

# ELI Research in Action

## Greening America's Next Energy Transformation



—James M. McElfish, Jr.,  
Director of ELI's Sustainable  
Use of Land Program

The United States is one of the world leaders in wind energy, second only to China in installed wind capacity. There is a realistic possibility that, within the next two decades and with the right laws in place, the United States can generate more than 20 percent of its electricity from wind facilities alone. But meeting or exceeding this goal will require attention to numerous factors—including the transmission grid, energy pricing, renewable energy portfolio standards, and tax and investment incentives.

According to recent studies by ELI research staff, it will also require a thorough reexamination of the state laws and local ordinances that govern the siting of wind facilities. “State and local siting regulations will play a major role in determining whether wind power can rapidly become a larger part of our energy mix,” says ELI Senior Attorney Jim McElfish. “Many state laws are in flux, and many local governments are applying inconsistent approaches to this important energy technology.”

Under Jim’s direction, our Sustainable Use of Land Program has focused on ways state and local laws eliminate perverse incentives and build governance systems premised on “smarter laws, better choices.” With a unique focus on how projects are sited—consistent with important objectives for energy, community development, habitat, and land use—the program is now strengthening and updating the laws that influence siting wind facilities. With support from the Wallace Global Fund, the U.S. Department of Energy, the American Planning Association, state agencies, and the National Oceanic and Atmospheric Administration, Jim and his team are producing substantial results that will help states and local governments make the changes they need to establish consistent frameworks.

Because jurisdiction over siting is so diffuse across the United States, rigorous attention to siting laws and rules is critical. One-half the states leave siting of wind projects entirely to their local governments, while many others have mixed



### Offshore Wind Energy

The wind energy resource off America’s Atlantic Coast is large. In the Mid-Atlantic region alone, the National Renewable Energy Laboratory estimates that over 119,000 megawatts of developable power may be available. ELI is continuing to work closely with the policy and permitting authorities in Virginia, Maryland, and Delaware to evaluate how they can best tailor their laws and policies to support rapid and environmentally responsible development of this valuable renewable energy resource. ELI is also working on a framework for the Mid-Atlantic states acting together as the Mid-Atlantic Regional Council on the Ocean (MARCO) to support a coordinated approach to wind power in federal and state waters. Related ELI publications may be found online: Maryland Offshore Energy Framework (2009); Virginia Offshore Energy Development Law and Policy Review and Recommendations (2008); Delaware Offshore Alternative Energy Framework & Recommendations (2011).

### Mitigation and Energy Development

ELI and The Nature Conservancy, working together, have pioneered an approach to protect habitat and landscape from impacts related to large energy projects. This approach emphasizes accountability, transparency, and use of a mitigation protocol that encourages avoidance of impacts, and minimization of unavoidable impacts, before moving to compensatory mitigation for the remaining impacts. The report “The Next Generation of Mitigation: Linking Current and Future Mitigation Programs With State Wildlife Action Plans and Other State and Regional Plans,” may be downloaded from the ELI website: [www.el.org](http://www.el.org).

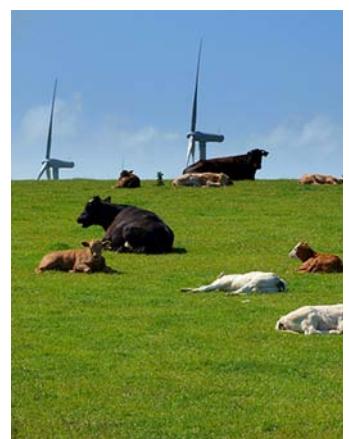
## Renewable Energy and You

Many states now allow individual retail consumers to purchase electricity from renewable sources, and others provide ways for regulated utilities to offer renewable power to customers. The creation of Renewable Energy Certificates (RECs), recognized by states in connection with the development of wind and solar energy, has provided a mechanism that accounts for the addition of renewable power to the electricity grid, and links consumer selection to the construction and operation of these facilities. RECs improve the market for renewable power and meeting state and regional greenhouse gas goals, and also assure consumers that their payments to their local electric utility actually reflect increased integration of renewable energy sources into the power mix.

state-local approval systems, often with overlapping responsibilities. While state and local standards can seriously affect the ability to site new wind projects, useful information for comparison and best practices has not been readily available.



ELI's work closes that gap. "State Enabling Legislation for Commercial-Scale Wind Power Siting and the Local Government Role" is a comprehensive review of all the state wind power siting laws, including those prescribing the role of local governments. This, together with review of the standards set out in 13 current statewide "model" ordinances for local governments, enabled ELI to define the state-of-the-art for improved siting regulation. To help government officials and legislators, the study identified and critiqued detailed standards on 10 frequently occurring issues ranging from zoning to habitat protection. Jim notes that ELI's work also provides the all-important model laws that legislators can use to address specific concerns related to jurisdiction over wind power siting. "We focused specific attention on issues of concern, such as requirements for setbacks from other land uses and decommissioning requirements."



ELI is also helping to advance opportunities for wind siting on Great Lakes waters, state trust lands, and other state-owned lands. In 2011, Jim's team undertook a comprehensive review of state approaches and existing projects on these lands and waters to determine how best to approach siting decisions, leases, and requirements. Many western states have entered into agreements

allowing commercial wind facilities on state "trust" lands. A number of states have authorized wind projects on their submerged lands. And a few states have declared particular lands off-limits to commercial-scale wind, such as natural resource agency-managed lands in Vermont and Maryland. ELI's report, "Siting Wind Facilities on State-Owned Lands and Waters," recommends that states inventory their state-managed lands and waters, and evaluate and revise their land-leasing and planning regimes to accommodate wind facilities in appropriate locations, including providing for suitable lease terms, requirements for decommissioning, and appropriate monitoring and management requirements.

ELI's staff is working directly with mid-Atlantic state governments to identify laws and regulations that may affect the siting of offshore wind facilities in federal and state waters. These states recognize ELI's expertise and our ability to help them evaluate and update their authorities to support this new, complex set of activities.

"Development of wind power is essential if we are to transform our energy economy. And while all energy sources involve environmental impacts and tradeoffs, wind energy is the one major source of electric power-generation available at utility scale that does not place demands on water supplies," Jim says. "It's critical to get these state and local siting laws right, and to take advantage of wind energy resources where they can be developed in environmentally sound places."