

**Biomass Policy Development in
Massachusetts**
RPS Rulemaking

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***Biomass
Sustainability and
RPS Programs***

***RPS Collaborative
Webinar***

**Clean Energy Group
&
Clean Energy States
Alliance**

Primary Drivers for Clean Energy Policy

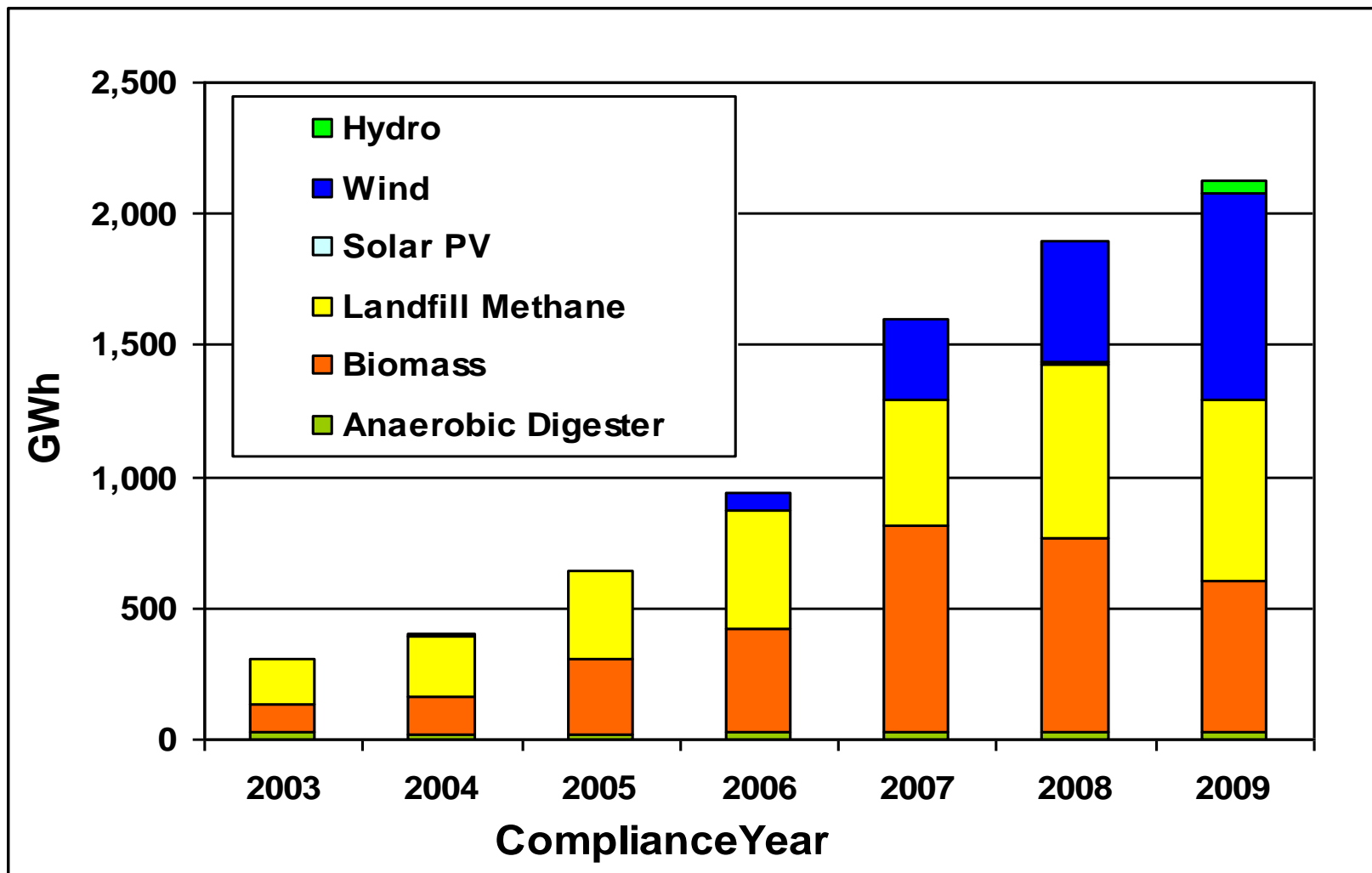
- **Green Communities Act**
 - Expands EE delivery mechanisms and goals
 - [RPS – expansion and strengthening targets](#)
 - Net metering provisions
 - Wind Siting Commission
- [Global Warming Solutions Act](#)
 - 2020 commitments – 10-25% below 1990 levels
 - 2050 commitments – 80% or more below 1990 levels
- **Oceans Management Act**
 - Provides zoning-like planning of state waters
 - Identifies presumptive areas for wind development
- **Clean Energy Biofuels Act**
 - Mandate for advanced biofuels
 - Paves way for transition to LCFS

MA Class I RPS Program Success



	2003	2004	2005	2006	2007	2008	2009
Surplus Banked	61	20	1	9	81	211	386
ACP Compliance	0	265	368	323	11	1	0
Compliance from Banked	255	61	20	2	7	81	190
Compliance Year Generation	304	445	645	939	1600	1896	2130

MA RPS Class I Compliance Trend By Technology



Biomass – Observations

What's good about biomass?

