The mayor said so? The impact of local political figures and social norms on local responses to wind energy projects

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ABSTRACT

Wind energy plays an important role in the energy transition. However, many wind energy projects result in conflicts at the local level. Mayors and local council members are key actors who can play a supportive, moderating, escalating, or mediating role in siting decisions about wind energy. Further, communities' social norms encapsulate their beliefs about what a wind energy project should be like. Alongside public expectations, these norms indicate the layers of cultural dynamics and standards of communities. Hence, this study investigates the dynamics of local responses to wind energy projects and their outcomes. This is achieved through an empirical-qualitative approach in which the experiences of four Bavarian case studies in Germany are illustrated using document analysis and in-depth interviews. The results of this study indicate that mayors play a crucial role in local responses to wind energy projects in Bavaria. Their support is necessary but not sufficient for local acceptance. Other stakeholders, next to project characteristics and communication, as well as external events, also have an impact on local responses over time. The paper concludes with lessons learned about communication and information strategies, as the study has implications for policymakers and practitioners in relation to designing and planning wind energy projects.

1. Introduction

The German energy transition (*Energiewende)* has long been a role model for other countries (Strunz, 2014). In 2021, Germany led 11% of the newly installed onshore and offshore wind installations in Europe, ranking as the third country after the United Kingdom and Sweden (WindEurope, 2022). Germany is expected to install the most wind capacity in Europe by 2026. Nonetheless, in 2020, the lowest installations and investments were seen since 2010. The COVID-19 pandemic can partly explain this, but also by complex and lengthy permitting processes and the challenges connected to the switch to an auction scheme in 2017 (Lundberg, 2019). Recent changes to this legislation will allow civic wind energy projects to be exempt from the auction system in 2023.[1] However, the German wind industry is currently facing not only challenges related to permitting, legislation, and auctions but also social barriers (Kimm, 2017). Many wind energy projects encounter local opposition and resistance, resulting in project delays or failures (Langer

et al., 2017; Reusswig et al., 2016; Zoellner et al., 2008).

The transition to renewable energy sources is affected by dynamics that go beyond technical issues, being part of a political, social, cultural, and spatial transformation. To facilitate a successful transition from fossil fuels to renewables next to the strategic site planning of federal, state and/or local governments, it is important to obtain the acceptance of local communities (Huijts et al., 2012; Warren et al., 2005). To enable a socially just energy transition, a better understanding of the concerns and motivations of local communities is inevitable. These could generate valuable insights into how projects should be sited, designed, communicated, and implemented (Olson-Hazboun et al., 2016). Understanding why some projects face resistance while others are supported is necessary (Christidis et al., 2017; Wolsink, 2007). Various studies have investigated different factors that influence local responses to wind energy projects; however, the role of local political figures has received little attention so far and is thus a promising area of research. This paper aims to investigate the dynamics of local responses to four wind energy

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[1] April 2022: 10H rule remains - with exceptions, Source: https://kommunalwiki.boell.de/index.php/10H-Regelung#April_2022:_10H-Regelung_bleibt_-_mit_Ausnahmen (accessed 29.09.2022).

projects in Bavaria, Germany, focusing on the role of local politicians and social norms.

German federal states define guidelines that regulate wind energy siting. Therefore, we chose only one federal state (Bavaria) to ensure that the regulatory framework was the same. One common regulatory path for addressing acceptance-related problems is determining requirements for their proximity to residential areas (Masurowski et al., 2016; Watson et al., 2012). Bavaria has introduced a state regulation, the 10H rule, which defines the minimum distance between the wind turbine and residential areas as at least ten times the total height of the wind turbine (Baugesetzbuch, 2014). With wind turbines reaching overall heights of 250 m, the 10H rule increases the challenge for municipalities to find appropriate project sites. Even though proximity has some effect on the perceptions of wind farms, the intensity of this effect is shaped by the norms and values of the affected communities (van der Horst, 2007). Political power can produce and promote certain norms in social systems (Fraser, 2014), and institutional norms have the potential to regulate market dynamics (Nyborg et al., 2016).

Further, this paper focuses on wind energy projects in forest areas because some of the main concerns of those who oppose wind energy projects are related to landscape protection and impacts on biodiversity, especially in forest areas (Dai et al., 2015). While deploying wind parks in forest areas is complex in terms of local acceptance in Germany, developing wind energy in such zones is necessary for achieving climate and renewable energy goals (FA Wind, 2021). Wind turbines in forested areas are situated almost exclusively in the southern federal states, namely, Rhineland-Palatinate, Hessen, Bavaria, Baden-Württemberg, and North Rhine-Westphalia (Bunzel et al., 2019). In Bavaria, forests account for around 37% of the land area, making it the state with the greatest forest coverage among all 16 German states (FA Wind, 2021). Analysing local actors that influence community norms can increase understanding of conflicts and dynamics related to wind energy projects (Karakislak et al., 2021). This paper aims to fill the gaps in the literature by exploring the relationship between local political figures and social norms and examining their effect on local responses to wind energy projects. It does so by addressing the following research questions:

1) What is the role of elected mayors in wind energy projects? 2) What influence do their opinions have on local responses? and 3) What actors and processes influence local responses over time?

