

Environmental Sustainability via Direct Democracy: Local Referendums on Wind Energy in the Czech Republic

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What: In light of the Czech Republic's goal of increasing sustainable energy production from wind, 21 local referendums took place on whether to site wind plants in different villages

Referendum question (typical): "Do you agree with the construction of a wind power plant in the territory of the municipality?" Yes/No.

Turnout: Varies greatly, from 6.9% (Lišťany) to 89.4% (Zbinohy)

Results: of 21 referendums, 15 were valid; of those, 8 were for wind power and 7 were against

Lesson: Outcomes depend on citizen knowledge, initiator, and issue framing. Local residents can change minds in light of more knowledge, pointing to importance of campaign dynamics

Type of referendum: Local, binding, imperative, citizen-initiated, local government-initiated

Referendum dates: ranged from 2004 to 2008

Research question

What impact do local referendums have on the politics of climate change? That is, under what conditions do citizens support or resist the construction of facilities needed to fight climate change, such as sustainable energy from wind power? To answer this, we examine the relatively unknown phenomenon in the Czech Republic, where 21 different villages in the years 2004-2008 held local referendums on proposals to site wind power plants in their communities. Because local conditions can shape the outcomes of the referendums, we analyse in detail the most influential cases, using interviews with activists and politicians, media reports and official data.

Background

Wind energy is one of the most important sources of renewable energy in the Czech Republic for achieving the country's commitments to renewable energy production expressed in the Czech Republic's Accession Agreement to the EU. The rapid growth of wind power installations in the 2000s was a product of the feed-in tariff system introduced by law no. 180/2005 Coll. on the support of electricity production from renewable sources. The law guaranteed the level of the feed-in tariff, which is valid at the time of installation, over a period of 15 years, which ensures price transparency and stability for energy producers and a guaranteed minimum return on investment that can be calculated upfront.

Those national incentives led to a gold rush among developers seeking to identify, propose, and build wind power facilities, mostly in rural, mountainous areas often near nature reserves or landscape protection areas, where sustained winds are also the strongest. While it is difficult to gather information about local referendum campaigns in the Czech Republic, I have been able to confirm 21 local referendums across the country in a 4-year time span, all on this one issue. Initially, developers and local politicians did not understand the many and conflicting views of local residents in those communities towards the siting of wind power plants. However, as more referendums took place, significant lessons from previous referendum campaigns were used to improve the quality of local deliberation, so that referendums became gradually more successful

(for wind power plants). As understanding of the issue grew, local referendums were needed increasingly less for solving conflicts between developers and communities.

Legislation

It should be noted that these referendums are also part of a larger process of citizen participation. Wind power development is subject to complex regulatory procedures. The location of wind plants has to be accordance with the territorial plan of the relevant municipality and thus have the approval of the local government. In the villages examined here – some of which have less than 100 residents – citizens can have a strong influence on the local council. In addition, citizen participation is also important in the Environmental Impact Assessment (Law no. 100/2001 Coll. on environmental impact assessment), where residents, environmental NGOs, and other stakeholders have multiple opportunities to provide positive or negative comments, which can then impact the conditions under which the wind power plant is to be built, if at all.

Besides the fact that local referendums in the Czech Republic are binding on local government – in the sense that a successful referendum provides an imperative for how a local government is to act – other aspects of Czech law on local referendums have changed significantly over time. The original Law No. 298 from 1992 stated that at least 25% of registered voters had to turn out for the referendum to be valid, with the passage of the referendum being decided by a simple majority of those voting. However, that law had many inconsistencies and legal problems (particularly the lack of legal safeguards for when a local government refused to recognize the results of a referendum, or other contested procedure), which prompted an entirely revised Law No. 22 of 2004, which also increased the turnout requirement to 50% for local referendums to be valid, with passage still decided by a simple majority of those voting. The law also made a number of changes, such as enabling local councils to call a referendum out of their own initiative (i.e. without a signature collection process, which is required for citizen-initiated referendums). Because the 50% turnout threshold is nearly impossible for citizen-initiated referendums to achieve in large cities, in 2008 the Czech parliament passed Law No. 169, which reduced the turnout quorum for local referendums from 50% to 35% and stated that a local referendum is valid if: 1) turnout is at least 35%; 2) a majority of voters vote in favor of the given issue; and 3) the number of voters in favor of the issue is at least 25% of all of the registered voters in the municipality. Those conditions still hold to the present. Note that most local referendums on wind power plants were held under the conditions of the 2004 law (imposing the 50% turnout requirement), with the most recent cases under the 2008 law. However, the substantive results of all of these local referendums would be the same regardless of the 2004 or 2008 legal conditions.

