Conserving a Place for Renewable Power

Jacob P Byl, Vanderbilt University
Abstract: Promoting renewable power and conserving land are often conflicting goals because renewable power requires a lot of land. The conflict is becoming an important issue on lands encumbered by conservation easements. I argue that the current legal rule allowing oil and gas development, but not wind and solar development, on conserved land does not make sense in light of the threats of climate change. The best way to encourage renewable power while respecting the intent of landowners is to have the Internal Revenue Service promulgate rules that explicitly allow renewable power going forward and interpret existing easements with a set of tools that match development parameters to conservation easements’ stated purposes.

I. Introduction

II. Background on Conservation Easements and Renewable Power

A. Conservation Easements
   i. Qualified Property Interest
   ii. Qualified Organization
   iii. Purpose of Easement

B. Renewable Power
   i. Wind
   ii. Solar
   iii. Biofuels and Biomass
   iv. Geothermal

C. Conflict Between Conservation Easements and Renewable Power

D. Local vs. National Incentives

III. Current Approach to Renewable Power on Conserved Land

A. Renewable Power on Conserved Land
B. Mineral Extraction on Conserved Land

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1 Ph.D. Program in Law & Economics and J.D. Candidate at Vanderbilt University Law School. I would like to thank Jim Rossi for helpful suggestions on this paper.
I. INTRODUCTION

When Consumer’s Power proposed placing fifty-six windmills on the rolling hills of Mason County in Michigan, a group of local residents immediately expressed their disgust at the idea of “destroy[ing] the scenic and natural beauty of the area with those monstrosities.” Consumer’s Power claimed that the windmills were part of an important move toward generating power from renewable sources to displace the fossil fuel power that makes up the majority of the power portfolio in the United States. There are important environmental interests, and strong emotions, on both sides of the argument about whether to allow renewable power projects in scenic and natural areas.

Landowners and political leaders in the United States increasingly face this difficult tradeoff between conserving natural places and generating renewable power. Conservation plays important roles in protecting biological diversity and maintaining an aesthetically pleasing and enjoyable landscape. Yet climate change threatens many of the natural areas, species, and agriculture that people seek to conserve. Changes in temperature, rainfall, and extreme weather events are predicted across North America in ways that will likely disrupt ecosystems,

2 Dave Alexander, Lake Wind Opponents Take Fight to Mason County Board, LUDINGTON POST, June 2012, available at http://www.mlive.com/news/muskegon/index.ssf/2012/06/lake_wind_opponents_wind_farm.html. [JPB: I intend to use an appropriate example that is local for the publishing journal]
crops, and species.\(^6\) One of the keys to curbing the emissions that contribute to climate change is to reduce the carbon emissions that come from the burning of fossil fuels we currently rely on for most of our energy needs.\(^7\) To stem these emissions, renewable energy sources such as wind, solar, and biofuels are seen as clean energy sources of the future.\(^8\) However, these renewable energy sources tend to be both land intensive and located far from population centers.\(^9\)

In order to generate and transmit renewable energy, substantial infrastructure is required that will conflict with conservation goals in many areas.\(^10\) This tradeoff between conservation and renewable power can be seen in the tension between wind projects and the Endangered Species Act,\(^11\) or in mineral extraction on public lands.\(^12\) This paper focuses on the development of renewable power on lands encumbered with a certain type of legal tool called a conservation easement. Renewable power on land with conservation easements is a useful context for the important discussion of how to balance conservation and renewable power because landowners, organizations, and multiple levels of government are involved in decision-making. To get a cleaner view of the legal and policy issues at play, I focus on generation of renewable power and only briefly discuss how to transmit renewable power to where people live and work. Although transmission is an important topic in discussions of renewable power, the legal context of transmission often involves the use of eminent domain powers that can sidestep some of the difficult questions we face head-on in the context of power generation.

I argue that the looming threats of climate change are important enough to tip the balance in favor of encouraging more renewable power, even if that means sacrificing some conservation.\(^13\) It is easy to say that we should generate more renewable power, but it is often difficult to lay out a plan for how to achieve that goal, especially considering differences in incentives at the local and national levels. One appropriate first step to encourage more renewable power is to have the Internal Revenue Service ("IRS") interpret the tax code in a way that explicitly allows many lands encumbered by conservation easements to host

\(^{6}\) Id. At 16.
\(^{7}\) Id.
\(^{9}\) Id. at 894.
\(^{10}\) Id.
\(^{13}\) See infra, Part IV.
renewable power infrastructure. Although this will not guarantee widespread development of renewable power on conserved lands, it will eliminate the current uncertainty over whether renewable power development is even an option. Allowing infrastructure development on conserved lands will at times be controversial, as the intent of the parties to the original conservation easement is an important factor in determining how the land can be used, but may be difficult to discern. This paper will use broad policy arguments to inform how to handle this “in the weeds” detail issue through a series of proposed rules of interpretation to use on conservation easements.

The paper proceeds as follows: Part II provides background on conservation easements and the potential conflicts with renewable power. In Part III, I lay out the current approach to renewable power development on land with conservation easements. Part IV turns to my argument that the appropriate balance of renewable power and conservation should be tipped more toward renewable power because of the profound implications of climate change. In Part V, I propose moving toward the appropriate balance by having the IRS allow development when the underlying purposes of the conservation easements in question, as interpreted through a series of rules, do not directly conflict with the renewable power infrastructure. Part VI anticipates criticisms and Part VII concludes.

