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DEALS IN THE HEARTLAND: RENEWABLE ENERGY PROJECTS, LOCAL RESISTANCE, AND HOW LAW CAN HELP

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I. Introduction

This Article offers proposals for better engagements, relationships, and deals with local communities contemplating wind farms. Because the rapid expansion of wind energy to date has exhausted the first-mover rural communities, the promise of wind energy depends on reluctant rural communities that may require the legal, relational, and policy innovations proposed herein if they are to grant their consent to future wind farms and participate in the renewable energy transformation. The proposals herein are the result of empirical research exploring how occupants of rural spaces have reacted to wind developer's strategies in their communities and how local communities have employed legal mechanisms to welcome—or, more often, reject wind farms in their home counties. While the field work informing this Article was based in Indiana, our findings have broad applicability.

II. Wind in Indiana's Rural Counties

A. Overview

Only six Indiana counties have permitted wind farms in their communities. More importantly, since 2008, no

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See Zuzana Bednarikova et al., An Examination of the Community Level Dynamics Related to the Introduction of Wind Energy in Indiana, Purdue Univ. 13 (June 2020), https://cdext.purdue.edu/wp-content/uploads/2020/09/Wind-Energy_Final-report.pdf [https://perma.cc/NW3C-ZP6L].

fewer than 30 of Indiana's 92 counties have either placed outright moratoriums on wind farm construction or have passed land use ordinances placing restrictions on wind turbine placement, setbacks, noise levels, or shadow casting, that effectively prohibit wind farms within the counties' borders.² This number betrays the prevalence of restrictive or prohibitive ordinances, as many counties with less desirable wind profiles have not undertaken to pass ordinances addressing commercial wind farms.

B. Methods

Over the course of nearly 30 hours of interviews in 2021 spanning 11 Indiana counties, we spoke with anti-wind activists, company representatives, county officials, and county economic development corporation officers. We also spoke with employees at regional, state, and national governmental and nongovernmental organizations focused on the expansion of wind energy and the conflicts it is creating in local communities. This fieldwork supplemented our comprehensive research on wind farms in Indiana, including (1) the presence and absence of wind farms, and their dates of construction, (2) the presence, absence, content, and dates of adoption of county ordinances designed to attract, prohibit, or place moratoria on wind farm construction within the county limits, and (3) all searchable court cases arising from controversies related to wind farms. We also collected information on court cases, statutes, and lobbying efforts at the state level connected to the expansion of wind energy in Indiana. In addition, we searched databases and ran general internet searches for

See Christiana Ochoa et al., Indiana County Data (unpublished compilation of Indiana county land use ordinances and other relevant information on wind farm regulation) (on file with authors).

local, state, and national news addressing wind energy development in Indiana.

III. The Wind Imperative

A. National Policy and Law

Over the past 20 years, total energy capacity from installed wind farms in the United States has grown rapidly, from 2,472 megawatts (MW) in 1999 to 109,919 MW in 2020.³ Assisted by national and state-level incentives, the sector is slated to continue growing rapidly.⁴

1. Grants

In early 2021, the U.S. Department of Energy announced \$100 million in funding for transformative clean energy research and development, of which advancements in wind energy technology are a key part. Through its Rural Energy for America Program (REAP), the U.S. Department of Agriculture provides farmers, ranchers, and small businesses in rural areas with grants and loan guarantees for renewable energy development assistance.

2. Tax Incentives

The current federal approach to wind energy development is seemingly designed to court massive investments from the private sector and inject "tens of billions of dollars in private capital"⁷ to jumpstart the transition away from fossil fuels.⁸

Among the mechanisms directed at this expansion, Production Tax Credits (PTC) provide "a tax credit of one cent to two cent-per kilowatt-hour for the first 10 years

of electricity generation for utility-scale wind." The Inflation Reduction Act extended the PTC to projects with construction beginning before 2024 and extends the PTC for at least 10 years for any energy project with a zero or less greenhouse emissions rate. The Investment Tax Credit (ITC) operates in a similar fashion.

