Research Brief
ELI Catches the Wind

Elissa Parker
Vice President
Research and Policy

The United States is the world leader in wind energy, passing China, Germany, Spain, and others usually regarded as world leaders. There is a realistic possibility that the United States can generate more than 20 percent of its electricity from wind within the next two decades. 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.

It will also require a thorough re-examination of the state laws and local ordinances that govern the siting of wind facilities, argues ELI Senior Attorney James McElfish. "State and local siting regulations and land use issues will play a major role in determining whether wind power will rapidly become a larger part of our energy mix. Many state laws are in flux, and local governments are applying inconsistent approaches."

Under Jim's direction, our Sustainable Use of Land Program has focused on the improvement of state and local laws to find ways to eliminate perverse incentives and build systems premised on "smarter laws, better choices." Before tackling wind energy, we have identified ways in which state and local decisions can provide for affordable housing, conservation, and fiscal health; evaluated state and local tax policy alternatives that can support sustainable land use; and identified effective policy reforms that align state and federal funding for infrastructure.

Jim's program is now putting these same approaches to work in advancing the U.S. transition to wind. With a unique focus on how projects are sited — consistent with state and local land and water and biodiversity objectives — the program aims to improve the laws that influence the ability to site wind facilities both on land and in state and federal waters. With support from the Wallace Global Fund, the U.S. Department of Energy, the American Planning Association, several state agencies, and the National Oceanic and Atmospheric Administration, Jim and his team have produced 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. Half the states leave siting of wind projects entirely to their local governments, while many others have mixed 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.

Jim's work closes that gap. A new ELI report, ***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 enabling local governments. Jim notes that it also provides the all important model laws and approaches that legislatures 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 of wind facilities from other land uses, and decommissioning requirements."

Great Lakes waters, state trust lands, and other state-owned lands offer significant potential opportunities for commercial-scale wind facilities, but require consideration of important tradeoffs. Jim's team undertook a comprehensive review of state approaches and existing projects on these lands. Their report, ***Siting Wind Facilities on State-Owned Lands and Waters,*** recommends that states inventory their lands, and reevaluate and revise their land leasing and planning regimes to accommodate the particular needs of wind facilities, including the length of lease terms, requirements for decommissioning, and appropriate monitoring and management requirements.

Jim also continues to work directly with mid-Atlantic state coastal programs to identify state laws and regulations that may affect their ability to site offshore wind facilities in federal and state waters, and has issued several reports, available on ELI's website. In addition to a study in Virginia, Jim is also working with Maryland and Delaware as they examine such issues as how to site and permit transmission line crossing through state waters and beneath beaches and coastal wetlands.

"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."