The remainder of this article is structured as follows: Section 2 introduces the theoretical foundation of the paper by discussing the role of social norms, local political figures, and the local population. Section 3 introduces the methodological approach, the case study selection, the methods, and the analytical approach. Section 4 gives a detailed overview of the case studies. Section 5 illustrates the results of the four case studies. The paper concludes in section 6 by reviewing the main findings and suggesting implications for policymakers and practitioners.

2. Social norms, political agency and local responses

This paper applies the conceptual framework described by Karakislak et al. (2021). This two-dimensional framework specifies factors and variables for analysing the definitions, influencing factors, and impacts of social norms as well as perceived justice within communities. The first element of the framework proposes that three groups of individuals are influential in terms of the norms that impact local responses: community spokespersons, political figures, and opposition groups. These actor groups come to power to influence public opinion in situations where there is uncertainty or conflicts, such as unequal distribution of benefits. Community spokespersons have social influence and strong ties within their groups, individuals with resources and networks capable of impacting others (Karakislak et al., 2021). Their opinion (e.g., support, oppose) on energy projects does not define their role, but their impact on the community and processes matters, whereas opposition groups foster a negative norm. Mayors and local council members are actors with political power, social resources, and strong ties to the community. Therefore, they have a key influence on local responses to wind energy projects (Karakislak et al., 2021). The theoretical foundations on which the conceptual framework is based are elaborated in this section by reflecting on the interdependencies between social norms, local political figures, and local responses.

2.1. Social norms

How members of the public respond to the social and environmental changes around them is widely linked to the expected reactions of others. These conditional expectations about how people will react, or how they should react, are conditional behavioural regularities - or social norms (Bicchieri and Mercier, 2014).

Overcoming conflicts associated with energy projects requires a deeper understanding of the embedded influences and values related to the social context (Upham and Johansen, 2020). There tends to be a gap between what others typically do (descriptive norms) and what ought to be done (injunctive norms) (White et al., 2009). The distinction between intention and behaviour is also relevant when estimating responses to wind energy projects (Sokoloski et al., 2018). Social influence[2] within groups tends to increase the effects of normative beliefs about renewable energy technologies in general (Hübner et al., 2023; Reyes-Mercado and Rajagopal, 2017). Moreover, social norms or pressure from family, friends, and neighbours, alongside political actors, have the potential to influence local responses in both directions (Huijts et al., 2012).

This study addresses local responses to projects as implicit normative indicators of communities. Descriptive norms about climate change mitigation are also factors that are considered.

2.2. The role of local political figures

Local politicians are directly affected by public opinion, while in turn their engagement in wind energy projects affects local responses (Friedl and Reichl, 2016). Consequently, local politicians may have a significant impact by shaping the dynamics of community acceptance of wind energy projects. Active local support for community-led projects[3] strongly shapes the distribution of power and the relationships between local actors (Bell et al., 2013).

As key agents of societal inclusion and local policies, the needs and views of the mayors should be better understood (Gürtler and Herberg, 2021). Young and Brans (2017) and Beermann (2009) found from their case studies that the role of the mayor as a policy entrepreneur in implementing 100% renewable energy systems is crucial. In other cultural contexts, for example, a case study comparison in Japan underlined the role of shared social norms about community initiatives for renewable energy as part of policy learning by mayoral leadership and other stakeholders (Takao, 2020). Mayors may become advocates or leaders of renewable energy projects that influence local citizens (Honvári and Kukorelli, 2018). Local politicians have the social and political power to influence public opinion (Busch and McCormick, 2014; Friedl and Reichl, 2016; Karakislak et al., 2021). The power of the local politicians may be applied in different ways. Partzsch (2016) explains this using three concepts in environmental politics: "power with", which includes learning and cooperation; "power to", which involves resistance and empowerment; and "power over", which refers to manipulation. These understandings of power are embedded in actors, agents, and structures that influence decisions (Partzsch, 2016). Thus, support from the mayor and the local council has the potential to increase cooperation among

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[2] Intentional or unintentional demands to change the behaviours of others.

[3] Renewable energy projects that a community of place or interest owns shares in, participates in, or distributes energy services through (see e.g., community energy Hoffman and High-Pippert (2005), energy citizenship Ryghaug et al. (2018), prosumers Ford et al. (2016), community liaisons Fast (2017)).

municipality actors and the community (Schwarz, 2020; Wüste and Schmuck, 2013).