B. State-Level Initiatives

Six states offer corporate tax credits¹² for wind energy generation specifically, while two states offer corporate tax deductions.¹³ State property tax incentives are more widely available, with the majority of states offering some type of property tax incentive for wind energy projects.¹⁴

Among states, grant programs are a popular form of incentive for renewable energy development.¹⁵ At least 18 states offer some type of grant or loan program for renewable energy development generally, while 11 states offer grants for wind energy specifically.¹⁶

IV. Legal Conflicts Over Wind Projects

While federal and state policies support expansion, wind energy projects have experienced significant local resistance, in the form of political organizing, activism, and litigation, that is increasing over time.

A. County Ordinances

In Indiana, as in most states, conflicts over wind farms are deeply local. The majority of states¹⁷ have either constitutionally provided or legislatively delegated at least some powers to municipalities.¹⁸ For example, under Indiana's Home Rule statute,¹⁹ the power over approvals for wind

See David Nderitu et al., 2020 Indiana Renewable Energy Resources Study, PURDUE UNIV. & STATE UTIL. FORECASTING GRP. 32 (Oct. 2020), https:// www.purdue.edu/discoverypark/sufg/docs/publications/2020_Renewables Report.pdf [https://perma.cc/4B4L-5PWS] (stating that the Indiana Cross-roads Wind Farm, located in White County, had an in-service date of December 2021).

^{4.} *Id.* at 20-30.

DOE Announces \$100 Million for Transformative Clean Energy Solutions, U.S. Dep't of Energy (Feb. 11, 2021), https://www.energy.gov/ articles/doe-announces-100-million-transformative-clean-energy-solutions [https://perma.cc/LB25-ZHZB].

Rural Development, Rural Energy for America Program Renewal Energy Systems & Energy Efficiency Improvement Guaranteed Loans & Grants, U.S. DEP'T OF AGRIC., https://www.rd.usda.gov/programs-services/energy-programs/rural-energy-america-program-renewable-energy-systems-energy-efficiency-improvement-guaranteed-loans [https://perma.cc/W4]2-WUH8].

Keynote Remarks by Secretary of the Treasury Janet L. Yellen at COP26 in Glasgow, Scotland at the Finance Day Opening Event, U.S. DEP'T OF THE TREASURY (Nov. 3, 2021), https://home.treasury.gov/news/press-releases/ jv0457 [https://perma.cc/K4B]-K8CD].

For a more complete array of national-level financial support programs for the wind industry, see generally Off. of Energy Efficiency & Renewable Energy, Advancing the Growth of the U.S. Wind Industry: Federal Incentives, Funding, and Partnership Opportunities U.S. Dep't of Energy (June 2021), https://www.energy.gov/sites/default/files/2021-07/us-wind-industry-federal-incentives-funding-partnership-opportunities-fact-sheet-v2.pdf [https://perma.cc/G8HL-RNB8].

Wind Energy Techs. Off., Production Tax Credit and Investment Tax Credit for Wind, U.S. Dep't of Energy, https://windexchange.energy.gov/projects/tax-credits [https://perma.cc/YQ4U-78SN].

^{10.} See Inflation Reduction Act of 2022, Pub. L. No. 117-169.

Laura B. Comay et al., Cong. Rsch. Serv., IN11980, Offshore Wind Provisions in the Inflation Reduction Act 2 (2022).

See Summary Maps, DSIRE, https://programs.dsireusa.org/system/ program/maps [https://perma.cc/6824-NB5G].

^{13.} See id.

See Summary Tables, DSIRE, https://programs.dsireusa.org/system/program/tables [https://perma.cc/2R8Y-UR9W].

^{15.} See Programs, DSIRE, https://programs.dsireusa.org/system/program?type=87& (click "apply filter," then "type," then "renewable energy" to see a list of renewable energy grant programs in various states) [https://perma.cc/38UX-VTLV].

^{16.} Id

See Jessie J. Richardson Jr. et al., The Law Behind Planning & Zoning in Indiana, Purdue Univ. Coop. Extension Serv. 2 (Feb. 2022), https://www. extension.purdue.edu/extmedia/id/id-268.pdf [https://perma.cc/7HJU-8DLU].