II. BACKGROUND ON CONSERVATION EASEMENTS AND RENEWABLE POWER

A. Conservation Easements

Conservation easements are an increasingly important tool used to protect open space, sensitive ecosystems, and historic areas. A conservation easement is a property interest that restricts land from being developed. Landowners who wish to preserve the natural or agricultural character of their property can donate or sell their development rights to a land trust or government body. The land is then protected from development, giving the landowner the benefit of knowing that the natural or open state of the land will be preserved. The use of conservation easements has grown dramatically in the past decades, rising from 24 million acres of land protected in 2000 to 47 million acres protected in 2010.

16 Id. at 1900.
17 Id.
18 Id.
Conservation easements have roots in easement and servitude law that date back to Roman law.\textsuperscript{20} In order to encourage the use of conservation easements, all fifty states and the District of Columbia have passed enabling statutes to define conservation easements and provide them with clarified and more powerful legal status.\textsuperscript{21} A typical state statute spells out the requirements for a conservation easement, including what land can qualify, who can hold the easement, and how courts should treat the easements when issues of enforcement or modification come up.\textsuperscript{22} As they stand, conservation easements are “one of the most powerful, effective tools available for permanent conservation of private lands.”\textsuperscript{23}

In a typical transaction, a landowner donates a conservation easement to a not-for-profit organization called a land trust that agrees to hold the easement and enforce it for perpetuity.\textsuperscript{24} Landowners are often motivated by 1) a desire to keep the land in its current state, such as natural or agricultural, 2) tax benefits of donating an easement, and less commonly, 3) money from the purchase of the easement in a cash transaction.\textsuperscript{25} The landowner and the land trust negotiate a document or series of documents that establish why the easement is being created and what restrictions should be put on the land.\textsuperscript{26} These documents constitute the legal evidence of the conservation easement interest if any future rights or obligations are disputed.\textsuperscript{27} Courts interpret these documents using a combination of property and contract law principles to establish what should be allowed on the property.\textsuperscript{28} The intent of the original landowner is centrally important, as property interest and contract interpretation tries to ascertain the original intent.


\textsuperscript{22} McLaughlin, \textit{supra} note 15.


\textsuperscript{25} \textit{Id}.

\textsuperscript{26} \textit{Id}.

\textsuperscript{27} \textit{Id}. at 1041.

\textsuperscript{28} \textit{Id}.
behind the agreement.\textsuperscript{29} Since property and contracts are generally governed by state laws, the law of conservation easements is rooted in state laws and varies from state to state.\textsuperscript{30}

The main financial advantages of conservation easements are usually tax benefits.\textsuperscript{31} Although some tax benefits are determined at the state level, such as lower property tax and state income tax deductions, the most important are determined by the federal IRS.\textsuperscript{32} The tax code allows landowners to deduct the value of donated conservation easements from their taxes for a number of years.\textsuperscript{33} Currently, landowners are able to deduct the value of donated conservation easements for up to fifty percent of their taxable income for fifteen years, or up to one hundred percent of their taxable income for thirty years if a majority of the landowner’s income is from agriculture.\textsuperscript{34} Since development rights are often valued into the millions of dollars, this tax benefit can be substantial.\textsuperscript{35} Conservation easements have become a common tool for estate planning in families with ranches, farms, or other large pieces of open property.\textsuperscript{36}

Since the federal income tax deduction is such a large motivator for most landowners, the IRS determination of what is a “qualified easement” becomes influential in conservation easement law.\textsuperscript{37} The tax code provides a benefit for a “qualified property interest” conveyed to a “qualified organization” for the “exclusive purpose of conservation.”\textsuperscript{38} Treasury regulations have interpreted these terms to provide additional detail.\textsuperscript{39} Landowners and land trusts are mindful of these requirements as they craft conservation easements.\textsuperscript{40}

\textit{i. Qualified Property Interest}

\textsuperscript{29} Id.
\textsuperscript{30} LINDSTROM, supra note 14 at 27.
\textsuperscript{32} Id.
\textsuperscript{34} IRS Regs, supra note 33.
\textsuperscript{35} See LAND TRUST ALLIANCE, supra note 31.
\textsuperscript{36} Id.
\textsuperscript{37} Id.
\textsuperscript{38} Tax Code, supra note 33.
\textsuperscript{39} See IRS Regs, supra note 33.
\textsuperscript{40} AMERICAN LAW INSTITUTE – AMERICAN BAR ASSOCIATION (“ALI-ABA”), \textit{CONSERVATION AND FACADE EASEMENTS AND COMMUNITY STEWARDSHIP ORGANIZATIONS: PRINCIPLES AND DRAFTING GUIDELINES} 2 (2005).
A qualified property interest is either a complete property interest or a perpetual conservation easement. Only perpetual easements, not term easements such as those used in many U.S. Department of Agriculture conservation programs (e.g. 5-year conservation reserve program), qualify for federal tax benefits. The IRS acceptance of only perpetual easements for tax benefits has pushed state laws to focus on perpetual easements within their conservation easement enabling statutes. Perpetuity is a long time, so the stakes are high to strike the proper balance between conservation and alternative uses of the land when conservation easements are created.

ii. Qualified Organization

A qualified organization is a branch of government or a 501(c)(3) nonprofit organization established with the purpose of conserving land. These organizations are often called land trusts. The most prominent national example of a land trust is the Nature Conservancy, an organization that holds conservation easements over 3.2 million acres out of the total 6 million acres held by all private land trusts.

iii. Purpose of Easement

An exclusive purpose of conservation has been interpreted to include several subfields. The first purpose is for public recreation or education and requires that the land be made available for public access. This makes the land like a park, and is perhaps the easiest purpose to justify for tax benefits as these lands give nearby residents and visitors many of the same benefits as public parks.