Most of the 21 local referendums have taken place in rural, sparsely populated areas in the regions of Northern Bohemia and in Vysočina. From Table 1, we can observe several basic trends on these referendums. The first trend is that while citizens voted against the development wind power plants in 7 of 10 cases in 2004-2005, in more recent years citizens have supported wind power in a greater share of referendums (with 5 of 11 referendums having binding outcomes in favour of building wind plants). One would expect that as Czech wind farms become more common over time, people will become more used to them as well. Second, turnout is higher in cases when local residents propose a referendum than when local councils do so from their own initiative. This is because opponents of wind energy who initiate referendum proposals, such as in Boží Dar, not only propagate their positions via the signature collection, but

also expose controversial elements of projects, thus provoking controversy and media and public interest. Third, referendums in favour of wind farms have a much greater chance of success when the referendum is proposed by the local council rather than by citizens. This is likely because local politicians, who are aware of the benefits of wind plants for the municipal budget, are also supportive of such projects. When the local council calls a referendum from its own initiative, it can have a greater influence over the political agenda, since opponents of the wind project may not have the time and resources to adequately respond to the called referendum and make their voice heard.

Table 1 Local referendums on wind power plants in the Czech Republic

Municipality	Region	Pop.	Date	Initiator of referendum	Turnout	% for wind plant
Vémyslice	Jihomoravský	724	12.06.04	Local council	66.5	10.5
Zbinohy	Vysočina	61	12.06.04	Local council	89.4	57.1
Boží Dar	Karlovarský	191	08.01.05	Citizens	61.7	18.4
Domamil	Vysočina	276	06.03.05	Citizens	60.0	34.0
Martínkov	Vysočina	265	06.03.05	Citizens	82.0	30.6
Mackovice	Jihomoravský	376	03.07.05	Citizens	20.9	27.6
Koclířov	Pardubický	690	30.07.05	Citizens	62.8	37.7
Líšťany	Ústecký	445	30.07.05	Citizens	6.9	41.5
Zbrašín	Ústecký	310	30.07.05	Citizens	59.2	52.0
Sedlec	Plzeňský	81	10.12.05	Local council	73.0	70.4
Petrovice	Ústecký	636	18.02.06	Local council	56.0	55.0
Peruc	Ústecký	2058	16.05.06	Local council	29.2	34.5
Herálec	Vysočina	1117	29.07.06	Citizens	35.4	43.5
Abertamy	Karlovarský	1140	08.12.06	Local council	54.4	91.0
Olešenka	Vysočina	195	27.01.07	NA	58.0	51.8
Místo	Ústecký	274	22.06.07	NA	60.5	16.7
Lichkov	Pardubický	586	08.09.07	Local council	56.4	91.8
Koleč	Středočeský	580	29.10.07	Local council	29.7	42.1
Líšťany	Ústecký	445	30.11.07	NA	44.3	
Bousín	Olomoucký	137	19.07.08	NA	76.6	29.4
Modlíkov	Vysočina	161	17.10.08	Citizens	84.7	53.2

Source: Author's calculations

Referendum campaigns

Because we cannot overview all of these wind power referendums, we focus our analysis on several case studies – the villages of Jindřichovice pod Smrkem, Lichkov, and Výprachtice – where we were able to conduct semi-structured interviews with politicians and activists that have played a prominent role in these consequential campaigns. Even though a local referendum was never held in Jindřichovice pod Smrkem, the views of key stakeholders there were interviewed because one of the oldest Czech wind turbines is located there, which became a focal point of interest for stakeholders in other communities. Lichkov was selected as a relatively typical example of a community that ultimately supported the development of a wind farm in their

community, while Výprachtice was selected as a typical example of a community where voters rejected a wind farm. These cases are typical in terms of community size, geographic location, and the main arguments used for and against wind power in the broader set of Czech local referendums on this topic.

