

Creating A Greener Energy Future For the Commonwealth

MA Energy Future

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Commissioner

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DOER Mission

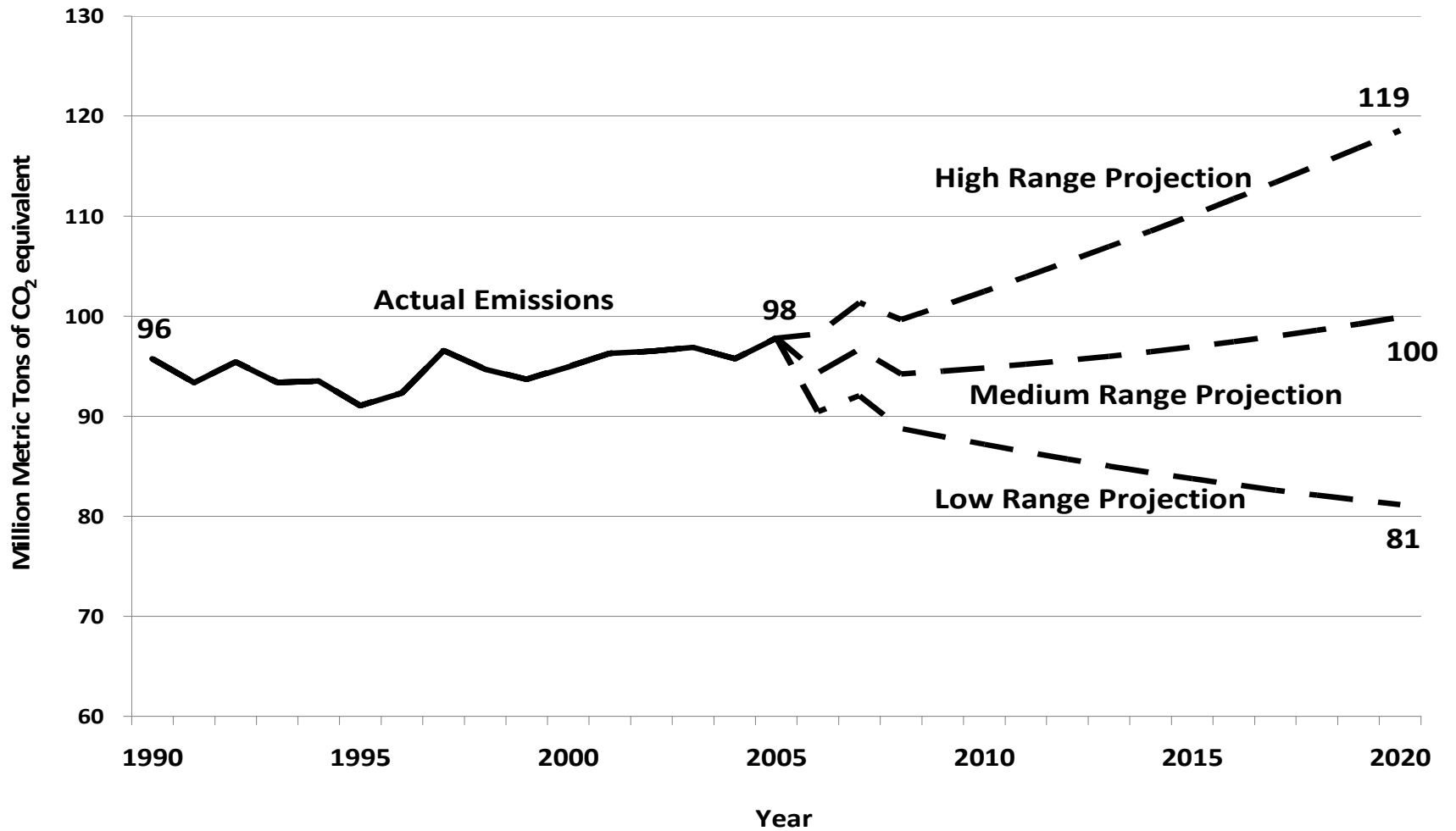
Creating a Greener Energy Future for the Commonwealth - economically and environmentally, including:

- Achieving all cost-effective energy efficiencies,
- Maximizing development of greener energy resources,
- Creating and leading implementation of energy strategies to assure reliable supplies and improve relative cost, and
- Supporting clean tech companies and spurring clean energy employment.