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41 Tax Code, supra note 33. See Glass v. C.I.R., 471 F.3d 698 (6th Cir. 2006) (deciding that reserved rights in a conservation easement precluded the landowner from qualifying for tax benefits).
42 See IRS Regs, supra note 33.
43 ALI-ABA, supra note 40 at 5.
44 Professor Nancy A. McLaughlin has explored these issues in several papers. See Nancy A. McLaughlin, Hicks v. Dowd, Conservation Easements, and the Charitable Trust Doctrine: Setting the Record Straight, 10 WYO. L. R. 73, 74 (2010); McLaughlin, supra note 15.
45 Tax Code, supra note 33.
46 MERRIL & SMITH, supra note 24.
48 IRS Regs, supra note 33.
49 Id.
50 LAND TRUST ALLIANCE, supra note 31.
A second conservation purpose is for significant relatively natural habitat. Old-growth forests and other natural ecosystems fit into this category, but they are not the only suitable properties. Other properties may qualify under this standard if there is a portion of the land that provides a significant natural habitat, such as a wetland area.

The third conservation purpose is the preservation of open space. This is the broadest of the purposes, potentially including open space like farm and ranch land. To put some limit on the open space conservation purpose, the IRS has explicitly based the determination on state goals as expressed in state conservation laws. For example, the Tennessee Conservation Easement Act recognizes easements “intended to preserve, maintain, or enhance . . . the open-space value, the air or water quality, the agricultural, forest, recreational, geological, biological, historic, architectural, archaeological, cultural, or scenic resources.” This language roughly tracks the Uniform Conservation Easement Act proposed by the National Conference of Commissioners of Uniform State Laws and enacted in some form by twenty-four states including Tennessee. As demonstrated by the broad range of purposes expressed in this state law, the open-space purpose remains a far-reaching category despite being pegged to state law.

The fourth conservation purpose is historic preservation. This designation is used primarily for structures and battlefields, so it will not be discussed further in this paper.

The IRS plays an important role in conservation easement law because it determines what legal interest and conditions can qualify as a conservation easement for tax purposes. Through this role, the IRS has a large impact on the state law that technically defines and controls conservation easements. So although the IRS does not have a lot of expertise in conservation or renewable power issues relative to agencies involved in environmental and energy fields, the IRS ends up being one of the most important policy makers when it comes to

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51 IRS Regs, supra note 33.
52 Id.
53 Id. See also Butler v. C.I.R., T.C. Memo 2012-72 (March 19, 2012) (analyzing relatively natural habitat for fish, wildlife, and plants on land used primarily for agriculture).
54 Id.
55 Id.
56 See C.I.R. v. Simmons, 646 F.3d 6 (D.C. Cir. 2011) (determining the exclusive conservation purpose for a conservation easement by looking to state law).
58 McLaughlin, supra note 15 at 426.
59 IRS Regs, supra note 33.
60 Lindstrom, supra note 31.
61 Id.
conservation easements. In Part IV, I argue that the IRS can use its role in shaping conservation easement law to open the door to the development of renewable power on conserved lands.

B. Renewable Power

The rise in the use of conservation easements has coincided with an increase in renewable energy development. Less than 0.25 percent of the United States power generated in 1980 came from renewable sources other than hydroelectric power. Developments in wind and solar technology paired with volatility in fossil fuels markets and a desire to harness clean, local energy led to an annual increase in renewable energy of twelve percent per year from 1980 to 2010. In 2010, 167 gigawatt hours (“gWh”) of non-hydro renewable power were generated, representing four percent of the total U.S. power portfolio.

This paper will discuss four renewable power sources that are likely to be an issue on lands encumbered by conservation easements. Due to differences in the use of the land, the four sources may be treated quite differently when it comes to conservation easements.

i. Wind

Wind energy has seen the most widespread deployment in the United States, with over thirty-five gigawatts (“gW”) of capacity installed by 2009. Windmills are typically sited in clusters called wind farms to enjoy economies of scale in negotiating agreements, connecting to the grid, and transmitting to population centers. Although the actual footprint of the windmills in a wind farm may be relatively small, setback rules and practical realities mean that the impacted area is much larger. For example, a 150-megawatt (“mW”) wind farm like the one discussed in the introduction may be spread over an area of 11,000 acres and prevent many alternate uses on that land. Modern windmills are large

62 LINDSTROM, supra note 14 at 23.
63 U.S. ENERGY INFORMATION ADMINISTRATION, ANNUAL ENERGY REVIEW (September 2012) available at http://www.eia.gov/totalenergy/data/annual/index.cfm#electricity. Non-hydro renewables constituted 5.6 gWh out of a total of 2,290 gWh in 1980. Hydroelectric power is excluded because it is well established and faces different legal issues than non-hydro renewable power sources.
64 Id.
65 Id. In 2010, renewables constituted 167 GWH of 4,125 GWH total generated.
66 See infra notes 86-89 and accompanying text.
68 Id.
69 Id.
70 See VAUGH NELSON, WIND ENERGY: RENEWABLE ENERGY AND THE ENVIRONMENT 259 (2010) (describing 162 mW wind farm on 4,450 hectares, with
industrial objects that raise over 400 feet in the air and can be seen from miles away. Turning blades create sound and a flickering of light that can impact people up to a mile away. The best wind potential tends to be either far from population centers in the Great Plains or offshore where it is more expensive to build and maintain wind farms.