Adam Coester, Dillon's Rule or Not?, 2 NAT'L ASS'N OF CNTYS. 1, 3 (Jan. 2004), https://web.achive.org/web/20151010114031/http://celdf.org/downloads/Home%20Rule%20State%20or%20Dillons%20Rule%20State.pdf [https://perma.cc/LLT8-47ZR]; see Jessie J. Richardson Jr. et al., The Law Behind Planning & Zoning in Indiana, Purdue Univ. Coop. Extension Serv. 2 (Feb. 2022), https://www.extension.purdue.edu/extmedia/id/id-268.pdf [https://perma.cc/7HJU-8DLU].

^{19.} See Ind. Code \$36-1-3-6 (2022).

energy projects is placed in the hands of county councils, commissioners, and zoning boards.²⁰

The Indiana State Legislature attempted in 2021 to curb the power of county ordinances to prohibit or restrict wind projects. House Bill 1381 (HB 1381), as originally proposed, would have limited home rule with respect to wind farm regulations by creating a statewide set of industry-favorable standards.²¹

However, by the time the Senate was considering the bill, nearly 60 counties had expressed their opposition to HB 1381,²² and, ultimately, HB 1381 died on the Indiana Senate floor²³ and, even with new legislation to incentivize counties to adopt favorable ordinances,²⁴ anti-wind energy politics continue to prevail.

B. Litigation

Individuals and groups opposing wind projects have brought Fifth Amendment claims²⁵ and claims of violations of local zoning ordinances,²⁶ but most of this litigation has been fruitless before the courts.²⁷

A strong theme that emerges in Indiana is judicial deference to county commissions and county councils, with each of the two cases over the zoning of commercial wind farms that have been considered by the Indiana Court of Appeals being decided in favor of county zoning board discretion.²⁸

V. Community Resistance and Conflicts

This part relies on our fieldwork to describe county-level efforts to maintain local control over wind-energy regulations. It provides insights into the community-level organizing and political machinations that create obstacles or outright blocks on future wind farms.

By far, the four most strongly felt sources of resistance are concerns about: (1) poor process; (2) the substance of the deals that are struck for wind farms, and with whom they

are struck; (3) the inevitable viewscape changes wrought by wind farms; and (4) the impacts on property values.²⁹

A. "We Got Steamrolled . . . We Kept Feeling Like It Wasn't Legal"³⁰

The most pervasive feature of our interviews throughout Indiana is that the process by which wind developers engage with communities causes resistance, resentment, anger, and long-lasting community divisions.

The deals surrounding wind energy projects are widely perceived as secretive, non-transparent, non-inclusive, and offering insufficient opportunities for participation in the design of projects.

Company lease-negotiators were described as inexpert, seemed guarded, oversold the upsides, and, in one instance, coaxed one farmer to sign a lease under the false pretext that their immediate neighbor had agreed to put in three turbines, only later to discover that this was untrue.³¹

"The result is that [we] didn't know until the deals were all but done—very late in the game Three wind projects were going by the time we learned of them." By the time a broad pool of residents learned that a wind farm may be established in their county, they felt (or were explicitly told) "it's a done deal." We had the sense the commission was not going to follow the rules. Learned that a wind farm may be established in their county, they felt (or were explicitly told) "it's a done deal." We had the sense the commission was not going to follow the rules.

The cumulative effect is that people who might have been agreeable or neutral on wind farms turned against them. "I believe that people took a relatively reasonable approach at first." But the process was seen as "arrogant, and the community reacted negatively. These things tend to get talked about over morning coffee more than any benefits [the community might receive]." One interviewee summed up his feelings about the process by saying: "I'm not anti-wind. I'm anti-how-it-was-done-here." I'm

See There When You Need It: County Government, Ass'n of Ind. Cnty. 2 (May 2009), https://www.indianacounties.org/egov/documents/1251296396_485260.pdf [https://perma.cc/4A7R-JCVU].

