deployment of all cost-effective energy efficiency
- Maximize development of clean energy resources
- Create and implement energy strategies to assure reliable supplies and improve the cost of clean energy relative to fossil-fuel based generation
- Support Massachusetts' clean energy companies and spur Massachusetts' clean energy employment

Clean Energy and Climate Plan for 2020



Massachusetts Department
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\$18B Energy Dollars Flow Out of MA

We spend \$22B per year on energy; 80% leaves MA

MA Energy Imports 2008	\$B
Fuel Oil (heating, diesel)	\$5.0
Gasoline	\$9.2
Jet Fuel	\$1.4
Other Petroleum	\$0.9
Natural Gas	\$5.2
Coal	\$0.3
Total	\$22 B
Per Household Average ~ \$4,600	

Oil & Natural Gas
- Canada

Natural Gas
- U.S. Gulf Coast

Oil & Natural Gas
- Middle East

Natural Gas
- Caribbean

Coal - Colombia

Oil - Venezuela



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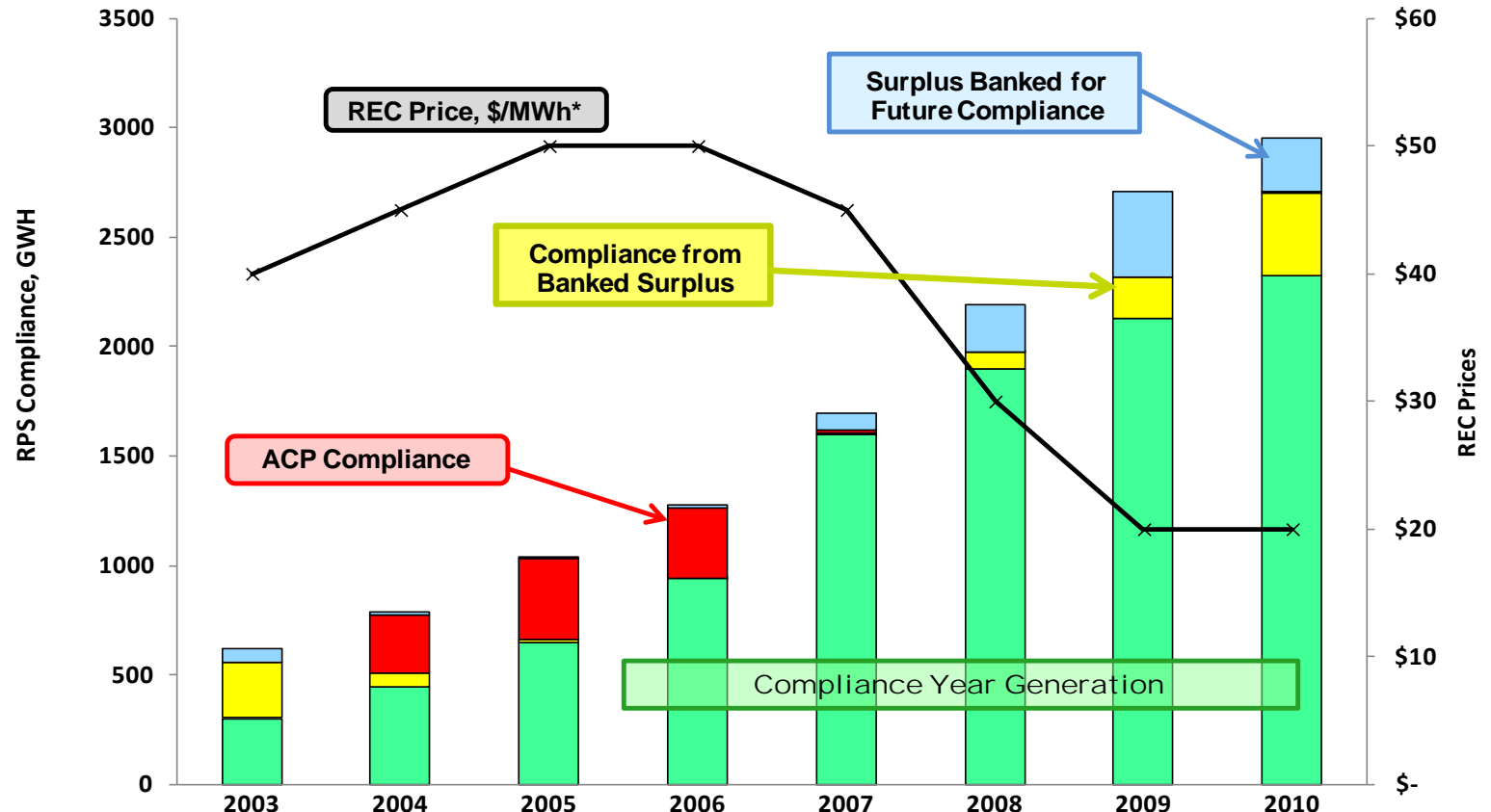
Renewable Energy Framework