**ii. Solar**

Solar energy has also seen substantial growth, with 3.6 gW of capacity now installed. Rooftop photovoltaic solar panels on houses and businesses have become widespread across the country. Although solar panels are not as visible as windmills in that they do not stick into the air, they still “catch the eye.” For this reason, many homeowner associations have restrictive covenants that ban solar installations. Commercial solar installations are most promising, and most common, in the sun-drenched Southwest.

**iii. Biofuels and Biomass**

Biofuels and biomass are terms used to refer to a range of organic materials that are used to generate energy to power vehicles or generate electricity. This paper will discuss biofuels and biomass that are grown to use as fuel in power generation. Sometimes this takes place with things like switchgrass that are grown specifically for the purpose – primary feedstocks – and sometimes residual products like corn stalks are used. One of the most widespread biomass feedstocks is wood chips. The land and practices used to grow biomass feedstocks are similar to those used for other types of agriculture and forestry.

**iv. Geothermal**

an actual footprint of two percent of that land area but restricting uses on the rest of the land).

71 Id. at 14.
72 Id.
73 DuVivier, supra note 67 at 74.
74 Id. at 20.
77 Id.
78 DuVivier, supra note 67 at 18-19.
79 Id. at 173-74.
80 See id. at 175 (showing table of sources of biomass feedstocks).
81 Id. at 174.
82 Id.
Geothermal energy uses temperature differentials in the ground to heat or cool buildings, or to generate electricity. Special wells are drilled into the ground to take advantage of temperature gradients. Geothermal is most effective in seismically active regions where pockets of heat rise close to the crust of the Earth, although there is potential for some form of geothermal energy almost everywhere in the United States.

C. Conflict Between Conservation Easements and Renewable Power

With rapid growth in the use of both conservation easements and renewable energy, there is an increasingly large prospect of conflict between the expansion of energy infrastructure and conservation easements. Since different renewable power facilities have different impacts on the land around them, the conflict between renewable power and conservation easements may be more drastic in situations where proposed uses have large impacts on the surrounding land than in situations where less intrusive renewable sources are available. Generally, wind power is more likely to conflict with conservation easements because wind farms are so visible. Solar power is also likely to disturb a natural aesthetic, although to a lesser extent since solar installations tend to be closer to the ground. Geothermal requires less disturbance of natural settings, as most of the activity goes on underground. Biomass production can involve substantial disturbance of nature, but does so in ways that are accepted aspects of agriculture and forestry.

This paper argues that it will be impossible to generate the power we need and get it to the places people need it without compromising some conservation goals. The United States currently uses 3,955 gWh of power per year, and demand is expected to increase to 4,842 gWh by 2040. Of the almost four thousand gWh currently used, ten percent is generated by renewable power sources (including hyrdroelectric), while seventy percent is generated from carbon-intensive fossil fuels. Forty percent of all carbon emissions come from

83 Id. at 221-22.
84 Id.
85 Id. at 219.
86 LAND TRUST ALLIANCE, supra note 31.
87 Id.
88 Id.
89 Id.
90 Id.
91 U.S. ENERGY INFORMATION ADMIN. (“EIA”), ANNUAL ENERGY OUTLOOK 2013 (Table A8) (2012).
92 Id. The Renewables figure here includes hydroelectric because that is how the information is presented, but for discussions of carbon intensity it also makes sense to include it with solar, wind, biomass, and geothermal power. The seventy percent figure for fossil fuel comes from adding coal, natural gas, and petroleum (2,750 gWh) and dividing by the total (3,955 gWh).
the power-generation sector. The Intergovernmental Panel on Climate Change ("IPCC") predicts that carbon emissions will have to be stabilized and reduced by fifty percent by 2050 in order to have even a more-likely-than-not chance of preventing three degree Celsius heating, above which widespread and catastrophic impacts of climate change are predicted. It is clear that a lower carbon future will require widespread development of many types of renewable power.

The land-use conflict is likely to be most intense for renewable energy sources that have large impacts on surrounding land, such as wind power. Many of the best energy sources tend to be far from large population centers, so long transmission is required as well. Like with the conflict between conservation and renewable power generation, there is a conflict between conservation and power transmission. High-voltage lines kill wildlife through run ins and electrocution, not to mention the electromagnetic fields that are found to impact many species. Constructing these lines requires clearing land and keeping it clear, altering the landscape in ways that are sometimes drastic. Transmission lines have been documented to allow invasive species to spread and increase sediment pollution into water.

However, the challenges of transmission siting and the role of conservation easements are beyond the scope of this paper because they involve use of eminent domain by regulated utilities or government bodies. Eminent domain gives state actors the right to take land against the will of the landowners as long as just compensation is paid. This shifts discussion to questions of whether conserved lands should be exempted from eminent domain powers, and if not, who should be compensated and how much. Professor Nancy McLaughlin has explored some of these questions in a series of articles. This paper does not attempt to take on these important questions directly, but implicates many of the issues with the argument that reasonable development of renewable power infrastructure, including transmission lines, should be allowed on conserved land.

94 Id.
96 LAND TRUST ALLIANCE, supra note 31.
97 Id.
98 Id.
99 Id.; see also U.S. Constitution, Amend. V ("nor shall private property be taken for public use, without just compensation").
101 Id.; see also McLaughlin, supra note 15.
Renewable power development on conserved lands is likely to be one of the next frontlines in the battle between conservation and development because the stakes on both sides will become increasingly important with climate change. It is also likely to be a contentious topic because there are different incentives for the different decision-makers involved.