^{21.} H.B. 1381, 122d Gen. Assemb., 1st Reg. Sess. (Ind. 2021).

Ass'n of Ind. Cntys. and Ind. Ass'n of Cnty. Comm'rs, HB 1381 Map, Ass'n of Ind. Cntys. (Mar. 16, 2021), https://www.indianacounties.org/egov/apps/document/center.egov?view=detail&id=2531 [https://perma.cc/47LY-WANA].

See IN HB1381, 2021, Regular Session, LegiSCAN (Apr. 15, 2021), https://legiscan.com/IN/bill/HB1381/2021 [https://perma.cc/Y3S7-4B6G].

See Senate Enrolled Act 390 of 2023, https://legiscan.com/IN/text/ SB0390/2023.

Eg., Complaint for Declaratory Judgment at paras. 14-16, Smith v. Miami Cnty., No. 52C01-1801-PL-000020 (Miami Cir. Ct. 2018).

^{26.} Dunmoyer v. Wells Cnty., 32 N.E.3d 785, 791 (Ind. Ct. App. 2015).

E.g., Order Dismissing Complaint at 1-2, Mosburg v. Bd. of Comm'rs, No. 21C01-1603-PL-00144 (Fayette Cir. Ct. Dec. 12, 2016).

^{28.} Flat Rock Wind, LLC v. Rush Cnty. Bd. of Zoning Appeals, 70 N.E.3d 848, 850 (Ind. Ct. App. 2017) (regarding denial of a zoning permit); Dunmoyer v. Wells Cnty., 32 N.E.3d 785, 797 (Ind. Ct. App. 2015) (regarding a challenge to an approval of a project).

^{29.} Other frequently cited reasons to resist commercial wind farms which this Article will not explore in detail are (5) the potential health consequences of living in range of "blade flicker" and turbine sounds, and (6) the negative effects for flying animals.

^{30.} Interview 203 with Anti-Wind Organizer (June 16, 2021) (on file with authors).

^{31.} Interview 201 with Anti-Wind Organizer (June 11, 2021) (on file with authors).

^{32.} Interview 204 with Anti-Wind Organizer (Sept. 20, 2021) (on file with authors).

^{33.} Interview 202 with Anti-Wind Organizer (June 14, 2021) (on file with authors).

^{34.} This is a concern shared in other instances as well. See, e.g., Interview 204 with Anti-Wind Organizer, supra note 32.

^{35.} Interview 203 with Anti-Wind Organizer, supra note 30.

^{36.} Interview 201 with Anti-Wind Organizer, supra note 31.

^{37.} *Id.*

^{38.} Id.

6 MW 3 MW 328ft 1.8 MW 295ft 262ft 0.9 MW 190ft 240 0.2 MW 98ft 120 173ft 4928 4109 2016 2035 Land-Based Wind Wind Turbine Capacity (Megawatt) | Hub Height (feet)

Fig. 1. Demonstrating Growing Wind Turbine Hub Heights Over Time

Source: Off. of Energy Efficiency & Renewable Energy, Wind Turbines: The Bigger, the Better, U.S. Dep't of Energy (Aug. 16,2022), https://www.energy.gov/eere/articles/wind-turbines-bigger-better [https://perma.cc/6NEX-TL23].

B. Organized Opposition: "It Starts With a Ringleader, Then Eight to Ten People, Then Hundreds." 39

Residents, tenant farmers, and neighbors all have reasons to oppose wind farms. When opposition to wind farms takes hold in a particular county, it often does so with force, garnering large numbers of county residents to the anti-wind farm camp. In each county we visited, concerned citizens quickly formed into anti-wind organizations.

Those who oppose wind farms are skeptical that the economic development agreements negotiated between companies and county governments are sufficient to compensate for the prolonged tax abatements that counties grant to companies, at least in the short term.