- **Patrick/Murray Administration Goals**
 - Solar: 250 MW installed by 2017 / Wind: 2000 MW installed by 2020
- **Renewable Energy Portfolio Standards (RPS/APS)**
 - Creates demand (Minimum Standard) and provides additional revenue (Renewable Energy Certificate) for qualified generation
 - Establishes an obligation of all Massachusetts Retail Electric Suppliers to provide a percent of their load with renewable energy generation
 - Strategy is to “green up” the ISO-NE grid. Generation from throughout New England and adjacent control areas is eligible
- **Green Communities Act**
 - Net Metering, Long Term Contracts and utility-owned solar PV
- **Mass. Clean Energy Center (MassCEC)**
 - Provides targeted funding programs to support development of RE supply in Massachusetts.



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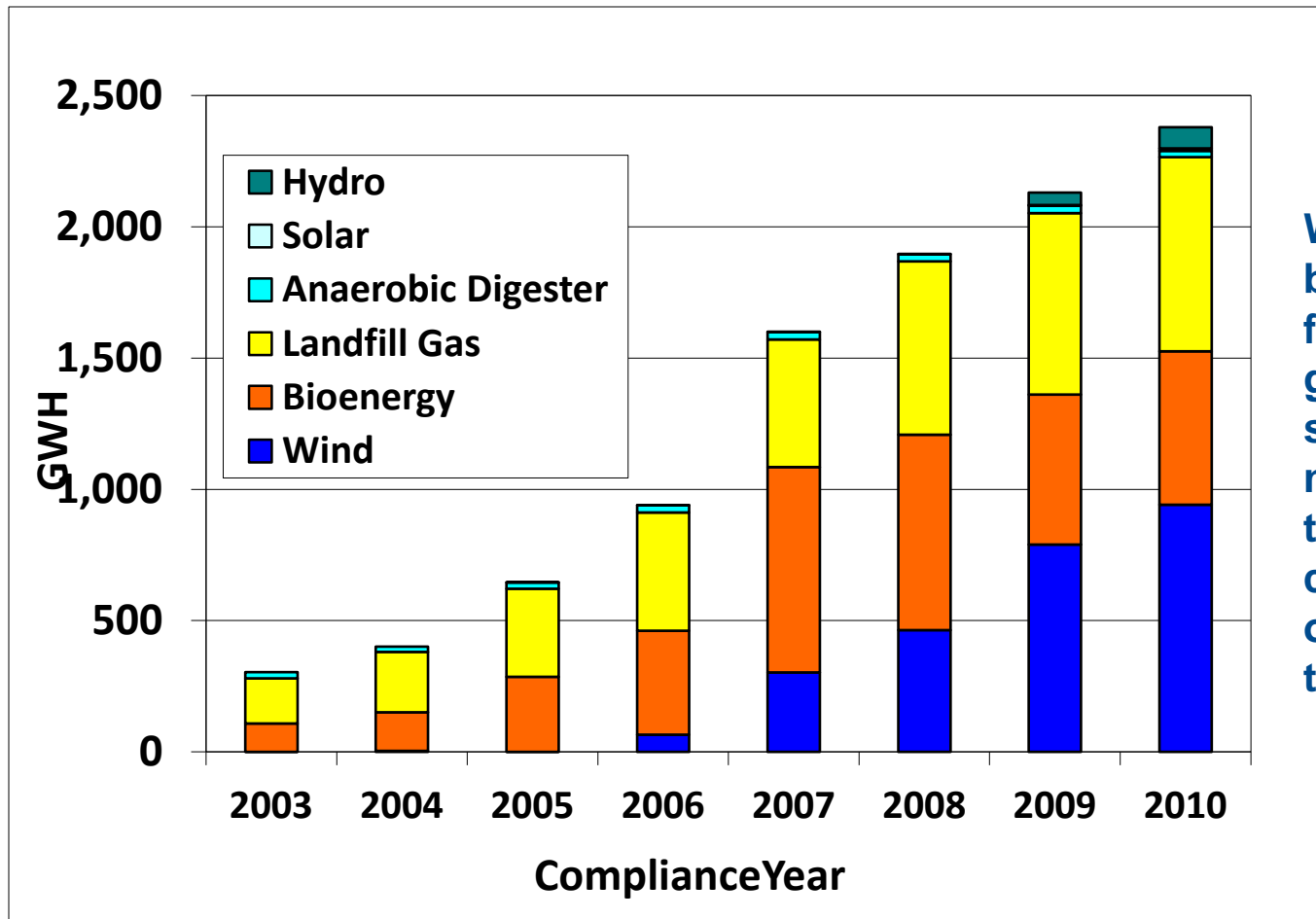
RPS Class I Compliance & REC Prices