I argue that there are four fundamental axes of the public debate about wind energy that impact referendum outcomes in the communities where wind turbines have been proposed. First, wind power plants are obviously a new, unknown phenomenon that evokes countless fears. When residents fear the unknown or the unfamiliar, the gut reaction is to always oppose it regardless of the scientific evidence on the different sides of the debate. In public meetings about proposed wind farms, residents frequently state that wind farms are “noisy,” that they “destroy the landscape,” create high levels of infrasound, drive away visitors, and even drive away animals. Opponents of wind power seek to maintain the status quo. From a discursive point of view, people do not need to prove the benefit of the status quo or their lived experience, they are taken as a matter of fact. Similarly, in the framework of local discourse, their claims that about noise and other issues do not need to be substantiated either, they are simply given.

When people fear the unknown, they probably won't believe in science or the views of experts. Wind technology has obviously made many technological advancements over the last two decades, and most new, modern wind turbines from a distance of 350m are very quiet: “infrasound practically does not exist during wind power plant activity, during a detailed analysis it can reach a slightly higher level, but its effect on human health is negligible.”¹ While wind plants poorly located near bird migration routes have led to many bird and bat deaths, the U.S. Audubon Society, the American bird conservation organization, has come out in strong support of wind energy, claiming that birds are over 10,000 times more likely to be killed by other human-related causes than by a wind turbine, and that the largest threat to bird wildlife is global warming, which wind power seeks to reduce.²

When people fear the unknown, one of the few ways of countering those fears is through the authenticity of experience. In Jindřichovice pod Smrkem, one of the first Czech villages to have a modern wind power plant (from 2003, 2 turbines x 600 kW), the well-known mayor, Pavel Pávek, had the idea of a wind power plant from his childhood, when he visited the coast of Germany and Denmark and experienced firsthand how they operated. Once the wind turbines were established in Jindřichovice, which previously had little in the way of tourism, roughly 13,000 people visited the wind plant in the first year alone. The enormous public interest in the wind plant led the local government to establish an information centre at the base of the wind turbines, which continues to have roughly 10,000 visitors a year. As one interviewee from Jindřichovice explained about the wind turbines:

¹ National Reference Laboratory for the Measurement and Assessment of Noise in the Local Environment, “Věc: Odpovědi na nejčastější dotazy o infrazvuku větrných elektráren,” accessed at http://www.csve.cz/user_files/csve/File/Infrazvuk_VE.pdf. See also “Hluk větrných elektráren” at <http://www.zupu.cz/index.php?pid=77> (accessed December 1, 2008) from the same laboratory.

² “For the Birds: Audubon Society Stands Up in Support of Wind Energy,” <http://www.renewableenergyworld.com/rea/news/story?id=46840>, accessed 5.11.2008.

“They are such a sought out tourist destination, for example cyclists come here in the summer, have some coffee or ice cream, and everyone is curious if the power plants are loud. So the stupidest, most standard scenario is when some car comes, stops, all four doors open, the entire family gets out and just listens. And they stand there for three minutes, and then say to themselves that it is not loud at all, as it is written in the newspapers. And then the issue ends for them. In this village we have created several tens of thousands of witnesses who have experienced it first hand.”

In the village of Sedlec in Plzensky region, where in 2005 70% of voters in the local referendum voted in favour of a wind farm with a capacity of 7 x 2MW, residents in the village had the opportunity to visit Jindřichovice’s information centre beforehand. The mayor of Modlíkov, in questioning people’s fears of wind farms, stated that “I saw a ton of wind power plants abroad. It’s a common part of the landscape, no one complains, they aren’t dangerous. But in the Czech Republic we act on the basis of rumours,” adding that “for the municipality it is a welcome chance to improve our municipal budget.”³ In many other cases, developers have paid for excursions to Germany so local residents and politicians experience modern wind farms first hand. More than anything else, the authenticity of first-hand experience enables people to question their in-built prejudices against wind power.

By contrast, there was little evidence from interviews and media sources that scientific arguments were useful in winning over voters. Rather, supporters and opponents of wind energy seem to gravitate to and cite the scientific evidence that supports their views, rather than taking into account competing evidence, as is often done in the EIA process. Major environmental associations in support of wind energy, such as CALLA and Hnutí DUHA, as well as civic associations opposed to wind energy, such as civic associations Zelena Louka or Unie pro Krajinu, make use of scientific argumentation to support their positions. Activists on both sides of the debate see themselves as environmental activists, as well as question the environmental credentials of the other camp. While local debates are imbued with scientific discourse, it is difficult to see how scientific claims can trump people’s experiences and beliefs in shaping how they vote.