- Biomass presents a large indigenous energy resource in MA.
- Biomass can be effectively used for non-intermittent baseload power generation, and for CHP, heating, district energy, and cellulosic biofuels - offers a non-fossil substitute for coal and fuel oil.
- Biomass creates substantial local and sustained economic development.

What's problematic about biomass?

- Biomass has air emissions.
- Biomass has the potential to impacts forests and calls for strict forest harvesting regulations and broader forest policy to maintain full range of forest services for nature and humans.
- Biomass is a finite resource, and total demand pressure on forests needs to be properly constrained.

What's not well understood about biomass?

- What are net impacts of biomass on carbon emissions, and how does forest management and the allowable re-sequestration timeframe impact this assessment?

Massachusetts Approach

Department of Energy Resources
Executive Office of Energy and Environmental Affairs
Department of Environmental Protection
Department of Conservation and Recreation

Step back study science establish prudent policy move forward

- EEA Secretary asked DOER to integrate forest “sustainability” criterion in RPS regulations for eligible biomass fuel
- DOER enacted suspension of new RPS qualifications for woody biomass units
- DOER commissioned comprehensive science-based study of forestry and carbon accounting issues (the “Manomet Study”). Completes Public Meetings and comments on study.
- DOER files draft proposed revisions to the RPS regulations pertaining to the eligibility of biomass units.

RPS Biomass Rulemaking

Key Components: Eligible Biomass Fuel

- Forest Derived Residues
 - Harvesting residues (tops/branches not used for products)
 - Unacceptable Growing Stock
 - Thinnings to improve timber stand
 - Removals to improve regeneration goals, including invasive species

Forest Derived Residues limited to 15% of total removal of timber products by weight for forest nutrient retention.
- Forest Salvage
 - Downed storm damage
 - Control of pest infestations
- Non-Forest Derived Residues
 - Primary/secondary forest products industry residues
 - Land clearing for land use change
 - Clean yard/wood wastes (prunings, road/park maintenance)
- Dedicated Energy Crops

RPS Biomass Rulemaking

Key Components: Fuel Certification/Tracking

- *Biomass Fuel Certificate* accompanies eligible fuels and provided to DOER quarterly by qualified Units.
- For forest derived eligible biomass, harvest site is provided an *Eligible Forest Residue Tonnage Report* prepared by certified forester approved/trained by DOER that stipulates the total number (tons) of *Biomass Fuel Certificates* that can be removed from the site.
 - DOER will provide further Guidance and spreadsheet methodology for this purpose
- Advisory Panel will monitor tracking and verification procedures and provide findings/recommendations to DOER.
- Forest Impact Assessment will be conducted every 5 years.

RPS Biomass Rulemaking

Key Components: Overall Efficiency

- Generation Units must meet Minimum Overall Efficiency Criterion
- Overall Efficiency calculated as:
(Electric + Thermal + Bio-Products Energy Output) / Biomass Input Fuel
- Units provided RECs based on Quarterly Performance
 - Units must achieve at least a 40% Overall Efficiency
 - 40% Overall Efficiency earns one-half REC credit per MWh
 - 60% and greater Overall Efficiency earns full REC credit per MWh
 - REC credit ramps up from ½ to full credit between 40 and 60% efficiency.

RPS Biomass Rulemaking

Key Components: Previously Qualified Units

- Existing terms of Statement of Qualifications remain in effect through 2012.
- Starting in 2013, Units must utilize Eligible Biomass Fuels to remain qualified through 2014.
- Beginning 2015, all criteria must be met to remain qualified.

RPS Biomass Rulemaking Process and Timetable

- DOER filed draft proposed regulations on September 17th and held two Public Hearings on October 15th
- DOER is in receipt of nearly 500 written comments (available on DOER website)
- DOER will file proposed final regulations with Legislature soon
- Following review by Legislative Committee, DOER will promulgate final regulations

Questions/Comments

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