Public trust in local decision-makers also impacts the acceptance of wind energy projects (Fast and Mabee, 2015; Titov et al., 2021). Developing trust could be understood as a chain whereby leaders first build trust in themselves, then in a process, and then an outcome (Dwyer and Bidwell, 2019). Moreover, trust between the local community and project stakeholders tends to increase when local people are involved in the project development (Walker et al., 2010). The transparency and openness of local actors could also potentially influence project outcomes (Firestone et al., 2018).

Christidis et al. (2017) found that the perceptions of community members and local politicians tend to differ regarding wind energy projects, which could become a barrier to their implementation. In cases when communities have a direct democratic impact on projects, such as through referendums (Bell et al., 2005), political actors have the advantage of being able to create open dialogue that overcomes such potential barriers. There is a potential for conflicts between the local politicians' influence on the public and how this might affect their re-election (Friedl and Reichl, 2016). For example, Walker et al. (2018) showed that a divisive political context in a province could spur the rise of opposition and even create an electoral backlash. Hence, in relation to projects, mayors may avoid taking sides until they are ensured of having enough public support or exert *power over* the community. This paper explores how the positioning of mayors can impact local responses and whether having supportive local politicians is key to successful project implementation.

2.3. Local responses to wind energy projects

Local responses influence the outcome of wind energy projects directly (e.g., through referendums) but also indirectly through their influence on local politicians (Jolivet and Heiskanen, 2010). However, it is important to understand local responses not as an obstacle to the energy transition but rather as an aspiration to increase their understanding (Devine-Wright, 2007).

Local responses are multi-layered and dynamic and can range from support to opposition and indifference, resistance, tolerance, or acceptance (Batel and Devine-Wright, 2015; Walker et al., 2018). Energy-related social science research has been developing a more nuanced understanding of local responses (Walker et al., 2018) and moved away from the NIMBY (not-in-my-backyard concept), which has been criticised for labelling opposition groups as self-interested or irrational (Kempton et al., 2005; Wolsink, 2006). Discussions about individuals' attitudes, behaviours, and responses are adapted to different concepts and theoretical frameworks (Fast and Mabee, 2015; Huijts et al., 2012).

Estimating and understanding local responses also requires that local actors acknowledge and cope with the emotions associated with wind energy (Perlaviciute et al., 2018). How people feel about wind energy in general, and their environmental beliefs might not reflect how they respond to projects. Positive associations about wind power tend to be more abstract than negative ones, resulting in the opponents' responses being more clearly elaborated (Cousse et al., 2020). Being directly affected by a project tends to be a strong driver of people's attitudes; thus, this requires better anticipation (Russell and Firestone, 2021). Van der Horst (2007) found that only people with strong feelings against wind energy generally engage in local resistance. Warren et al. (2005) claim that local opposition involves a minority of people but that they receive more attention from the press. On the other hand, in locally rooted projects, some actors have the potential to foster positive emotions and opinions about wind energy (van der Schoor and Scholtens, 2015). In the past, most referendums about wind energy projects resulted in project abandonment. However, more recently, decisions have tended to be pro-wind energy (Langer et al., 2016). A similar trend can be perceived in Bavaria. One explanation may be that people with personal experience with wind energy tend to be more positive about it (Langer et al., 2018). Another possible explanation is that the "silent

majority" either passively supports (Schweizer-Ries, 2008) wind energy or has no strong opinions about it (Gross, 2007).

3. Research methodology

The aim of this study is to investigate how local politicians and social norms influence local responses to wind energy projects. In order to do that, the paper analyses four case studies in Bavaria and examines the processes around these wind energy projects. In this section, we will explain our case study selection, present our methods, and conclude with the analysis.

3.1. Case studies

Germany is a relevant context for examining the local dynamics of wind energy development for three reasons. First, Germany's phase-out of nuclear and coal energy requires a substantial expansion of renewable energy. Second, Germany has great potential for wind energy expansion, and third, the deployment faces various challenges.