D. Local vs. National Incentives

State law traditionally governs both conservation easements and the siting of power generation and transmission facilities. There is a long history of local governance of land use in this country, and federal incursions into this regulatory area are often met with stiff resistance. In many respects, this makes sense as the tradeoff between conservation and power supply may differ across the country based on the local geography, economic activities, and preferences.

There are also issues that are more national or international in scope, such as national energy transmission corridors and climate change implications of greenhouse gas emissions. To adequately deal with these issues, the federal government might have to play an active role in determining how to appropriately balance the interest in conserving natural and open land with the interest in promoting renewable energy. Otherwise spillovers from one state to another are not accounted for in the local calculation of costs and benefits of alternative courses of action. In the most common scenario, local residents resist development of renewable power infrastructure because they lose the benefits of natural open space, but only gain a marginal amount from the national and international benefits of more advanced power generation. Without federal intervention, every location may feel this way and states may regularly use state law to block new renewable power development. This appears to be the motivation behind the provisions of the Energy Policy Act (“EPAct”) of 2005 that give the Federal Energy Regulatory Commission (“FERC”) backstop authority to

102 See PENNSYLVANIA LAND TRUST ASSOCIATION, ENERGY AND OTHER RIGHT-OF-WAY ISSUES, available at conserveland.org/policy/utility/.
103 See McLaughlin, supra note 15 (explaining state control of conservation easements); Jim Rossi, Trojan Horse of Electric Power Transmission Line Siting Authority, 39 ENVTL. L. 1015, 1016 (2009) (discussing traditional state role of siting transmission lines).
105 Id.
106 See Rossi, supra note 103.
107 Economists refer to this type of spillover as a negative externality. See ROBERT N. STAVINS, ECONOMICS OF CLIMATE CHANGE AND ENVIRONMENTAL POLICY (2012).
108 Id.
109 Id.
site energy transmission in areas that have been determined to be national interest transmission corridors when the states involved are dragging their feet.\textsuperscript{110}

Although FERC backstop siting authority may end up playing an important role in determining how energy developers should handle conservation easements, it remains to be seen as FERC has been unable to utilize its authority to this point.\textsuperscript{111} Even if and when FERC does use its backstop siting authority, that will only apply to transmission siting and will not apply to the siting of renewable power generation infrastructure.\textsuperscript{112}

However, the federal government has been involved in this important issue in a less visible way whenever the Internal Revenue Service (“IRS”) interprets what conservation easements qualify for benefits under the Internal Revenue Code.\textsuperscript{113} As discussed in Part II, the IRS has a huge and largely unexplored role in shaping the law of conservation easements.\textsuperscript{114} The IRS has not provided any interpretations of the tax code, whether through regulations or guidance, dealing with renewable power on land with conservation easements.\textsuperscript{115} Instead, states and private actors, such as landowners and land trusts, have done their best to come up with policies for renewable power and conservation easements with the hope that the IRS would not challenge any tax deductions that are claimed for easements that allow renewable power.\textsuperscript{116}

III. CURRENT APPROACH TO RENEWABLE POWER ON CONSERVED LAND

A. Renewable Power on Conserved Land

The current approach does not strike the proper balance between conservation and renewable power development because the approach is based on


\textsuperscript{111} See Tara Benedetti, Running Roughshod – Extending Federal Siting Authority over Interstate Electric Transmission Lines, 47 HARV. J. ON LEGIS. 253, 254 (discussing FERC’s attempt at using backstop authority being thrown off track by Piedmont Envtl. Council v. Fed. Energy Regulatory Comm’n, 588 F.3d 304 (4th Cir. 2009)). Although FERC has not been able to exercise its backstop authority to date, it may still impact the behavior of states by having the looming threat of FERC’s future preemptive authority.

\textsuperscript{112} See EPAct, supra note 110.


\textsuperscript{115} Lindstrom, supra note 14.

\textsuperscript{116} See LAND TRUST ALLIANCE, supra note 31.
antiquated notions of power generation. In most states, the default rule appears to be that renewable power generation for personal consumption is allowed on encumbered land, but most generation for commercial use, usually defined as power linked to the grid, is not allowed.\textsuperscript{117} This nostalgic distinction probably stems from the common practice in the early 20\textsuperscript{th} century of using windmills to power water wells. The western ranch would not be complete without a rickety old windmill spinning slowly. But modern commercial windmills do not fit in the picture of a classic western ranch. So states tend to allow the former, but not the latter.\textsuperscript{118}

Unfortunately the distinction between personal and commercial power production is inadequate for dealing with the modern realities of renewable power.\textsuperscript{119} If a house has solar panels, or small-scale windmills, that are primarily for personal consumption, they are probably still connected to the grid and while producing in good conditions sell power back to the grid.\textsuperscript{120} Should these be considered commercial? A simple rule would be to allow net metering of power and set a cap at zero or some arbitrary number of kilowatt hours above which landowners may not sell to utilities, but that rule does not adequately address the central conflict between conservation easements and renewable power: climate change is not going to be substantially mitigated by allowing rural parcels with conservation easements to have a carbon-neutral power situation.\textsuperscript{121}

Biomass production is allowed on land that is conserved to preserve agriculture, as growing biomass feedstock is indistinguishable from growing other crops.\textsuperscript{122} However, biomass only constitutes two percent of the renewable power current generated so it would have to see tremendous growth to replace substantial amounts of fossil fuel power.\textsuperscript{123} Additionally, the carbon emissions associated with biomass power production may not be significantly lower than emissions from fossil-fuel sources. Although it is a legal grey area, some geothermal power development could probably also take place on conserved land,

\textsuperscript{117} See, e.g., Vermont Land Trust, \textit{Stewarts of the Land} (2008) (promoting wind power on conserved lands “as long as power generation is used primarily for on-site consumption”) http://www.vlt.org/news-publications/publications-archive/archived-articles/wind-power; California Renewable Energy Combining Zone Permit, (promoting commercial solar on agricultural land but “shall not be placed on any property under a [conservation easement]”) available at www.ccpda.org.