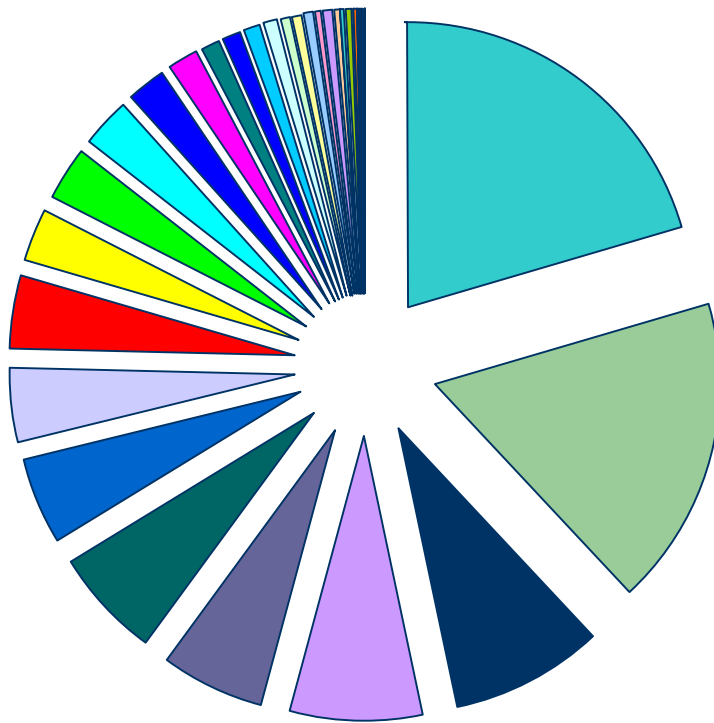
MA Initiatives

- Executive
 - LBE
 - 35% reduction by 2020
 - Decoupling
 - RGGI
 - Funding efficiency expansion
 - Renewables
 - PV: 250 MW by 2017
 - Wind: 2000 by MW 2020
 - ZNEB
 - Performance based outcomes
 - CERT/Energy Leaders
 - competitions
 - MEPA
- Legislation
 - Green Jobs
 - Clean Energy Center
 - Energy Efficiency Innovation Institute
 - Ocean Management
 - Clean Energy Biofuel
 - Green Communities
 - Building Codes
 - Inspector Training
 - Least cost procurement
 - Community challenge grants
 - Renewables/net metering
 - Global Warming Solutions
 - 80% GHG reduction by 2050