The Bavarian state government introduced the Bavarian Energy Action Program in 2019 to spur the deployment of 300 new wind turbines with a 1 GW newly installed capacity (StMWi, 2019). However, this significant goal of expanding wind energy and informational instruments has met regulatory setbacks. Since there is no national regulation about wind turbines in forest areas, each state employs restrictions on planning that steer wind energy's expansion (Bunzel et al., 2019). Particularly in Bavaria, forest areas carry a large potential for wind power, but – as Ludwig and Bosch (2014) suggest – this requires alternative socio-ecological integration models. In November 2014, Bavaria introduced the 10H rule, which defines the minimum distance from the residential areas to the closest wind turbine as ten times the turbine's total height (Baugesetzbuch, 2014). There are recent changes to 10H that allow dropping the distance rules in priority and reserved areas for wind energy (e.g., motorways and forest areas). However, local municipalities can define exceptions to the 10H rule in their local setting through urban land use plans that allow wind energy projects within the 10H limits. Municipal actors also have to balance the local and national interests in situations when hierarchical interventions such as the 10H rule exist (Verhoeven et al., 2022). Despite the intention to avoid conflicts, local projects still face strong opposition in Bavaria (Langer et al., 2016). In practice, the 10H rule can put additional pressure on local municipalities. First, the 10H rule can take power away from municipalities, and second, the exception to the rule puts pressure on them since they have to justify why a distance lower than 10H is allowed (Watson et al., 2012). This often results in considerable resistance from the local population but also from neighbouring municipalities (Langer et al., 2016).

Bavaria is a particularly interesting area for wind energy due to its significant role in the German energy transition. Bavaria ranks third on the list of German federal states in terms of its ambitions and implementation targets of renewable energy to create socio-technical change (AEE, 2019). Thus, it is one of the states that prioritised the energy transition. However, the 10H rule has affected the expansion of wind energy and created further conflict.

Most federal states in Germany have two types of mayors, working voluntarily or full-time, depending on the municipalities' size. There could be multiple mayors in Bavarian municipalities with more than 5000 inhabitants, the first mayor being the civil servant that the citizens directly elect. The first mayor is the chairperson of the council and head of administration. The local council elects the second or third mayor from their members. Their role is to represent their community similarly to other council members (GO, 1988).

In order to identify relevant case studies, we screened news articles, the Bavarian Energy Atlas and the State Ministry for Economic Affairs, Regional Development and Energy to create a list of wind energy projects that fit our criteria. We used the following factors to examine the wind energy projects, such as the institutional conditions (e.g., land

Table 1
Information on the case studies (Source: Interviews and document analysis).

Case study	Number of turbines	Year	MW (each turbine)	Total height	Distance from residential areas	Inhabitants of the municipality	Financial participation	Ownership	Project developer	Opinion of the mayor
1	4	2015[a]	2.5 MW	197m	800m	2400	Yes	Bürgerwind (citizen wind)	Regional	Advocate & initiator
2	3	2019[a]	3.6 MW	199.5m	900m	5600	No	Private	National	Advocate
3	4	2019[b]	6 MW	250m	>1000m	12000	Planned	Private	National	Hesitant support
4	5	2022[b]	N/A	230–250m	N/A	6400	Planned	Bürgerwind (citizen wind)	N/A	Advocate & initiator

[a] Implementation.
[b] In planning.

ownership, developer/operator, and planning authority), project features (e.g., number of turbines, distance, and location), opinion of the mayor, and intensity of active opposition or support groups. We ended up with sixteen case studies defined as successful and completed projects by the Bavarian ministry and four conflicted potential projects covered in the news. We chose the case studies based on the following five selection criteria: project size, ownership, implementation status, project site, and opinion of the mayor (see Table 1).

First, we ensured that all projects were similar in size, thus within a certain range of installed or planned MW capacity (<30 MW). We eliminated seven completed examples because they were either single-turbine or larger-scale (>8 turbines) projects. Second, we excluded three projects owned entirely by the municipality or the local community (e.g., energy cooperative). Third, to allow a comparison between successful project implementation and disapproved projects, we included two projects that were already in operation and two projects in the planning phase. Fourth, for the project location, we only selected projects that were planned or implemented in a forest area since 37% of the landscape in Bavaria consists of forest areas, and one of the main concerns about wind energy is landscape protection. Fifth, we distinguished the projects by the mayor's response. We wanted to include projects where the mayor either supports, opposes or is indifferent towards them. However, we could not identify project proposals or implemented projects that a mayor openly opposed. Through our interviews with project developers, we learned that bilateral discussions occur before a project gets started between interested project developers and mayors. If mayors oppose the project, they seem to not even get initiated. Therefore, we could not include a project with an opposing mayor. We present the four case studies as examples of various project outcomes in similar social contexts and illustrate the different processes rather than compare the project actors or results. Thus, this study presents the case studies descriptively and discusses their processes, outcomes, and implications interpretatively.

3.2. Data collection

For the data collection, we conducted interviews at three different points in time. In total, we conducted 23 semi-structured interviews. The first 13 interviews were conducted in December 2021 and January 2022, followed by 5 in May/June 2022 and 5 in November/December 2022 and January 2023 (see Table 2). We conducted semi-structured interviews as they allowed comparability between the cases while providing us with enough flexibility to react to context-specific questions. Through a web search, we identified relevant stakeholders and contacted them via email. All the interviews were conducted in German using online tools and took between 20 and 60 min. At the end of each interview, we asked respondents to identify further relevant stakeholders of the project, and we stopped interviewing when we reached data saturation for each case study.[4] We want to highlight that,

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[4] When no new information was forthcoming.

