20% Wind Energy by 2030

Chapter 6: Wind Power Markets

Summary Slides
State renewable energy incentives

Renewable portfolio standards (RPS)
- 25 states and the District of Columbia
- Current RPS = 55 GW of new renewable energy capacity by 2020

- California: 20% by 2017
- Illinois: 15% by 2012
- New York: 25% by 2013
Growth slowed during years when the production tax credit expired

Wind power applications

- **Utility-scale**
  - Represents 90% of all wind power generated in the U.S.

- **Community-owned**
  - Typically 500 kW or greater
  - Strengthens communities by broadening local tax bases and generating new income
  - Galvanizes support for wind energy

- **Small wind**
  - Typically smaller than 100 kW
  - Often can sell unused electricity back to the grid

- **Off-grid home and farm/ranch systems**
  - Challenges include zoning, lack of financial incentives, and turbine availability

Photo courtesy of NREL
Managing the stakeholder process:

- State and local siting guidelines needed
- Developer, state, local, and community groups should collaborate on design of stakeholder outreach
- Identify stakeholders early in the process
- Assess concerns and requirements of stakeholders
- Begin early with stakeholder engagement and build trust
Wind project developers must accommodate market features

- **Policy-driven/compliance markets**
  - Compliance markets play an important role in supporting the development of wind energy.

- **Voluntary or green power markets**
  - Voluntary markets also play a key role in supporting new wind. Renewable energy credit markets might be able to support wind energy in regions that have no compliance market.
  - More than 500,000 electricity customers purchase green power products.

- **Air quality/emissions markets**
  - Carbon dioxide trading programs are currently under serious consideration.