For those who reside where wind farms are slated to be built, their concern is much deeper. Many farmers in this part of the country have long, inter-generational connections to their land, some dating back over 200 years.⁴⁰

Our team repeatedly heard stories of large-farm absentee owners contracting with wind farm operators: "The big farmers wanted to sign up early. The vast majority of the people that signed up don't live on the land. For example, one farmer signed up for 49 turbines without regard

to his tenants."41 The "leaders of the opposition are often tenant farmers."42

The neighbors of wind farms are also among the most aggrieved in recipient communities, given that neighbors often are in the noise and flicker zone of turbines, and experience vastly changed landscapes, while typically receiving no economic benefit.

C. "It's Like Living in an Industrial Zone"43

The earliest commercial wind towers erected in Indiana from 2008-2010 have hub-heights of approximately 262 feet.⁴⁴ By 2020, the total average height of onshore wind turbines was 410 feet, nearly the height of the London Eye Ferris Wheel.⁴⁵

People who have lost wind farm battles (or never fought them) have seen their surroundings transformed from rural countryside and farmland with wide-open vistas to large-scale, industrial energy-production facilities. To understand the experience of living on land now occupied by a large-scale wind farm, one must imagine a bright, blinking red light on the top of hundreds of wind turbines (these are necessary and required for air safety). One couple we talked with said it was "horrifying the first time we saw the towers at night."

Interview 502 with Former Economic Development Director (June 25, 2021) (on file with authors); see also Interview 204 with Anti-Wind Organizer (Sept. 20, 2021) (on file with authors); Interview 203 with Anti-Wind Organizer (June 16, 2021) (on file with authors).

^{40.} See Hoosier Homestead List, Ind. State Dep't of Agric., https://www.in.gov/isda/files/1976-2014_Hoosier_Homestead_List_pdf.pdf [https://perma.cc/E75P-88LM] (listing Hoosier Homestead farms, with one dating back as early as 1791, that were recognized by the Indiana government from 1976-2014).

^{41.} Interview 202 with Anti-Wind Organizer, supra note 33.

Interview 502 with Former Economic Development Director, supra note 39.

^{43.} Interview 203 with Anti-Wind Organizer, supra note 30.

^{44.} Bednarikova et al., supra note 1 at 13 tbl.1.

Off. of Energy Efficiency & Renewable Energy, Wind Turbines: The Bigger, the Better, U.S. Dep't of Energy (Aug. 16, 2022), https://www.energy.gov/eere/articles/wind-turbines-bigger-better [https://perma.cc/6NEX-TL23].

^{46.} Interview 203 with Anti-Wind Organizer, supra note 30.

Fig. 2. Benton County, Indiana, Farmhouse Surrounded by Wind Turbines



D. "How Can They Not Be Hurting Property Values?"⁴⁷

One of the leading concerns expressed by communities contemplating wind farms is the effect they may have on property values. The conclusions in the literature on the effects of wind farms on property values are mixed.

Perhaps most interesting is a study indicating that the community attitude toward wind farms is a strong predictor of their effect on property values. Where communities have voiced no opposition to the establishment of wind farms, property prices rise, though not enough to be statistically significant.⁴⁸ On the other hand, where communities have received wind farms despite notable opposition, properties located within about two-and-a-half miles of a turbine tend to drop between 5% and 10%.⁴⁹

E. Other Concerns

Other reasons for opposing wind farms relate to shadow flicker (the notable light flicker created by the shadow of rotating turbines), sounds from wind turbines, and the ecological effects of wind farms.

F. The Results: Slower Transitions to Clean Energy, Distorted Electoral Politics, and Broken Communities

There are at least three reasons to heed the concerns driving opposition to wind farms.

Transitioning to Renewable Energy Will Be Slower and More Difficult

Opposition to wind farms is shutting down the United States' ability to reduce its reliance on non-renewable energy. In Indiana, for example, more than 30 viable wind energy counties have passed ordinances effectively or actually prohibiting wind farms in their boundaries.⁵⁰ The same is occurring in other wind-viable states.⁵¹

2. Local Politics and Elections Are Distorting

In small communities, this type of mobilization is unusual and has resulted in many county-level elections being characterized as strident "single-issue elections" for the purpose of ensuring anti-wind farm ordinances will be passed in the period immediately following elections. "Our county government is substantially different as a result of wind farms. Incumbents are losing even to unknown people with no experience." This raises concern about the effects that single-issue elections have on local governance.