	2003	2004	2005	2006	2007	2008	2009	2010
Surplus Banked	61	20	1	9	81	211	386	241
ACP Compliance	0	265	368	323	11	1	0	4
Compliance from Banked	255	61	20	2	7	81	190	381
Compliance Year Generation	304	445	645	939	1600	1896	2130	2324
REC Prices (approx.)	\$40	\$45	\$50	\$50	\$45	\$30	\$20	\$20

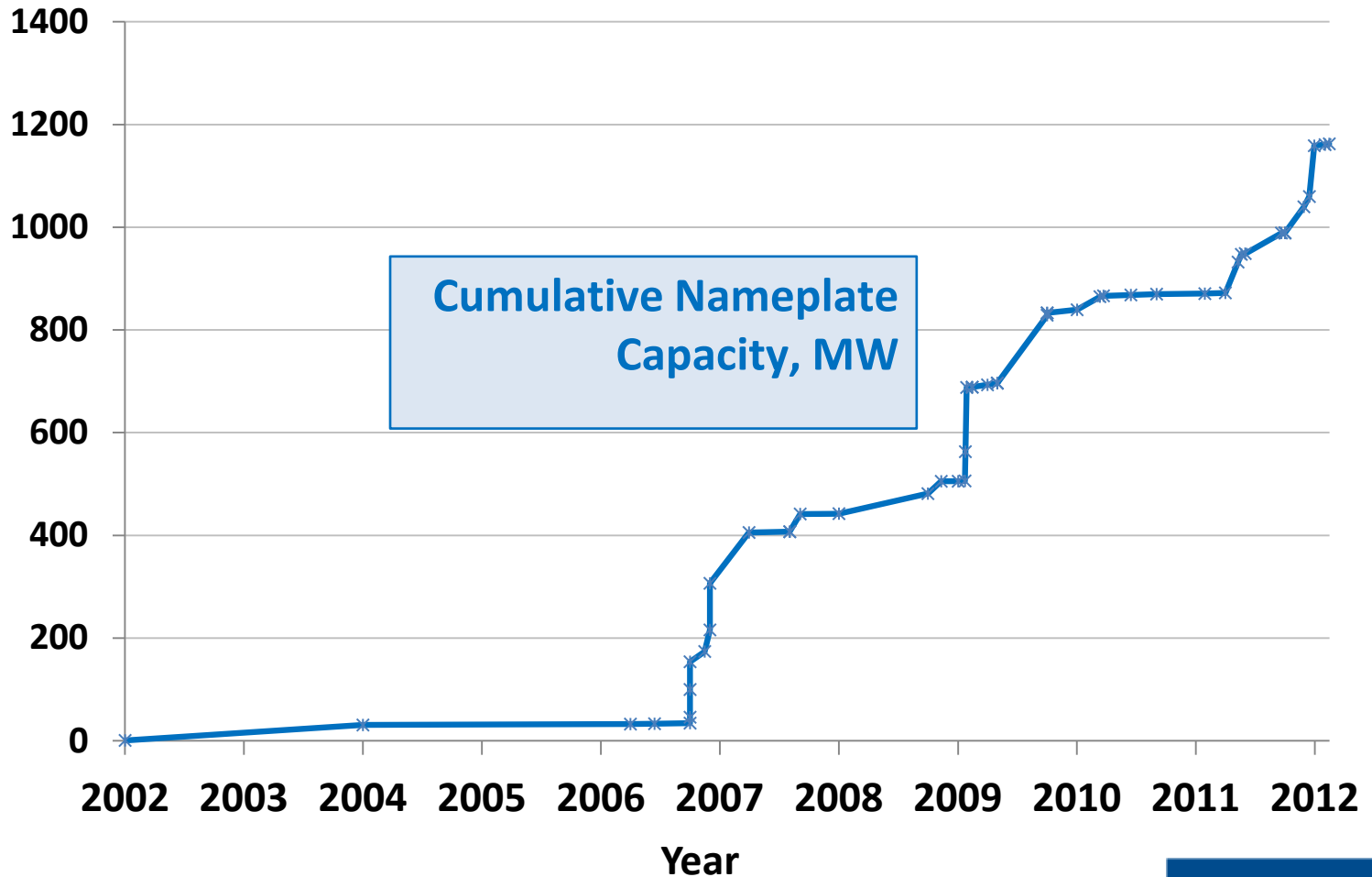
*from NREL Report