Table 2
Interview participants.

Case study	Interviews	1st Mayor	Local council members	Project developer	Local community
1	6	1	3	1	1
2	5	1	1	2	1
3	7	1	2	1	3
4	5	1	4	N/A	–

especially for the ongoing projects, there will be changes and new information until the projects are implemented or cancelled. Thus, data saturation was reached for the time period of January 2022. In order to ensure data saturation for a longitudinal study, we referred to the following principles: initial analysis sample, stopping criterion and independent coders (Francis et al., 2010). Initially, we aimed to have four interviews for each case study. For Case Study 4 (CS4), we interviewed local political actors who are also community members because wind energy was discussed during a local council meeting and then stopped before a project could evolve. Thus, no project developer was involved yet, and the interviewees portrayed the two local council meetings and the open opposition before the vote. Since we conducted interviews in a one-year span, there were recent developments in the potential projects. However, there was still no concrete proposal nor a potential developer. Hence, we had additional interviews with other local council representatives and stopped when no new information or insights appeared. Two co-authors coded and analysed the interviews independently, supporting the study's replicability (Francis et al., 2010; Fusch Patricia and Ness Lawrence, 2015).

Three types of knowledge can be gathered through interviews: technical, process, and interpretative. First, facts and figures were explored which do not depend on individuals, i.e. *technical knowledge* (Bogner and Menz, 2009). Here, we were interested in the project specifics such as location, number of turbines, turbine height, MW capacity, ownership structures, and proximity to residential buildings. *Process knowledge* provides insight into processes and activities obtained through experience and direct involvement (Bogner and Menz, 2009). Here, we were especially interested in participation structures, the actors involved, communication strategies used, and the local responses to the projects. *Interpretative knowledge* refers to interviewees' subjective perspectives, interpretations, and constructions (Bogner and Menz, 2009). The interviewees provided us with their assessment of the projects and the role of key actors, their perceptions about local responses, and their explanations for the success or failure of the projects.

3.3. Analysis

After transcribing and translating the interviews, we used a framework method to analyse the data, which involves qualitative data management and analysis and is affiliated with the broader context of thematic or qualitative content analysis (Gale et al., 2013; Ritchie et al.,

2003). It consists of organising the data to enable interpretation within and between cases to identify similarities and differences (Gale et al., 2013). This analysis was complemented by examining relevant documents and reports to understand the Bavarian context better.

In the first step, both authors reviewed all interview transcripts independently and inductively coded them by identifying themes. As a result, an index was created that identified the main and sub-themes. The software "MAXQDA" was used for data management and analysis. This software facilitates the application of the framework method and offers several visual tools and mapping options for the analysis (Kuckartz, 2010).

Initially, the concepts that addressed our research questions were identified. These include local actors in decision-making and the dynamic process of local responses. Next, we studied emerging patterns within the results from the case studies (Yin, 2014). Finally, we searched for explanatory patterns and factors. For example, the leadership styles of the mayors, citizen participation, impact on the outcomes and trust are some that emerged. We connected these patterns, insights, and concepts that relate to the outcomes of the projects as the findings of our research questions.

4. Case study descriptions

This section describes the social and cultural context of the case studies and summarises the process of wind energy projects. The information presented here is collected from documents and interviews.

Most of the landscape (80–90%) for all four locations was rural, divided between agriculture and forest areas. Their respective local economies depend on manufacturing, trading, transportation, and hospitality industries. According to the last federal and state elections, the towns supported political parties similarly. Germany's Christian-democrat and conservative political party (CSU) received the most votes in all four towns. There are three male mayors (CS1, CS2 and CS4) and one female first mayor (CS3) in these municipalities. The gross annual household income of the residents in the towns was also similar (Bavarian State Office for Statistics, 2021). We, therefore, argue that the towns have a relatively similar socio-economic and cultural context (see Fig. 1).

4.1. Case study 1

Case Study 1 (CS1) is in a town in the northwest of Bavaria, close to the borders with Baden-Württemberg. The town has one mayor and a 14-seat town council. Most of the council members are independent candidates, including the mayor.