Massachusetts Proposed 1990 Baseline and 2020 BAU Projection



RGGI Auctions



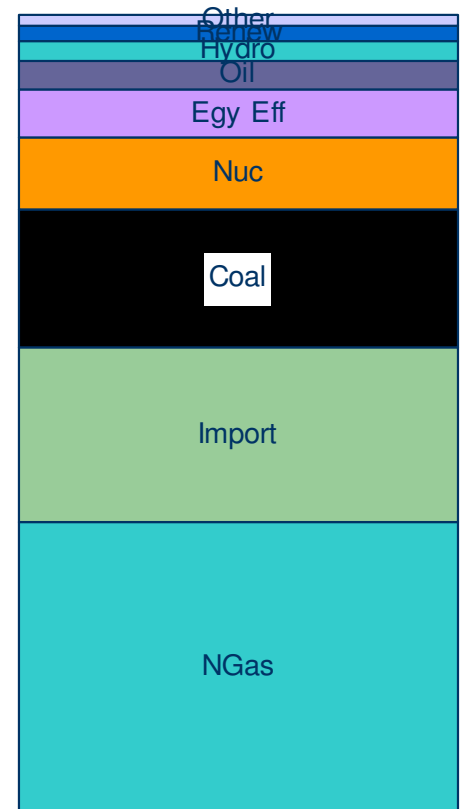
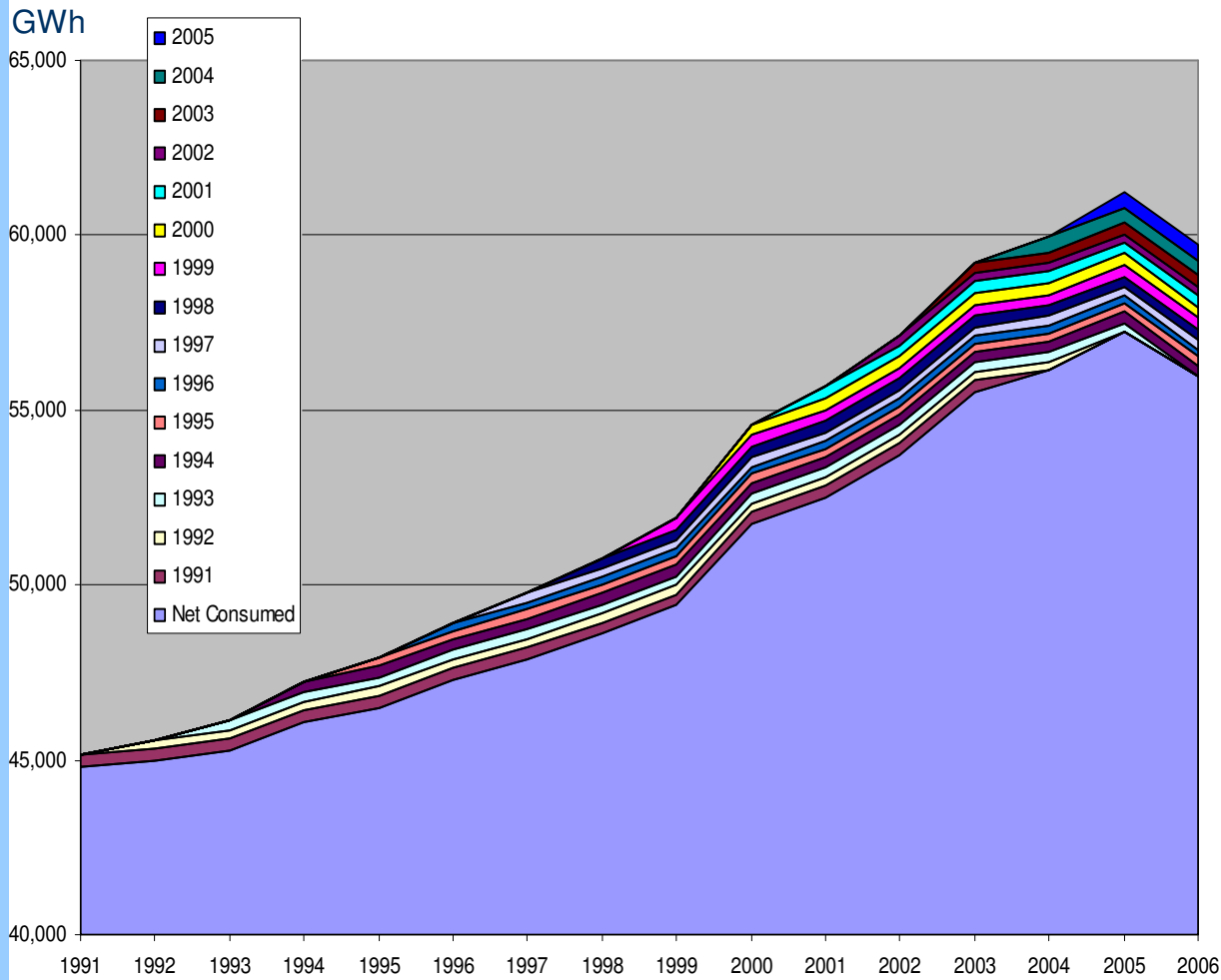
Awarded Allowance
Distribution

- September 2008: 6 states
 - 12.5 million 2009 allowances offered
 - \$ 3.07 clearing price
 - \$ 38.6 million proceeds

- December 2008: 10 states
 - 31.5 million 2009 allowances offered
 - \$ 3.38 clearing price
 - \$ 106.5 million proceeds

- March 2009: 10 states
 - 31.5 million 2009 allowances offered
 - \$ 3.51 clearing price
 - 2.2 million 2012 allowances offered
 - \$ 3.05 clearing price
 - \$ 117.2 million proceeds

Results: 3,764 GWh Efficiency 2006



Net Zero Energy Buildings

“Less energy usage isn’t enough, We have to set our sights not higher, but lower – all the way to zero.” Governor Patrick

Task force recommendations that would:

- issue specifications for the first state-owned Zero Net Energy building by January 1, 2010;
- specify an interim standard for state owned construction that is significantly more stringent than current
- point the way toward broad marketability of Zero Net Energy residential and commercial buildings by 2020, and universal adoption of Zero Net Energy buildings for new construction by 2030.