3. Local Communities Are Suffering

Finally, there is the enduring erosion of the value of living in a peaceful community. Some interlocutors described feeling threatened even four years after a contentious vote over wind farms.⁵³ Many people lamented that their community has not returned to its previous levels of peace and civility.

^{47.} Interview 202 with Anti-Wind Organizer, supra note 33.

^{48.} Benton Cnty. Assessor's Off., Benton County—Wind Turbine Taxes, Assessed Values, and Residential Properties (on file with authors).

^{49.} *Id*.

Jennifer Miller, Opinion, 30-Plus Counties Hit the Brakes on Wind Farms. Indiana May Soon Blow That Up., INDYSTAR (Mar. 10, 2021), https://www.indystar.com/story/opinion/2021/03/10/op-ed-indiana-may-over-rule-local-governments-wind-and-solar/6814301002 [https://perma.cc/DIS7-RPI M]

David Nderitu et al., 2020 Indiana Renewable Energy Resources Study, PURDUE UNIV. & STATE UTIL. FORECASTING GRP. 37 (Oct. 2020), https:// www.purdue.edu/discoverypark/sufg/docs/publications/2020_Renewables-Report.pdf [https://perma.cc/4B4L-5PWS.

Interview 503 with Former County Commissioner (June 29, 2021) (on file with authors).

^{53.} Interview 204 with Anti-Wind Organizer, *supra* note 32.

VI. Recommendations Rooted in Resistant Communities

A. Theoretical Premise: Interventions in Contract Formation

The current practices of wind companies in local communities are not working. Outsider wind energy companies must engage communities early, transparently, respectfully, and generously to credibly propose mutually beneficial relationships. The proposals have to build trust such that communities are at least willing to enter relationships with the companies that may last a generation or more. They must also be attractive enough that communities can envision how the burden they will bear—an irreparable transformation of their land into an industrial power plant—is sufficiently compensated.

B. Recognizing the Burden

One feature we noted in our conversations with wind farm resisters is that they believe they are perceived as unreasonably or irrationally attached to "the view,"⁵⁴ caught up in "their greed,"⁵⁵ or jealous of their neighbors who wind up with lucrative leases.⁵⁶ The tendency to diminish the value of what is dear to a community is an ongoing reason companies are having trouble establishing in America's heartland.

C. Improving the Process

So many of the people with whom we spoke spent most of our conversations detailing what, for them, was a terrible experience with wind farm operators and county officials. They told us about companies whose mode of operation was intentionally secretive, such that leases were signed and county meetings had already been scheduled by the time they learned that a wind farm was proposed in their county. They also remarked on how little opportunity there was for participation in official county meetings.

These practices are pervasive—we have learned of only one wind company experimenting with a community engagement model similar to what we propose here.⁵⁷

1. Registering Interest and Reporting Process

Before a company sends employees or contracts to offer leases to landowners in a particular county, the company should be required to publicly register its interest in developing a wind farm in that county. County officials could

54. Interview 501 with County Commissioner (June 16, 2021) (on file with authors)

be required to report any such registration at the next possible public meeting. Any company that has registered interest could be required to submit a short report of any steps taken during the prior quarter toward the realization of their interest. County officials could, in turn, be required to relay those reports at quarterly public meetings. This process would give community members notice that companies are working toward signing leases in their area and their rate of progress.

2. Invite Engagement and Participation

Under the typical wind company model, companies: (1) look at technical maps to find a good location for a wind farm; (2) send people out to sign leases; (3) conduct environmental and other studies to determine viability; (4) use computer-generated models to determine the optimal location for turbines; and (5) go to the relevant county boards with fully developed plans.⁵⁸

Under a new pilot being conducted by one innovative company, the goal is to design a project that fits the requirements of the community. As an alternative to the standard model, they intend to: (1) engage the community; (2) work with the community on how to design the project (this includes identifying important locations that should be protected); (3) take time to work through the concerns community members have and discuss the real trade offs; and (4) give the community a 1% royalty on the project in addition to the taxes due, with the community empowered to decide who collects and administers these funds.⁵⁹

Transparent and Robust Information-Sharing

Companies can be required to hold ongoing information sessions and two-way dialogues separate and ahead of formal county government decision points.