\textsuperscript{118} See Lindstrom, supra note 14.


\textsuperscript{120} \textit{Id.}

\textsuperscript{121} EIA, supra note 91.

\textsuperscript{122} DUJIVIER, supra note 67 at 120.

\textsuperscript{123} EIA, supra note 91 at Table A16.
as discussed further below. Yet biomass, some geothermal, and personal wind and solar are not going to amount to a large portion of the reduction required to make a serious dent in carbon emissions. If we are serious about mitigating climate change, we need to build out enough renewable power to supply energy to the grid to meet the needs of the population centers that consume the vast majority of the energy in our country. The traditional rules for renewable power on conserved land do not allow production at a scale that can actually help solve the vast problem of fossil-fuel energy generation creating carbon emissions that contribute to climate change.

B. Mineral Extraction on Conserved Land

The traditional rule for wind and solar is curious in light of similar legal doctrines that govern oil, gas, and mineral extraction on land encumbered by conservation easements. Most states allow for extraction of energy and minerals on land with conservation easements as long as these activities have a “limited” and “localized” impact on the property that is “not . . . irremediably destructive of significant conservation interests.” If a property is found to have oil beneath it that is economical to extract, the extraction can take place as long as there are enforceable limits on the above-surface activity. In contrast, the IRS successfully challenged a conservation easement that allowed the landowner to extract gravel in a way that would lead to “lasting damage . . . that would frustrate the conservation purpose.”

If temporary and limited disruption of the land is allowed for oil and gas extraction, it begs the question: why is renewable power often governed by a harsher standard? Geothermal power could probably be developed under the oil and gas rule as long as surface facilities are sited appropriately and the land could be returned to a relatively natural state after the working life of the plant. Geothermal benefits from having much of its activity occur out of sight underground, much like oil and gas extraction. Solar and wind, however, are not treated by the same standard. Solar and wind facilities are temporary in a similar way as oil rigs and could be sited to minimize environmental impacts. Approval of developments could be conditioned on appropriate disassembly and restoration procedures to return the land to a relatively natural state. It seems curious to allow land to be temporarily disturbed to extract energy resources like oil and gas that contribute to climate change, but forbid the temporary disturbance of land for renewable power that can help us mitigate climate change.

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124 See infra notes 133-34 and accompanying text.
125 See EIA, supra note 91.
126 DuVivier, supra note 67 at 12.
127 See Model Act, supra note 29.
128 IRS Regs 1.170A-14(g)(4)(i); see also Lindstrom, supra note 14 at 80.
129 Id.
131 DuVivier, supra note 67 at 221.
The paradox of more lenient rules for climate-change aggravating activities should prompt a search for a better approach that balances the trade-off between conservation and energy development to more seriously allow for development of renewable power that can mitigate climate change. In the next section, I turn to that issue.

IV. A BETTER BALANCE THAT PROMOTES RENEWABLE POWER

A. Public Policy in Favor of More Renewable Power

To better match society’s preference for conservation and renewable power, state laws should promote the development of renewable power on land with conservation easements when the conservation purpose is not clearly and excessively frustrated. The current balance is tipped in favor of conservation, as states have control over the decision on this tradeoff and local communities tend to have an incentive to reject renewable developments because they bear the bulk of the burden of lost natural landscape, but receive only a small portion of the climate change mitigation benefit.

The threats of climate change loom over many aspects of society, including conservation efforts. The IPCC predicts that anything over a three degree Celsius increase in temperatures will lead to drastic changes in weather patterns. Droughts and severe flooding will both become more frequent with higher evaporation rates and shifts in the hydrologic cycle. Natural species and agricultural crops will be stressed and some will fail to adapt to the new conditions, leading to a wave of extinctions. These drastic changes will press social and legal structures, including the Endangered Species Act and conservation easements that were created to protect a significant natural habitat that may no longer be there. Outside the realm of conservation, climate change threatens economic activity, human migration, and many other important social and economic factors.

In light of the threats of climate change, there should be a strong public policy in favor of promoting renewable power to help stem the release of carbon into the atmosphere. With this public policy in mind, I turn to the substance of a set of rules that can help achieve the goal of promoting renewable power.

B. Matching Development to Conservation Purpose

132 See generally Heller & Zavaleta, supra note 5.
133 IPCC, supra note 93.
134 Id.
135 Id.
136 Id.
137 Id. at Section II.
To strike the right balance, the scales should be re-centered from the current position where local control tends to favor conservation over development of renewable power. With over 6 million acres already encumbered by perpetual conservation easements, the proper balance of renewable power and conservation will be hard to reach without rules that include existing easements. Existing conservation easements should be interpreted to allow for reasonable renewable power development when it does not directly conflict with the purpose of the easement. ‘Reasonable’ should be interpreted at least as broadly in this field as it is with oil and mineral extraction, and there is a good public policy argument that it should be interpreted more broadly: renewable power helps mitigate climate change, a looming specter over all conservation efforts. This means that required access roads and transmission lines should be allowed to support the renewable power.