The second axis of debate about wind energy is the more general conflict of the interests of local permanent residents versus people with country cottages (*chaty*). In general terms, permanent residents benefit from the economic development of a village, and suffer disproportionately from its decline. People who go to their country cottages for the weekend, by contrast, value a locality largely by virtue of its natural properties (landscape, peace and quiet, its physical remove from pollution of cities), rather than by virtue of economic and infrastructure conditions. Even though most people with country cottages do not have permanent residency in the villages where referendums have taken place (and thus they cannot vote), they can still have a significant impact on the outcome of the referendum through their protest activity, particularly through the establishment of civic associations. The websites of anti-wind organizations led by city dwellers with country cottages, such as the civic association Naše Výprachtice, are full of idyllic scenes of rolling pastures, wild flowers and romantic wooden farms, and contrast such scenes with dreadful pictures of wind turbines dominating the landscape and standing mere meters from

³ Havlíčkobrodský deník, “Větrné elektrárny by měly za Modlíkovem stát do dvou let,” 29.11.2007.

people's homes. While it would be difficult to claim that residents that have passed referendums on wind farms have different aesthetic tastes than people in localities where such referendums were rejected, it is likely the case that the degree of presence of recreationists plays a role in shaping local debates.

Local politicians that we interviewed tended to be critical of the complaints of people with country cottages. In one public discussion, the mayor of a village explained that "every municipality tries to use what natural conditions offer for its development. The disagreement of people with country cottages is understandable, but there are also people who want to live here. The village does not have other means, and so it is necessary to act on the possibility of gaining funds for the local budget." As another mayor discussed in an interview,

"I have some knowledge of other localities... So in 99% of cases of conflict about wind plants the issue is about people with country cottages, not at all about the people who live there, but recreationists, who act like they know everyone. They threaten villagers with the laws and proclaim how they will not allow anything of the sort. They yell that the village should repair the roads and clean the garbage cans, but they do not care at all whether the village has the resources or not. The wind power plants are one of the few significant sources for local budgets. Contrary to all of the negative PR about wind power, I have never met villagers in the places with wind power plants who were strongly opposed to them."

Not all people with country cottages, however, are necessarily against wind farms, especially if the farm is located further away from recreational objects. As one politician in Lichkov – where residents voted nearly 92% in favour of a wind farm – explained, "the local referendum law does not allow people with temporary residence to vote. 20% of the village is comprised of country cottages. We talked to the majority of people with country cottages, and only three were strongly against the power plants. The others said that it would not bother them at all, and if the village would get something in return, that they are for it. Because all of the city people with country cottages, when they come in winter, face meter and a half of snow and would like the local government to make paths to their property [and provide other services]."

The third axis of the public debate surrounds the role of money. As one mayor commented, "These localities such as the one we are in, are in the middle of no where. The mountain villages don't have any money, they have a hard time financing basic services, let alone anything above-standard, such as programs for youth, a gym, cultural activities. Those are the things that basically none of these places have." While every municipal budget benefits from some degree by profit-sharing with the operator of the wind farm, the financial amount varies not only by the size of the wind farm, but by the negotiating power of local politicians. In Lichkov, the local council negotiated profit-sharing that would reach 500,000-1 million CZK a year, as well as a seat on the board of directors of the company in order to oversee the financial operations of the firm. According to one local politician, "the money from the plant will go towards the sewage system. Thus a part of the Tiché Orlice River will be cleaned, and so the threatened wildlife can live there normally without the protection of the state, because currently the municipality does not have the resources to build the sewage system."