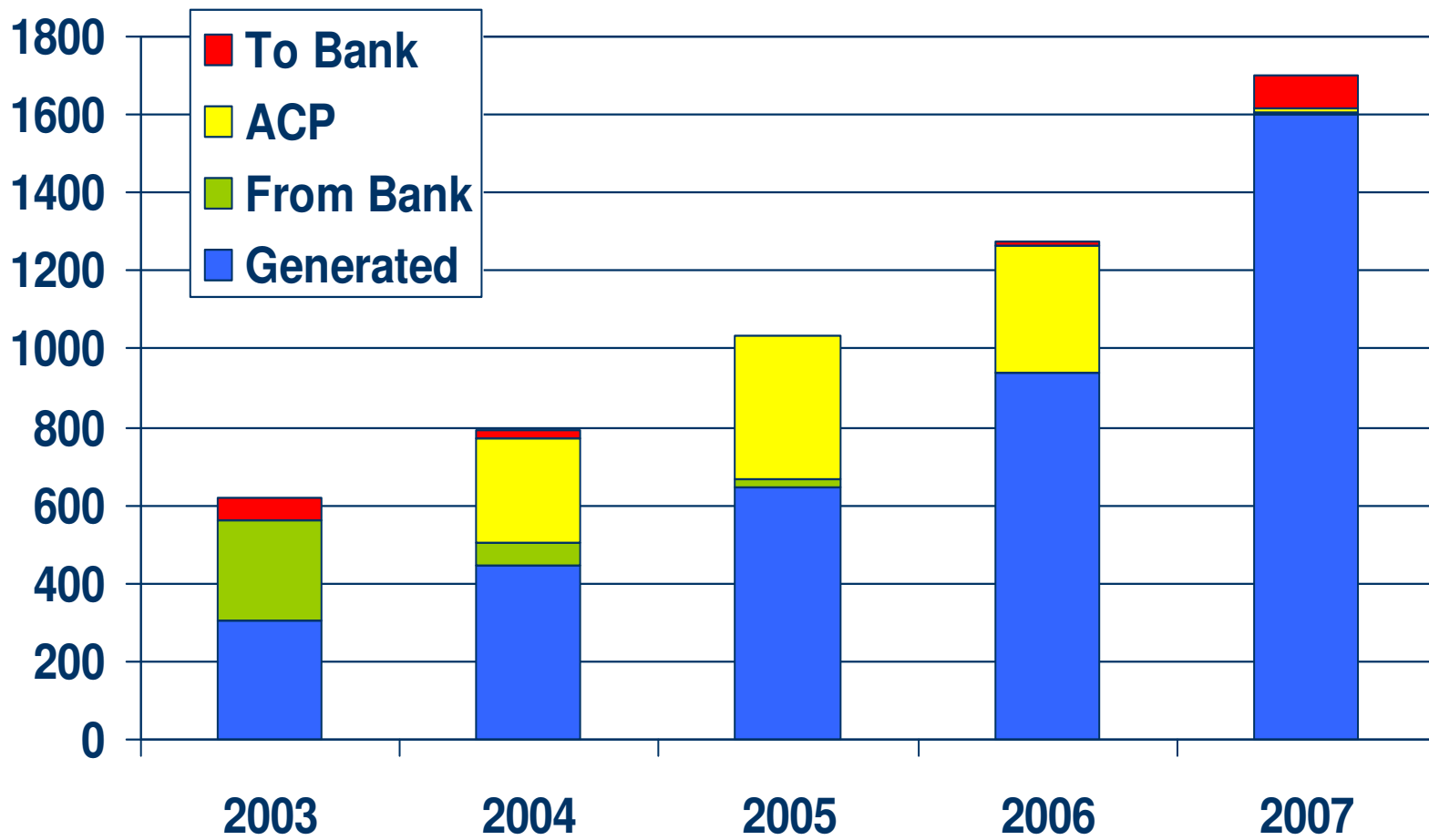
“With integrated planning and design, energy-efficient buildings do not have to cost more to build than the status quo,”
Deborah Rivers, Perkins+Will, a leading sustainable design firm.
In fact, green buildings save money over time.”



