



Broadening Wind Energy Ownership by Changing Federal Incentives

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Introduction

A typical 2 megawatt wind turbine provides enough electricity for around 600 average American homes. So why is it nearly impossible for those same 600 households to pool their resources and own a wind turbine?

There are two significant barriers to owning and investing in renewable energy projects. First, the federal renewable electricity incentive – the production tax credit (PTC) – limits the type and amount of income tax that can be applied. Second, the Securities and Exchange Commission (SEC) has complicated and expensive registration fees for sizable cooperative investments. If lawmakers want Americans to achieve energy independence, they need to revise the PTC and simplify SEC registration.

Production Tax Credit (PTC)

The federal PTC provides renewable electricity generators with a tax credit of 2.0 cents per kWh of electricity produced for ten years. The tax credit can only be applied to taxes owed on “passive income.”



Tax Credit Limitations

The PTC restricts investment in renewable energy by its very nature as a tax credit. To get the 2.0 cents per kilowatt-hour (kWh) incentive, an investor must owe a lot of taxes. A single, two-megawatt wind turbine generates around \$125,000 in tax credits each year, but only if the investor owes that much in taxes. Not many Americans owe \$125,000 a year in taxes; that's 2.5 times the median household income.

With multiple owners, the tax credit could be shared, but the PTC limits recipients in another way. The tax credit can be taken only against "passive income," which the IRS defines as income from rental property or investments. In other words, the credit is only valuable to individual investors who owe taxes from rental property or investments. That's another pretty small slice of the population.

Passive Income

Passive income is income earned from rental property and other investments where the owner does not "materially participate." The vast majority of households have little or no passive income.

Two workarounds have been developed to clear this high bar for accessing the federal renewable energy incentive. One is to look for a partner with a lot of tax liability. In most projects with local ownership, the local investors partner with a large, absentee equity firm that gets the tax credits. These firms gather together investors who owe a lot of taxes and who provide equity for purchasing wind turbines in exchange for getting full access to the PTC. Often, the project is arranged as a "flip," where the equity firm holds 99% ownership of the project (and the revenues) for a minimum of ten years, after which the local investors assume 99% control. This arrangement means that the federal incentive flows through local projects to these (typically out-of-state) absentee firms.

To avoid losing those revenues to out of state partners, some local groups try to gather many local investors. But here the paperwork required for investment regulations hampers projects where tax law did before.

Cooperative Limitations

Getting numerous local investors can be very onerous and expensive, and that's not counting the actual recruiting. The SEC provides five ways to gather investors for renewable energy projects and none of them marry the typical wind development model (dozens of turbines) with democratic ownership (many owners per turbine).

SEC Registration Options

Any time a group of people want to get together and invest in a project, the SEC oversees the "offering." The rules for registering a public offering depend on the size of the offering, number of qualities of the investors, and other factors. The rules are designed to prevent fraud and ensure investors can afford the risk. Five types of registration are available, and they require different upfront and compliance costs.

1. Full SEC Registration

The most costly and complex, the benefit to full registration is that there are no limits on the number or type of shareholders or the advertising methods. This method has been employed by several farmer-owned ethanol plants.

2. Regulation D

The most-used exemption to SEC registration, it requires that investors meet income or asset limits (\$250,000 or \$1 million, respectively) and that you only offer shares to people with whom you have a prior relationship.

3. Regulation A

This exemption has not been used by community-owned projects because it limits the offering to \$5 million or less. However, investors don't have to be accredited and the prospectus required does not need approval.

4. Intra-state offering

This strategy has been used in a few Minnesota and South Dakota projects. All investors and operations must be within a single state. Registration is done through the state's Department of Commerce or equivalent regulatory agency. Compliance work is rather involved and

Type of registration	Upfront Cost	Compliance Costs	Restrictions
Full SEC	\$100,000-125,000	Over \$400,000/yr	None
Regulation D	\$30,000-50,000	\$10,000/yr	Accredited investors; prior relationship
Regulation A	\$50,000-75,000	\$10,000/yr	\$5 million offering
Intra-State	\$50,000-75,000	\$10,000/yr	In-state only
Private	Minimal	Minimal	Prior relationship; no advertising

can be much more onerous in some states. The biggest liability is that investors have “right of rescision,” though with many investors this problem is minimized.

Right of Rescision
 Intra-state offerings are subject to state consumer laws, which often provide consumers with up to three days to back out of a transaction without penalty.

5. Private offering

This has the fewest filing requirements, but the organization must have a prior relationship with all investors and cannot advertise the offering.

The result of the complex regulations is that there are few renewable energy projects that tap large numbers of investors. Instead, several wealthy individuals combine forces to build projects or developers create “revenue participation” models where landowners do not own their renewable energy generation, but receive some portion of the gross revenues.

A Small Solution with a Big Impact

While no active proposals solve the entire problem, a bill by Representative Tim Walz (D-MN)¹ addresses part of the PTC roadblock. The bill would allow wind project investors to access up to \$40,000 of the PTC against ordinary income. If enacted, that bill could dramatically expand the pool of potential local investors.