RPS Class I Compliance & REC Prices



Wind has been the fastest growing new supply, and now provides the largest contribution of any technology.

MA RPS Qualification – Wind Capacity



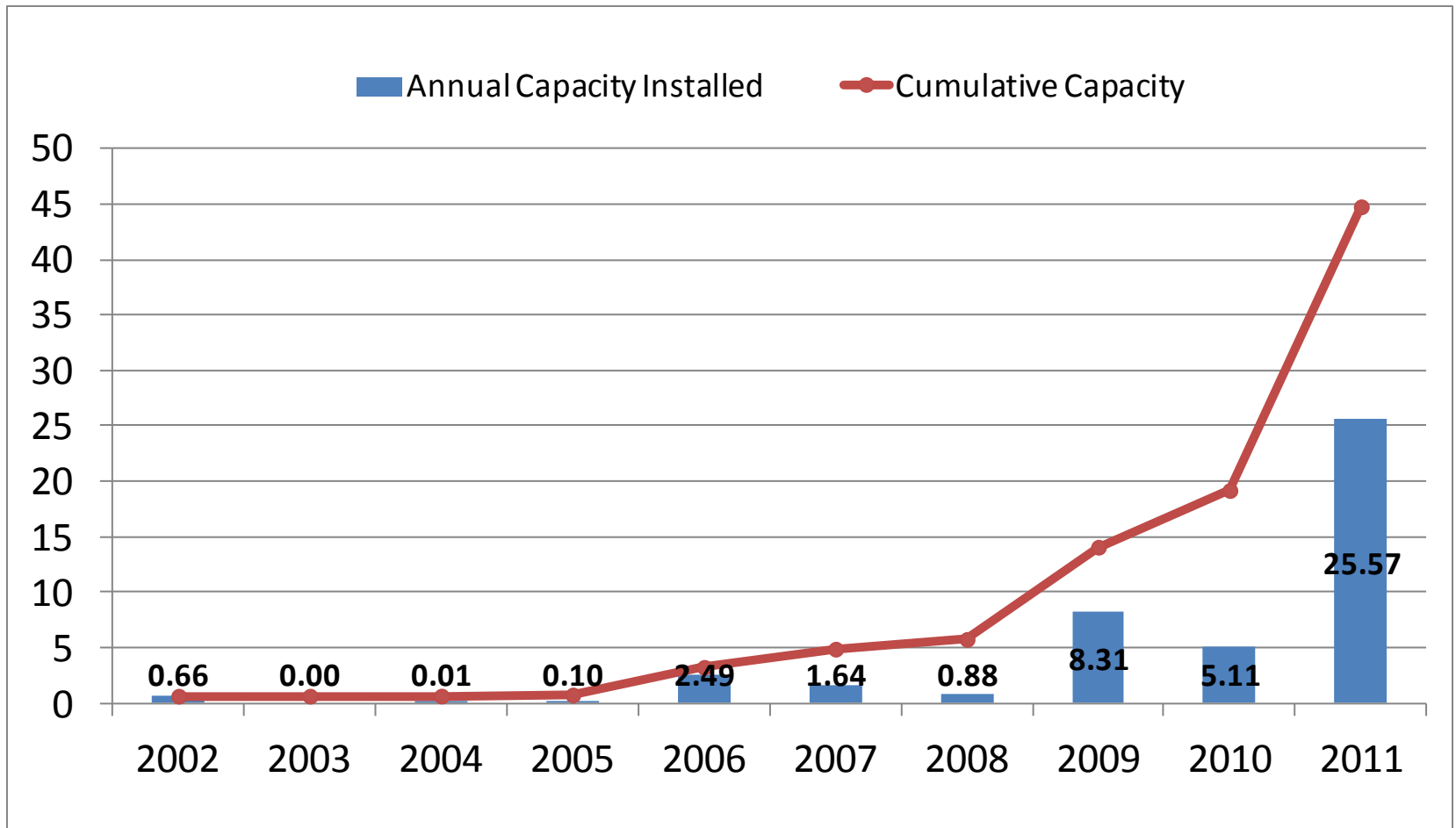
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Creating A Cleaner Energy Future For the Commonwealth

