

# NEHE Sustainability Summit 2010

## Renewable Energy for Colleges and Universities April 23, 2010

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# Massachusetts Renewable Energy Programs

- **Solar**
  - Commonwealth Solar Rebate Program
  - Solar Renewable Energy Certificates
  
- **Wind**
  - Background to wind development
  - Available incentives

# Commonwealth Solar



**Greenfield Community College, 2.7 kw**

## **Solar in Massachusetts:**

- **More than 20 MW installed now -- 50 MW by the end of 2010.**
- **MA solar industry has grown from 50 to 200 installers since 2008**
- **Workforce development programs at community colleges**

# Commonwealth Solar

- Funding is non-competitive, \$1million/quarter for commercial systems up to 5KW

| <b>Commonwealth Solar II Rebate Matrix (\$/watt dc)</b>  |                  |
|--|------------------|
| <b>All Residential PV Projects, and<br/>Commercial PV Projects with a Nameplate Capacity of ≤ 5 kW</b> |                  |
| <b>Incremental Capacity</b>  | <b>1 to 5 kW</b> |
| Base Incentive   | \$1.00           |
| <b><i>PLUS: Additions to Base</i></b>  |                  |
| MA Company Components  | \$0.10           |
| Moderate Home Value <b>OR</b>  |                  |
| Moderate Household Income  | \$1.00           |

# RPS Solar Carve-Out and SRECs



Umass Lowell 10.56 kw, installed with students

- **What are SRECs?**
  - Solar Renewable Energy Certificates
  - % of State's RPS to be met by solar PV
  - New financing mechanism for solar PV development
- **Who regulates SRECs?**
  - Department of Energy Resources (DOER)
- **What are they worth?**
  - Market mechanism: ACP is \$600, Solar Clearinghouse = \$300

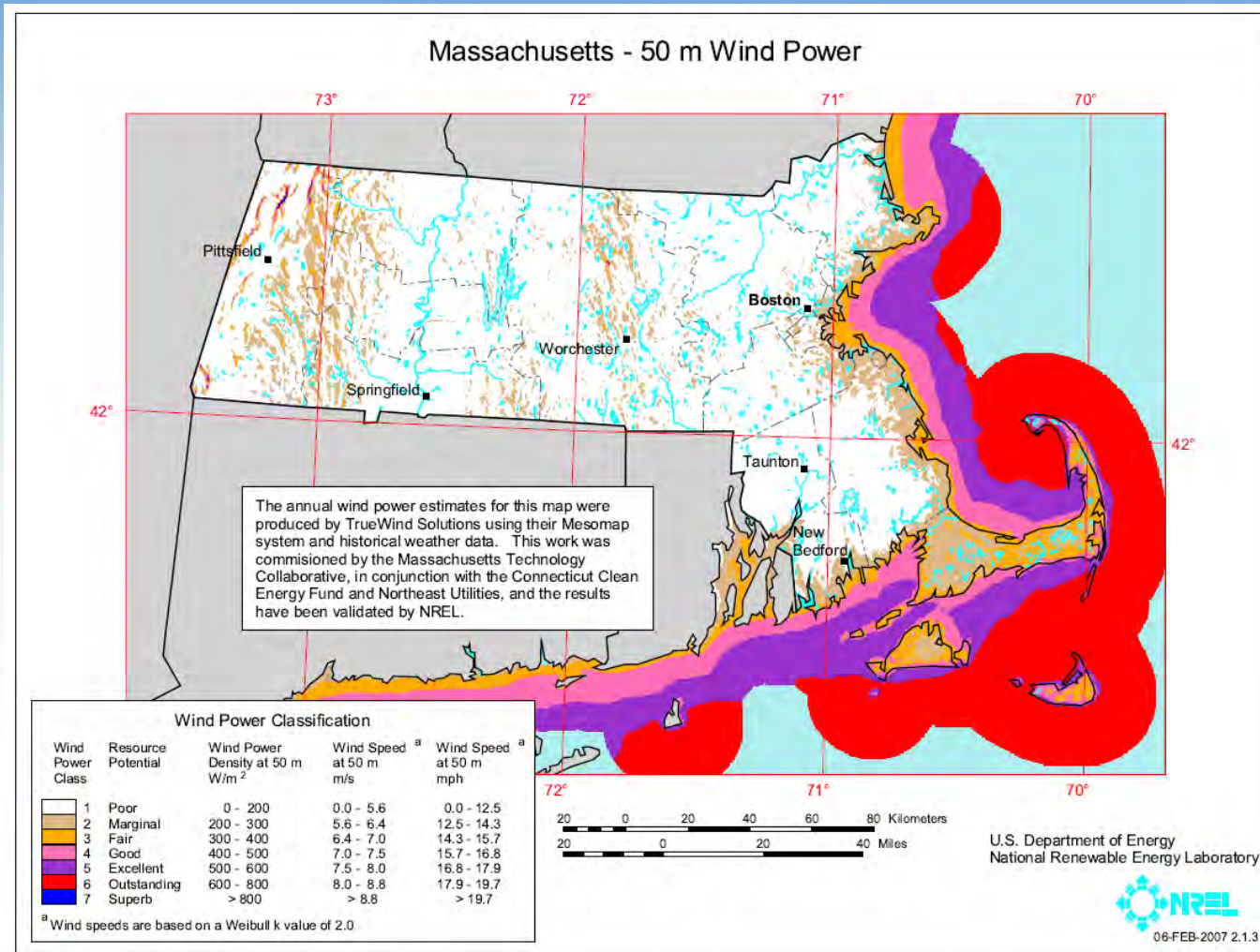
# Financing Options

- **Because non-profits cannot benefit from the 30% federal tax credit for renewables, many are choosing a “PPA” (power purchase agreement) or leasing model with a for-profit partner.**
- **Leasing and PPAs have become more than 30% of the market in the past year.**
- **As with any installation, prospective PPA customers should make sure they understand the assumptions and contract terms and compare bids.**

# Commonwealth Wind Program Goals

- To further Gov. Patrick's goal of developing 2,000 MW of wind power capacity by 2020.
- To provide funding for wind projects that are:
  - Cost effective
  - Well-sited
  - Have realistic and timely development schedules

# Where is the wind in MA?





# Wind Installations in MA



Mass Maritime Academy 660 kw

- **15.2 MW**
  - 19 turbines over 100kW
  - ~62 “micro”-turbines
- **MassCEC has provided grants for**
  - ~90 feasibility studies
  - ~40 design & construction projects
- **Several universities have nation-leading labs in wind engineering, e.g. UMass, MIT – presently competing for major federal funding**

# Thank You!

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