Although renewable power development should be allowed and even encouraged on land with conservation easements, that does not mean that every conserved property should be open for renewable power development. Some land is conserved with a purpose that would be severely frustrated by the erection of windmills, solar panels, biofuel crops, or geothermal facilities. To encourage renewable power but still respect the intent of landowners who create conservation easements, the legal rule should look to the easement purpose.

Renewable power should be allowed on land encumbered by conservation easements that have a purpose that does not directly conflict with the renewable power development. For example, easements with a purpose of public education and recreation should allow renewable power generation. Renewable power can actually enhance the purpose of these easements, as the public can continue to engage in most of the recreation that they did before on the property, and additionally learn about renewable power.

Approval of renewable power development on lands with easements for the purpose of protecting significant natural habitat should depend on what type of species and habitat are the main focus of protection. For example, if a species of bird or bat is being protected, then windmills could potentially pose a problem because windmills cause some deaths of these species. If a rare mouse is being protected, then windmills may not be such an issue, especially if care is taken during installation. Many easements have purposes that focus on preservation of natural habitats, such as oak savannah or seasonal wetlands, instead of certain species. Agencies often use an ‘ecological significance’ standard for these properties to determine whether they qualify for conservation easements in the first place. This same ‘ecological significance’ test could be used to determine

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138 See Heller & Zavaleta, supra note 5.
139 See Ruhl, supra note 11.
140 ALI-ABA, supra note 40 at 25.
141 See Simmon, 646 F.3d at 7.
whether a proposed development would destroy a large amount of the ecological value of the conserved land. Whether dealing with species or habitat, courts and agencies faced with these determinations should keep in mind that climate change threatens to disrupt most species and habitats in unknown ways, so close calls should go in favor of allowing renewable power development even if some conservation goals are frustrated to a degree. The same public policy in favor of renewable power should be kept in mind when the conservation easement is not explicit about what significant natural habitat the easement is intended to protect.

The most common purpose for conservation easements is to preserve open space as defined by the goals in state laws. This broad category encompasses so many different types of easements on different types of properties that it is difficult to have a categorical rule to govern these situations. If we value open space because of the natural scenic beauty, then windmills or solar panels may conflict with this purpose. Alternately, if we value open space because it provides green space and has working farms, then windmills and solar panels would not necessarily be detrimental to these goals. Since there is such a strong public policy in favor of renewable power to mitigate climate change, I propose that renewable power development be allowed on land that is conserved for the purpose of preserving open space unless there is language in the conservation easement that clearly shows the intent of the donor would be severely frustrated by that development.

To make matters complicated, many conservation easements have multiple expressed purposes. Drafters strategically include these multiple purposes in case courts or statutes were to invalidate a certain purpose. When there are multiple purposes in a conservation easement, I propose that courts should assign weights to each purpose and allow renewable power development if the purposes that constitute the majority of the weight would allow it. The default rule could be that multiple purposes in a conservation easement are assigned equal weights unless there is an indication in the easement to the contrary.

With these rules of interpretation in mind, I now turn to a proposed method of implementing these changes in the laws governing conservation easements.

V. IMPLEMENTING THE NEW RULES THROUGH IRS ACTION

A. IRS Interpretations that Trickle-Down to State Law

The most clear and politically accountable way for this policy to be implemented would be for Congress to amend the tax code or to promulgate a law

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142 ALI-ABA, supra note 40 at 25.
144 Id.
specific to conservation easements and renewable power, but this is an unrealistic proposition in the current political environment.\textsuperscript{145} Administrative action could achieve similar ends without requiring bicameralism and presentment. As discussed in Part II, the IRS plays an important role in crafting the law of conservation easements by interpreting the tax code to determine what qualifies for tax benefits. When tax benefits are targeted at perpetual easements, state laws tend to focus on perpetual easements that will qualify for the tax benefits.\textsuperscript{146} When the IRS challenges tax deductions based on certain conservation purposes, landowners are less likely to base conservation easements on those purposes.\textsuperscript{147} With this influence, the IRS is probably in the best position to implement the proposed policies within the existing statutory framework.

The first step is for the IRS to expressly allow renewable power development in conservation easements going forward. There is currently a lot of uncertainty over whether this type of provision is allowed in conservation easements or if it will disqualify the landowner from tax benefits of donating an easement.\textsuperscript{148} Landowners and land trusts should be confident that one of the options they can consider when drafting a perpetual easement is to allow for reasonable development of renewable power.

As discussed in Part IV, it is important to include existing conservation easements in the new policy as well. By adopting the above rules of interpretation, landowners and land trusts will know how the IRS analyzes renewable power development on land with conservation easements. Past experience suggests that states may adapt existing laws so that landowners are best able to receive federal tax benefits of conservation easements, which in this case would mean aligning state law with IRS policies encouraging renewable power development. It is unclear how rapid or widespread this ‘trickle-down’ would be, as the incentive to align state law with IRS policy will sometimes be opposed by an incentive to prevent local renewable power development, as discussed in Part II. However, any additional encouragement of renewable power development would be an improvement over the current situation. Even if no states amend laws to better match IRS policy, the IRS policies themselves would resolve uncertainty and promote renewable power development.

B. Administrative Action to Implement the Rule

The IRS could implement this rule in a variety of ways. One way would be through notice-and-comment rulemaking, changing the IRS interpretation of the tax code as presented in the federal regulations. This method has the benefit of clarity, as the rules have the force of law and the IRS’s interpretations of the

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\textsuperscript{145} See Ruhl, \textit{supra} note 11 (discussing challenges to passing legislation dealing with conservation).