While local councils often seek to use profits from wind plants for sewage systems, water systems, reconstruction of schools, the construction of cultural centres and so on, other profit-sharing arrangements can also appeal to voters. In Abertamy, for example, where the local council initiated the referendum, the proposed farm of three 1.8 MW turbines was a joint venture between the municipality and a private investor. The mayor estimated that the three turbines would bring an annual profit to the municipality of 1.5 million CZK,⁴ which represented 15% of the municipality's tax revenue in 2006. The project was later changed so that the municipality would receive roughly 2 million CZK annually. Residents voted 91% in favour of the wind development, likely because the mayor promised that the profits would not simply be kept by the city hall, but that each resident would receive 1,000 CZK a year as a kind of dividend from the project, with the precise amount of the payment to be decided by the city council.⁵ It seems unlikely, however, that the project will go forward, given the negative verdict reached in the EIA process due to the project's proximity to a Natura 2000 site.⁶

Critics of wind plants, however, often suggest that the financial payment from wind power operators to municipalities "looks like a bribe."⁷ As one critic of a proposed wind power plant in Výprachtice – where the local council chose to organize opinion polls, rather than binding referendums – pointed out, "there is something wrong promising money to municipalities. This is possible to see when wind power plants are built on private land, sometimes owned by the mayor. Isn't that a bribe? The money offered to municipalities is ludicrous, since road maintenance and repairs during the plant construction are more expensive than the promised annual rent." Another critic similarly complained that due to the role of 'green bonuses,' wind power plants contribute to the increased market prices for electricity, and thus revenues for municipalities are ultimately paid by citizens "through more expensive electricity."

Lastly, the fourth significant factor shaping public debate is whether the debate is being led by opponents of wind power (referendums initiated by citizens) or by the local politicians (referendums initiated by the local council). In other words, the type of referendum can be an important factor influencing the probabilities of public support. In both types of referendum, voters have the ultimate voice, but opponents of wind farms will likely have a much smaller influence and public credibility if they do not have the chance to petition for the referendum. That was likely the case in Lichkov, where the civic association Za naši přírodu was established to protest the proposed wind farm in February 2008 – five months after the binding referendum in favour of the wind power plant was held – which significantly limits the influence they can have on that case. Mayors who suggest that local councils call the referendum also can claim to respect the will of the people, which can also have the reciprocal effect that residents respect the opinions of local politicians. In newspaper interviews, mayors almost always state that they will respect the results of the referendum – even though they are required to by law if binding – which builds positive bonds between the local government and society. Similarly, opponents who act quickly enough to petition for a referendum have the opportunity to go door-to-door,

⁴ Zázpis z projednání posudku a současně dokumentace záměr „Farma větrných elektráren Abertamy“, 23.1.2006. Accessed 12.1.2008 at http://tomcat.cenia.cz/eia/download.jsp?view=eia_cr&id=KVK045&file=zapis1VPDOC.

⁵ MF Dnes, "Obec ocení hlasy pro větrníky," 2.12.2006.

⁶ EIA documentation for the case is available at http://tomcat.cenia.cz/eia/detail.jsp?view=eia_cr&id=KVK045.

⁷ Otevřený dopis, Občanské sdružení "Krajina pod Javořicí o.s." accessed at <http://www.dejmalka.cz/htm/content/odospve.pdf> (20.10.2008).

explain their views to strangers, build camaraderie as well as popular legitimacy for their cause. Given how divided communities can be by the prospect of wind power plants, the variable of who initiates a referendum can be decisive in shaping the ultimate outcome.

Conclusion

Referendums on wind power plants are not shaped by e.g. demographic factors, but rather by how politicians and activists appeal to resident's fears, values, experiences, and hopes for a more prosperous community. The lack of social capital – particularly in the sense of residents' distrust of outsiders, such as the claims made by power plant operators – is also a prevalent condition in these communities, though it can be tempered by residents' trust of their local leaders. These fears, values and experiences are also shaped in the context of social transformation, as residents who have travelled more broadly in the West seem to be less fearful of wind farms, whereas opponents of wind energy tend to think of the Czech idyllic landscape as unique and in need of preservation in its entirety.

In the Czech Republic, more and more local councils have turned to calling referendums from their own initiative as a way to show respect for citizens' views while also preventing the emergence of strong, anti-wind opposition groups from emerging. If local councils call a referendum from their own initiative, it also makes sense that they would also organize public hearings where the mayor and other political representatives would take centre stage. Such hearings provide opportunities for politicians to explain the economic benefits of the proposed project, and effectively frame the public debate as one of the development of the municipality rather than as a question of the landscape per se. In the future, it will be important to follow how local anti-wind organizations respond to the emergence of council-initiated referendums through strategic action of their own.