The need to remain transparent and share all relevant information will extend over the life of the relationship. Such information should include effects on property values, health effects, and effects on birds and bats. It must also include robust information on revenues paid and public projects funded as a result of the company's operations.

Among the greatest challenges our team faced was the inability to access first-hand information about the private contracts between landowners and companies due to stringent non-disclosure clauses. One possibility would be to require companies to submit the contracts to the county assessor or recorder, with permission to redact information vital to the company's competitive position.

4. Spaces for Voicing Concerns

The concept of "exit and voice" is a useful framework for understanding how the limited spaces for public conversa-

^{55.} Interview 503 with Former County Commissioner, supra note 53.

Interview 702 with Wind Farm Company Representative (Sept. 10, 2021) (on file with authors).

^{57.} Interview 701 with Company Representative (Aug. 27, 2021) (on file with authors).

^{58.} *Id.* at 3.

^{59.} *Id.*

^{60.} See Albert O. Hirschman, Exit, Voice, and Loyalty 19-20 (1970); see also Albert O. Hirschman, "Exit, Voice, and Loyalty": Further Reflections and

tions result in highly contentious public meetings. When the ability or will to exit (move to another county or to an urban location) is low, the propensity toward political action—voice—in the face of challenges such as the arrival of wind farms is elevated. If that political action is limited or derided, it would be rational for communities to reject wind projects to avoid relating with them. This is clearly an attractive alternative to moving. The companies, rather than the residents, are thus forced to exit. County officials who are perceived as overly solicitous of wind companies are similarly ousted (from office if not from the county) at the next elections.

If this dynamic is to improve, company and incumbent county officials must open additional public spaces for earnest community input, evidence, discord, and discussion.

5. Lessons From International Development

Over the past decade, Free Prior Informed Consent (FPIC) has emerged as a mechanism in the foreign direct investment context designed to enhance the role communities have in negotiations over large-scale mining and development projects in much of the developing world. The concept emerged to assist primarily Indigenous communities in securing a role in striking (or denying) deals that would affect their ancestral lands. While FPIC has received merited criticism, the core principles at its heart have been very useful to our team as we consider how community engagement and relationships could be improved.

D. Fair Compensation

One consequence of not recognizing the burden local residents are asked to bear is that the deals companies offer to communities are not perceived by local communities as adequate compensation for all they stand to lose. This is a lost opportunity to enhance public infrastructure and services that can act to revitalize rural communities.

Contingent Tax Incentives and Abatements

If companies are not voluntarily seeing the utility of sharing the benefits of tax incentives, federal and state governments could force sharing by requiring companies to pass along a simple percentage of gross revenues or a substantial portion of tax credits to host communities.⁶⁴

a Survey of Recent Contributions, 58 MILBANK MEM'L FUND Q. HEALTH & SOC'Y 430 (1980) [hereinafter Hirschman, Further Reflections]; OLIVER P. WILLIAMS, METROPOLITAN POLITICAL ANALYSIS: A SOCIAL ACCESS APPROACH 29 (1971).

Similarly, the tax credits for counties establishing Wind Energy Ready Communities under legislation such as Indiana's recently adopted Senate Enrolled Act 39065 could be enhanced to further benefit the residents of such communities whose land is not the subject of a lease with a wind company. This would assure additional benefit to the most immediate neighbors of wind turbines who are not receiving direct financial benefit from leases.

2. Categorical Grants

The federal government could also use categorical grants for counties committed to engaged, transparent, and participatory wind farm permitting. Counties that are able to show their commitment to such processes leading to the establishment of a commercial wind farm could apply for project or formula-project categorical grants created specifically for this purpose. State grants-in-aid can act as a mechanism for states to create similar incentives.