The project was initiated by the mayor, who has been in office since 2008. When project planners showed interest in implementing a wind energy project, the mayor initiated a community-owned project through an alliance with four neighbouring municipalities to ensure the benefits stay in the region. He saw an opportunity to generate income and create regional value since the municipality did not have many other sources of income. The mayor's motivation and advocacy were seen as the decisive factor in terms of the project outcome. Local council member 2 described the mayor as "*far-sighted and driven*". Another local council member described his impact in the following:

> "*And above all the mayor, who is pushing this quite massively, and then of course there is also the effect, uh, that people trust the mayor and therefore perhaps don't speak out as loudly against it ...*" (Local council member 1, Biologist)

The project developer was chosen from eight applicants and was described by our interviewees as "*from the grassroots*", trustworthy, experienced, and caring about the region. He mostly develops community-owned projects with his company to ensure that benefits stay in the region. The project developer also recognised the public's concerns, addressed people personally, and described members of the small opposition group as "simply afraid". He was described by our interviewees as one of the reasons for the high level of acceptance. Compared to having an external company involved, council member 3 perceived that the developer "*had not gotten rich from the project*" but instead made sure that the profits stayed within the municipality.

The citizen project involves the investment of five municipalities and 215 citizens. Next to financial participation, there was no possibility for the local population to get involved in the planning process, but the local population was informed early and regularly. The option to buy shares was communicated in all municipalities through citizens' meetings and local media channels. The project has been very successful and
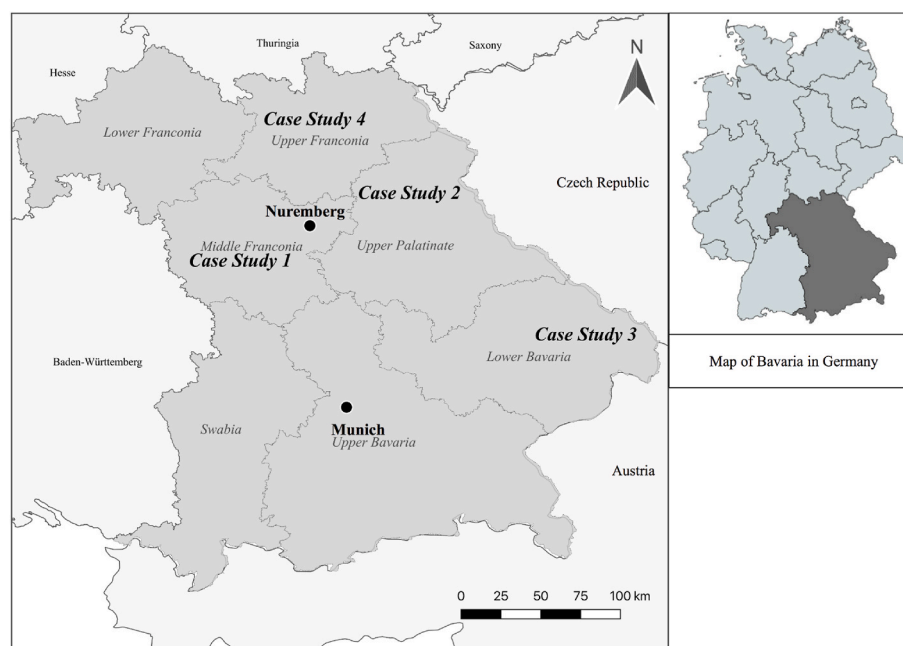

Fig. 1. Case study areas in Bavaria, Germany (Created with QGIS software).

profitable for the stakeholders. Recently, the developer proposed to extend the wind farm with a turbine, but one of the neighbouring communities rejected it.

Some individuals were against the project, but the opposition was never very strong, and the local population mainly supported it. The mayor would not have proceeded with the project without the local population's support, noting "*the danger of being voted out of office*" in this respect. One of the community members expressed their concern about Bavaria not being an optimal region for wind energy due to the presence of dense forest areas, waterfalls, and water reservoirs. The project was planned around existing infrastructure to avoid as much deforestation and impact on the local environment as possible. Further, the municipality invested between 180,000 and 200,000 euros into nature conservation measures and reforestation in compensation for the wind energy project. According to the local council member 1, these mandatory compensation measures raise awareness and highlight that compensation measures are not required for other quite invasive infrastructure projects.

Acceptance of the project was not an issue. A community member explained that the people of Franconia[5] were "*very patient*" and "*tolerant*". However, the project encountered other obstacles. Delays were caused by the implementation of the 10H rule, the presence of a nearby American helicopter airport, and the connection to the grid. The biggest challenge, however, was that the project was planned in a state forest, and a minister in Bavaria disallowed the state forest authority to sign the respective contract. However, through political pressure, the project was approved in the end.

4.2. Case study 2

The media and our interviewees described the second case study (CS2) as a showcase example in Bavaria. The town is located in north-eastern Bavaria, close to the border with the Czech Republic. The town has a council with 20 members and three mayors. The current mayor is a democratic and conservative party representative, similar to most council members. The previous mayor who initiated the project in 2015 is from the same party. In addition, the municipal council members were unanimously in favour of the project, which increased the coherence between local representatives of all parties.