How many more Minnesotans could become wind energy investors in this scenario? Over 1.1 million...

Take an example from Minnesota, Rep. Walz’s home state and one with 25% of wind projects sporting some form of local ownership. If fifty landowners and rural residents wanted to invest in a single wind turbine under existing rules, they’d be unlikely to have enough passive income (and owe enough taxes on that income) to use much of the PTC. With Walz’s amendment, however, each owner could get up to \$40,000 of the PTC against ordinary income, more than enough to claim their \$2,500 share of the annual \$125,000 credit. When these fifty landowners are able to access the PTC, it covers over 40% of each investor’s equity contribution and reduces the project payback time from 6 years to just over 4 years.²

How many more Minnesotans could become wind energy investors in this scenario? Over 1.1 million could fully use a \$2,500 credit against ordinary

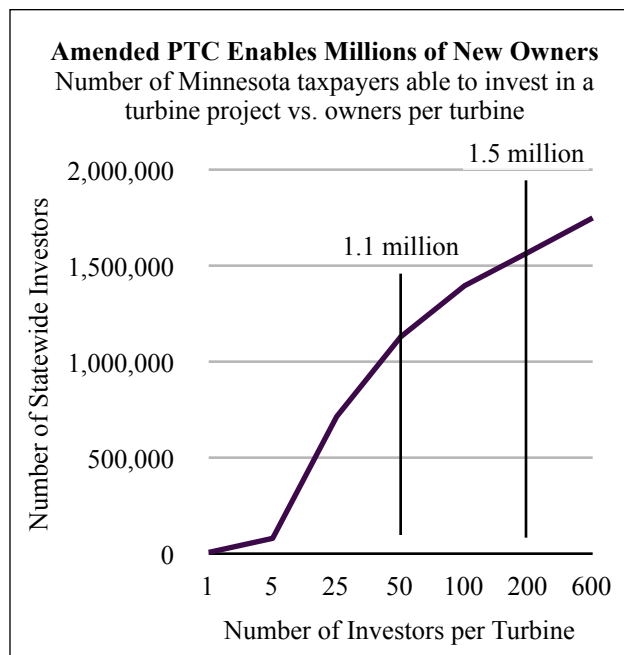
income.³ And if projects could be assembled with 200 investors per turbine, the tax threshold falls to \$625, allowing 1.5 million Minnesotans (30% of the state) to leverage the tax credit to become owners in renewable energy production.⁴ That’s almost the entire universe of those able to access the tax credit – those one-third of the population who itemize their tax returns.

The chart below illustrates the potential of an amended PTC to turbocharge investment in wind energy in Minnesota. The chart assumes the PTC is divided

Ordinary Income
 Ordinary income is income earned from wages and salary. The vast majority of households pay almost all their taxes on ordinary income.

evenly among the turbine investors, with the vertical axis showing the number of taxpayers who have sufficient tax liability to use the full value of their PTC share. If 600 investors could share ownership of a single turbine, over a third of Minnesotans could be self-reliant on renewable electricity.

The beauty of this arrangement is that two alternatives to full SEC registration are palatable to an investor group with a single turbine. One turbine falls below the \$5 million threshold of SEC Regulation A, so these projects could avoid the expensive and onerous SEC process. The size of these projects would also be small enough to draw local investors, making intra-state registration attractive if the state’s registration and compliance process was simple. Various investor groups could create a turbine purchasing and servicing pool to get around other disadvantages of single-turbine projects.



Conclusion

The rapid development of renewable energy provides an opportunity to democratize energy ownership, allowing citizens to own their share of electricity production. Amending the federal PTC could help as many as 30% of Americans access federal incentives for owning renewable power, and is a significant first step to democratizing ownership. However, the tax credit would remain unavailable to the more than two-thirds of Americans without sufficient tax liability. Furthermore, SEC regulations would severely curtail those with access to the credit from pooling sufficient capital to build projects.

With renewable energy providing community-scale power, it makes sense that the 600 households served by a single turbine could be owners of that resource. Federal energy incentives have so far prevented that type of sharing, but they don't have to. Changing the PTC to a feed-in tariff could provide a more consistent and stable funding source without any tax requirements or appropriations. Amending SEC regulations to simplify shared ownership of renewable power generators could streamline development and allow democratic ownership. States could simplify intra-state registration to allow communities of investors easier means to organize. The bulk of renewable energy development is still ahead of us, as is the potential for a country of self-reliant owners of renewable energy.

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References

¹ H.R. 2691. Accessed 2/14/08 at <http://tinyurl.com/2c7hvm>.

² In present value dollars.

³ At this threshold, owners would also have to contribute \$40,000 toward the turbine. At the 200 owner threshold, each owner would need to put forth \$10,000. In both cases the contribution could be borrowed.

⁴ Of course, if instead of a tax credit the federal government provided a producer payment of 2.0 cents per kWh to locally-owned wind projects, all 5 million Minnesotans could access renewable energy incentives.

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