Local Benefits

In the context of the renewable energy imperative, it may be time to use or create paths for communities and companies to strike deals that assure that local communities will receive an enduring benefit in the form of local tax enhancements, the creation or revitalization of public infrastructure and services through project and maintenance funds, etc. in exchange for agreeing to see their county transformed into an industrial electricity generation facility.

4. Permanent Fund Dividends

A final model for assuring that local communities receive financial benefits in exchange for allowing wind farms in their borders can be found in examples such as the Alaskan Permanent Fund Dividend. The Permanent Fund Dividend is designed to provide an "annual payment . . . for Alaskans to share in a portion of the State minerals revenue in the form of a dividend to benefit current and future generations." Dividends of this form could enhance the bargain between wind companies and local communities. If adequately managed and responsibly funded, such programs would also contribute to enduring relationships between companies and communities.

See Hirschman, Further Reflections, supra note 61, at 448-50 (citing John M. Orbell & Toru Uno, A Theory of Neighborhood Problem Solving: Political Action vs. Residential Mobility, 66 Am. Pol. Sci. Rev. 471, 484 (1972)).

See, e.g., Mauro Barelli, Free, Prior, Informed Consent in the Aftermath of the U.N. Declaration on the Rights of Indigenous Peoples: Developments and Challenges Ahead, 16 Int'l. J. Hum. Rts. 1, 2-4 (2012).

^{63.} *Id*.

Email from Roberta Mann, Mr. & Mrs. L.L. Stewart Professor of Bus. L., Univ. of Oregon Sch. of L. to Leandra Lederman, William W. Oliver Profes-

sor of Tax L., Indiana Univ. Maurer Sch. of L. and author, Christiana Ochoa (July 1, 2021) (on file with authors).

^{65.} See Senate Enrolled Act 390 of 2023, supra note 24.

^{66.} See Robert Jay Dilger & Michael H. Cecire, Cong. Rsch. Serv., R40638, Federal Grants to State and Local Governments: A Historical Perspective on Contemporary Issues 8-12 (2019), https://sgp. fas.org/crs/misc/R40638.pdf [https://perma.cc/9YFC-G2AP] (discussing the federal government's historic use of categorical grants).

Guide to Indiana County Government, Ass'n Ind. Cntys. 34 (2009), https:// www.pfw.edu/dotAsset/c78253c7-7f49-4d54-b3aa-6c44ccd4d8db.pdf [https://perma.cc/FK3G-XHRK].

See generally About Us, State of Alaska: Dep't of Revenue: Permanent Fund Dividend, https://pfd.alaska.gov/Division-Info/About-Us [https://perma.cc/X2R3-RL5A].

VII. Conclusion

The empirically informed recommendations we have made here are not easily implemented. They will also not always be successful. However, climate change is arguably our greatest current global existential threat. A rapid transition from fossil fuels to renewable energy is crucial to reducing greenhouse gas emissions. To get there, states in America's heartland will have to increase their wind energy capacity by factors of 10 and 20. Indiana's onshore wind energy capacity, for example, would have to increase by 16 times its current load.⁶⁹ At the same time, the rural land suitable for wind farms in states like Indiana has largely become unviable due to local ordinances that restrict or prohibit their construction.

Fortunately, there are alternatives to the divisive dynamic emerging throughout rural America. The recommendations we have made here offer tools to shift the process by which wind farms are being introduced to small communities, the form and extent of community involvement, the benefits shared with local communities, and the protections and guarantees offered to those communities.

The proposals we have made here can create new models for individuals, groups, and communities to more openly consider the benefits that will come along with the undeniable burdens they will bear if, or when, a wind farm is constructed in their locations. These recommendations may help provide nuance and open possibilities where a binary antipathy to wind farms has emerged as the dominant reaction.

Mark Jacobson, Zero Air Pollution and Zero Carbon From All Energy Without Blackouts at Low Cost in Indiana, STAN. UNIV. tbl. 4 (Dec. 7, 2021), http://web.stanford.edu/group/efmh/jacobson/Articles/I/21-USStates-PDFs/21-WWS-Indiana.pdf [https://perma.cc/AT7M-EFAR].