The Bavarian minister from the Ministry of Economic Affairs visited the wind park with six delegates to learn more about the project and obtain insights into its successful implementation. This was the first project to be implemented with a distance to residential buildings less than specified by the 10H rule. Local acceptance was high, and it was also the only project that was not legally challenged at the time. Additionally, this municipality's average CO2 consumption per capita is higher than the Bavarian average, which a local council member interpreted as a reason for the greater awareness of the need for the energy transition.

The previous mayor was the key facilitator of the project and was identified as one of the reasons for the project's successful implementation. According to our interviewees, the public supported the project strongly due to their belief in the necessity of renewable energy development and the mayor's advocacy. The project planner stated that:

"*I think what had a very positive effect here was a courageous mayor who communicated to the population from the outset that this procedure, which was necessary, would be started in a results-oriented manner and that if insurmountable problems became apparent, then it would be possible to discontinue it again.*" (Project and landscape planner)

After some initial concerns that the use of wind energy could cause "*trouble*", the local council voted unanimously for the project, and all

related resolutions were approved. The local council also included a member of the German Federal Parliament (Bundestag) who is a strong advocate of wind energy, which may be one of the reasons for the strong support for the project. Initially, the municipality was approached by an external energy corporation that planned to build six wind turbines. This corporation's approach was described as "*brisk*". The responses of the local population were not only positive. The local council wanted to promote wind energy but remain in control over the locations and consequently, decided through zoning about potential sites. In the end, the project was planned by a regional company together with a regional planner, while an employee of the local municipality carried out the urban planning. The previous energy corporation had an approach that mainly focused on maximising profits, whereas the new project developer considered the municipality's needs. The latter chose a pooling approach, meaning that not only the landowner where the turbines stand profits from the lease but also anyone affected through access roads or the grid connection. Further, the turbines were installed close to existing infrastructure to avoid unnecessary environmental and forest impacts. Moreover, a local described the siting of the wind turbines to be favourable without any shadow cast.

The local population was informed about the project through an information event. There was a presentation at the beginning, followed by an opportunity for residents to visit different information tables and obtain the information they were interested in. The information event was described as constructively critical by our interviewees. The set-up was identified by a local council member, community member and project developer as one of the reasons for the high level of local acceptance as it did not allow mobilisation against the project. The project manager shared this assessment:

"*This led to the fact that the citizens' initiatives from outside were actually there, but as they saw that they were not given the platform for their protest, they left again.*" (Project manager for administrative procedures)

The planning process took three years, and there was no possibility for financial participation offered. During the planning phase, they faced two main obstacles: the 10H rule and a military helicopter training area located close to the project site. After completion, the current mayor stated that they had realised that the dismantling of wind turbines would be classified as special waste (*Sondermüll*), which was not accounted for in the original budget.

4.3. Case study 3

In central-eastern Bavaria, Case Study 3 (CS3) is located at the border with Austria. It is a more densely populated town than the other three cases, with 24 members on the local council and three mayors. The town's first mayor is an independent candidate, while most of the council members represent conservative parties.

The project is still in the planning phase and was the most controversial of the four case studies. After an external energy corporation indicated its interest in implementing wind turbines in this municipality, resistance formed quickly and strongly. One of the targets was the mayor, who was elected ten years ago. While the second and third mayors, other council members, and the project developer were not directly exposed to the aggressive activities of the opposition, the first mayor was held accountable for the project. She received threats, although she was neither a vocal advocate of the project nor had she pushed strongly for it. The mayor supports the project but has not clearly voiced her opinion since, as she reported, she did not want to influence the local council or the local population. She stated:

"*I've always said that we have to deal with the question of where our energy should come from in the future, and we can't always say that others have to fix it for us. […] We can't always just be against it without saying what we're for.*" (First mayor)

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[5] Franconia is defined as the cultural region in Bavaria with its own Franconian dialect.

The backlash she has faced for her political stance was exceptionally intense. She had received a dead rat by post, which she interpreted as being a gendered threat. When asked whether a male mayor or the other town mayors would have faced the same reactions, she replied, "No". However, the sample size is too small to conclude gender-related issues.