MA RPS Wind Qualification: 2010 - present

Project	Location	Capacity, MW	RPS Effective Date
DCAM Wind Aggregation	Winthrop MA	6.1	1/1/2010
Stetson Wind II	ME	25.5	3/12/2010
Town of Falmouth - Wind 1	Falmouth MA	1.65	3/23/2010
Notus Wind I	Falmouth MA	1.65	6/15/2010
Templeton Wind Turbine	Templeton MA	1.65	9/2/2010
Berkshire East	Charlemont MA	0.9	1/28/2011
Town of Portsmouth WTG	Portsmouth RI	1.5	4/1/2011
Rollins Wind Plant	Lincoln ME	60	5/10/2011
Berkshire Wind Power Project	Hancock MA	15	5/20/2011
Ipswich Wind Farm 1	Ipswich MA	1.6	6/1/2011
Sheffield Wind Plant	Sheffield VT	40	9/20/2011
Nantucket Wind 100	Nantucket MA	0.1	10/1/2011
Allen Farm Wind	Various MA	0.1	10/1/2011
Barnstable WWTP Wind	Barnstable MA	0.2	10/1/2011
Record Hill Wind	Roxbury ME	50.6	11/28/2011
Spruce Mountain Wind	Bryant Pond ME	20	12/15/2011
Granite Reliable Wind Project	Coos County NH	99	12/30/2011
Lightolier Wind I	Fall River MA	2	2/1/2012
Town of Falmouth - Wind II	Falmouth MA	1.65	2/14/2012
	Total Qualified	329	2010-present

Installed Wind in Massachusetts



The Patrick-Murray Administration set a goal to have 2,000 MW of wind energy installed in Massachusetts by 2020. The above figures represent the cumulative amount installed as of December 1, 2011.

Green Communities Act: Section 83 LTKs

Section 83 renewable energy project core requirements

- Commercial operation date on or after January 1, 2008
- Qualified by DOER for RPS Class I
- Be determined by the DPU to:
 - provide enhanced electricity reliability within the Commonwealth;
 - contribute to moderating system peak load requirements;
 - be cost effective to Massachusetts electric ratepayers over the term of the contract;
 - where feasible, create additional employment in the Commonwealth.

Modifications resulting from TransCanada lawsuit

- The geographic limitation on eligible facilities was eliminated through DPU regulation
- The requirement that additional employment be created “in the Commonwealth” was eliminated through DPU regulation



Section 83 LTKs: Outcomes

Utility	Contracted Projects	Capacity, MW	State	Approximate Portion of 3% of Load Target
NStar	Hoosac Wind	28.5	MA	1.6%
	Groton	48	ME	
	Blue Sky	32.4	ME	
	Cape Wind (contract pending approval)	129	MA	>1.5%
WMECO	Noble Passadumkeag	37.5	ME	3%
Unitil	Stillwater B Hydro	2.2	ME	3%
National Grid	Cape Wind	234	MA	3%

- All wind projects, except for Stillwater B Hydro

Thank you!

Questions?