\textsuperscript{146} LINDSTROM, \textit{supra} note 14 at 22.

\textsuperscript{147} Id.

\textsuperscript{148} Paul Doscher, \textit{The Next Frontier}, SAVINGLAND (Spring 2010).
The downside to notice-and-comment rulemaking is that it takes a long time and substantial agency resources. However, one of the reasons for the long time period is that the agency is required to seek public input for the proposed rule. This can give interested parties like land trusts, agriculture groups, and renewable energy advocates a chance to become involved in the process. Although it takes a long time and substantial resources, I argue that notice-and-comment rulemaking is the best way to end up with the appropriate balance of conservation and renewable power.

An alternative to the notice-and-comment rulemaking process would be for the IRS to issue guidance on the issue. The Administrative Procedure Act (“APA”) does not require the notice-and-comment rulemaking process for non-legislative regulations that are “interpretative rules.” The benefit of promoting this rule as guidance is that it does not require the lag time and resources involved in notice-and-comment rulemaking. One downside is that the public would not have a formal opportunity to participate, although some of the sophisticated actors involved like land trusts and the energy lobby are likely to be in communication with the agency even without a formal notice-and-comment period. The other downside to issuing this rule as guidance is that it may be challenged under the APA for attempting to create new law without going through the proper procedures.

VI. CRITICISMS AND ALTERNATIVES

There are several questions left open with the suggested rule to promote renewable power on conserved lands and its implementation. One of the most common criticisms will likely be that allowing renewable power development on a property may frustrate the intent of the landowner, even if that intent is not adequately documented in the conservation easement itself. Since the majority of conservation easements were created in the past twenty years, many of the original donors are still alive and may be very vocal about disagreements. Although this issue is sure to put government officials, land trusts, and renewable power companies in awkward positions at times, I propose that the conservation easement documents should continue to be thought of as the legal manifestation of the agreement that was reached. Accordingly, analysis of the purpose behind a conservation easement should focus within the four corners of the conservation easement documents. Although it may seem that this rule could lead to harsh results, it is important to keep in mind that nothing proposed here would force

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151 Id. at 401-02.
renewable power on land with conservation easements. It would merely open the possibility of renewable power development on conserved land. Developers would still require agreements with landowners and the land trusts holding easements, so there are natural checks on the intent to conserve natural places.

On the other side, some may argue that this rule is unlikely to be effective at actually promoting renewable power development on conserved lands because it does not give new tools to energy developers, such as the eminent domain powers used in transmission. I propose this rule as a first step toward a more appropriate balance of renewable power and conservation. I do not claim that it will get us there. I am optimistic that once people become more familiar with the sight of renewable power facilities, some of the aversion will dissipate.

Although the IRS could issue a regulation that sets forth the above rule, some may argue that other implementation procedures would be preferable. Another agency with more expertise in the area of conservation, such as the Department of Interior, U.S. Department of Agriculture, or Environmental Protection Agency, could implement the rule and take advantage of expertise in conservation. Alternatively, an agency with more expertise in renewable power, such as FERC, could be charged with promoting renewable power. These agencies may be able to implement the rule in a more visible way, making them more accountable for the decision. However, it is not clear what statutory authority these agencies would be exercising when getting involved in renewable power on conserved lands. I argue that the best way to get them involved under the current statutory framework is to have the IRS seek specific input from these other agencies in the notice-and-comment rulemaking process, thus getting some of the benefits of their collective expertise.

Should state law play a larger role instead of the federal agencies just discussed? As discussed earlier, there are many benefits of local control. Perhaps those actually outweigh the downside of tending to put the brakes on projects that have national and international benefits. However, as alluded to earlier, it seems that the stakes are high enough when dealing with climate change that an active role for the federal government is justified.

VII. CONCLUSION

In conclusion, current law does not tend to allow the development of renewable power on land encumbered by conservation easements. In a world facing serious threats from climate change, this is an unacceptable balance of conservation and renewable power with too much weight placed on conservation. One of the main reasons for this preference for conservation over renewable power is that local actors have a large amount of control on the state law that governs conservation easements and renewable power development. Although there are good justifications for substantial local control over these issues, there are also impacts like national power transmission and global climate change that
extend well beyond the boundaries of the communities that are making these decisions. As local communities are unlikely to fully weigh the dispersed benefits of reduced global warming against the concentrated local cost of less natural open space, there is a strong impulse towards preventing the development of renewable power infrastructure on land encumbered by conservation easements.

The federal government is in a better position to balance the wide-ranging costs and benefits of developing renewable power on land with conservation easements. Through the tax code, the IRS can determine what conservation easements qualify for the substantial federal tax benefits. By interpreting the tax code to allow renewable power on conserved land when it does not directly conflict with the purpose of the conservation easement, the IRS can push toward a better balance between conservation and renewable power. The preferred method for making this change in policy is to go through notice-and-comment rulemaking to clarify that conservation easements for the purpose of public education can allow renewable power. Conservation easements with a purpose of protecting sensitive habitat should not allow renewable development if the key species are susceptible to damage from the installation or operation of the renewable power infrastructure. If the ecological significance would not be substantially diminished, renewable power should be allowed. If the purpose of the conservation easement is scenic enjoyment of open spaces, there should be a presumption that renewable power be allowed.

This proposed approach offers the benefits of federal involvement but still leaves a role for states to shape the contours of the law in a way that suites the local tradeoffs between conservation and renewable power development. Hopefully a clearly articulated tax policy can move us toward a more appropriate balance of conservation and renewable power that ultimately allows for meaningful reductions of carbon emissions and long-term conservation.