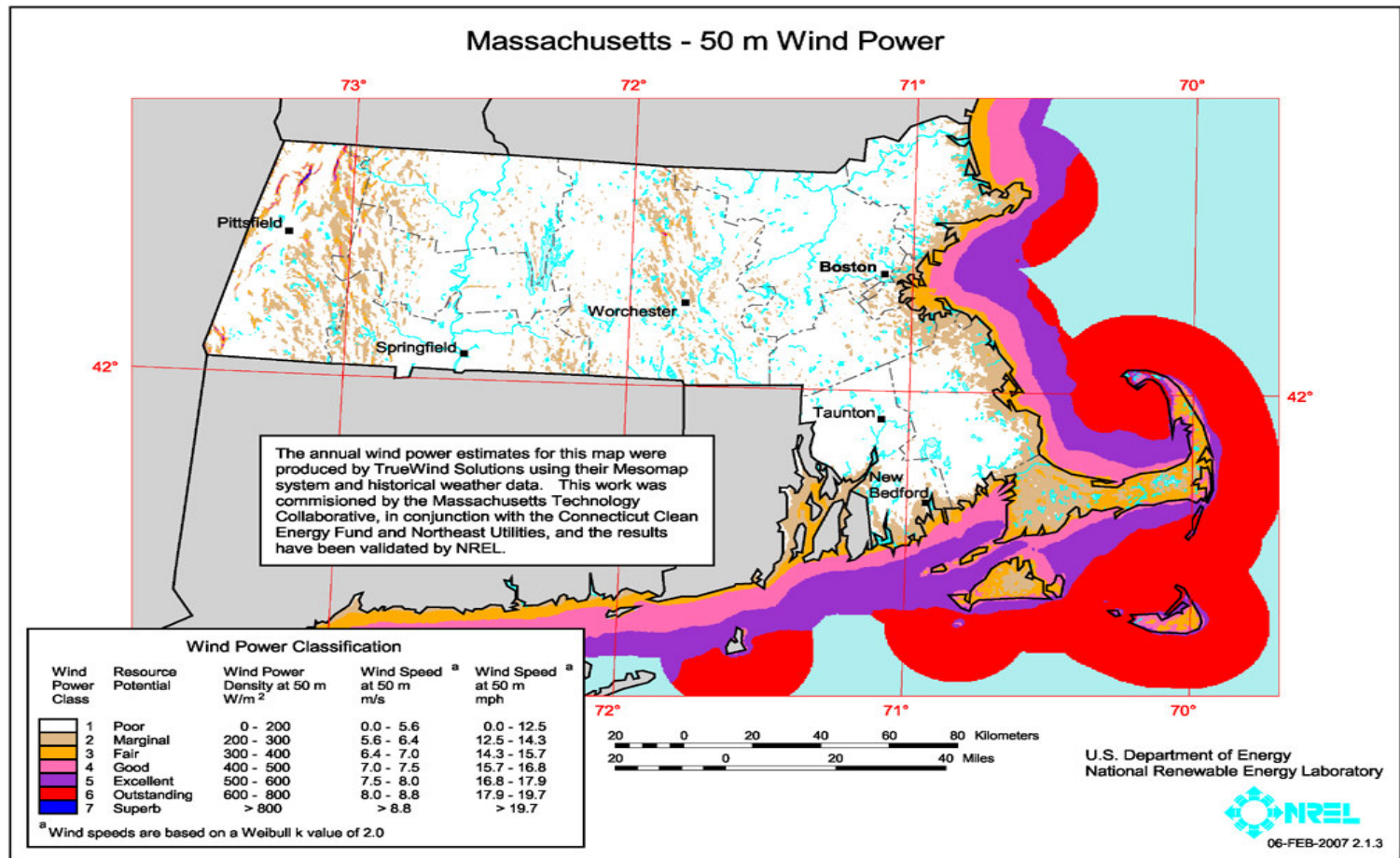
Commonwealth Solar

- Enable MA PV market to grow ~40% per year to achieve **250 MW by 2017**
- First installment: \$68 million over 4 years – 28MW
- Streamlined non-competitive rolling rebate
- Rebate level ~40% of PV system (can be 20% to 60)
- Launch on January 23, 2008
- 2007 cumulative capacity: 5.2 MW
- First year accomplishments
 - \$22 million awarded; 7.2 MW; 539 projects
 - Installers and contractors tripled from 51 to 154

RPS meeting targets



Wind Resources



Outcomes

A new greener world order:

- Much more energy efficient economy
 - Businesses, institutions, communities, homes
 - No longer optimizing a fixed efficiency spend
 - Now spending whatever makes economic sense
- Significantly increased renewables
 - Building off success
 - Adding important elements
- Strong economic growth