Other political actors in the municipality argued that the hesitant position of the first mayor had created further conflicts. Local council member 1, who is against the project, also stated that politicians should rely on being elected by a large percentage of the population and take a stand. Moreover, he is part of a political party in the local council that emerged from the opposition group against the wind energy project. The third mayor explained the lack of leadership as "*decisive*" and added:

> "*The principle in a Bavarian municipality is quite simple, in my opinion: the [first] mayor is the leader. The mayor defines the direction in which a municipality can develop. They have everything in their hands, they have the staff that works for them and the other members of the city council … Simply, it is the first mayor, who says, "Dear administration, we now have the application here, how do we deal with it, or what could we do with it?" - and the rest is all incidental.*" (Third mayor, local council member 2)

The project developer wanted to install turbines of the maximum height. One of the local council members criticised this goal and suggested having smaller turbines instead. Local council member 1 stated that the planned project will only be profitable for investors and will "*fill their wallets*" but ignore the community's concerns. A financial participation model is planned for this project, but the details have not been decided yet. The project developer further elaborated on early information the following:

> "*The difficult thing about early information is that it is always very vague. If we provide information at an early stage, we don't have a bird survey or a noise survey yet. So we don't have all these things yet, because we inform early and sometimes there is a conflict with the expectations. […] Then we are asked a lot of questions that, of course, can only be answered in a general way at the beginning of a project and not in a project-specific way. And then again, I would say that the disappointment is sometimes very great because people expect to learn a lot of details that it is not possible to give at that point.*" (Project developer)

This project is associated with the most vigorous opponents of the four cases. Concerns included environmental destruction, impacts on fauna and flora, risks for the water sources, effects on the landscape, a drop in tourism, visual impacts, the impact of infrasound, and health risks. The strong response to the interest of the energy company in building a wind energy project in the municipality was surprising to the mayor since, in 2010 and 2011, the same municipality had stated its intention to become a role model regarding wind energy in Bavaria. At the beginning of her term, the land-use plan was adapted, and concentration zones for wind energy were defined. That did not result in a response from the local population, which may be due to a lack of awareness in the community. However, she described the energy company as being too confident and unwilling to make any concessions and "*gambling away*" the local population's trust as their communication methods or rather the lack of communication had failed to address people's concerns. The local population was informed through an event that was held in response to the local opposition. Additionally, the third mayor described the 10H rule as a further burden at the municipal level, as local politicians would prefer not to undermine the 10H distance.

The case exhibits a striking difference between the perceptions of the local council and the local population in contrast to the perceptions of the project developer. The developer sees the project as being on a good track with opposition within the normal range, while the mayor and the local council perceived this quite differently. According to the project developer, the sole difference was that there was a greater media presence. Recently, following a petition by the local population, the local council decided to vote on the project proposal and has set a prospective date. However, the developer company withdrew their proposal from the local municipality before the voting, considering proposing the project to the county instead. The interviewees from the local council and the local population highlighted the lack of transparency on the part of the project developer. Next to the initial information event at the beginning, which was also only a response to the request to get some information, the project developer did not share any information with the local population or the local council. This caused a strong resentment and the local population did not get any responses to their questions and also their concerns were not addressed. They have been unable to reach the developing company or the project developer. According to our interviewees, there is a huge gap between what the developer promised and should do and what they were doing. Three of our interviewees from the local population were against the project and stated that the frustration mainly evolved from the lack of information and that they did not get any responses to their questions.

4.4. Case study 4

CS4 is a town in the north of Bavaria, close to the state of Thuringia. The local council consists of mostly independent candidates, local party members, and their mayor. The town council has 21 members and one mayor. Over the one year in data collection, CS4 evolved and had the most dynamic responses and the most dynamic development. The mayor initiated the project in 2021 and was an advocate, but the project was cancelled as a reaction to the strong local opposition through a municipal council vote before a project was planned. However, after the implementation of the "Wind an Land" law,[6] the local council re-opened the discussion about wind energy in the municipality in August 2022.

According to the mayor, a project was already initiated ten years earlier, and the population was receptive. Back then, the contracts with landowners had already been signed, but after the introduction of the 10H rule, the project could not proceed. However, since municipalities can circumvent the 10H rule through a land-use plan, the mayor put the topic back on the agenda 2021. In February 2021, during a meeting without public attendance, the local council decided in proportions of 19:1 in favour of investigating the possibility of developing wind energy projects in their municipality. This was a decision that indicated an interest in the topic, but no concrete project was initiated at that time.

At this time, a lockdown due to the COVID-19 pandemic was ongoing, and the local population was informed via the local newspaper. Inviting the public to an information event was also not possible, so the event took place online. According to local council member 2, this made it more difficult to interact and to get a feeling about the assessment of the local population. He also mentioned that questions remained unanswered since many details were not known or undecided at that point. In the next local council meeting, the local council voted unanimously to investigate the use of wind energy in the municipality. After the local population was informed, opposition emerged rapidly and intensely. Concerns included shadow, noise, flashing lights, and bird strikes. The mayor was surprised by the intensity of the reactions.

As a reaction to the intense local opposition, the local council voted in May 2021 against the project 13:7. Just weeks earlier, the same local council had voted in favour of the project with 19:1. According to the local council member 1, opponents put a lot of pressure on local council members, stating that they would divide the local population. The local council meeting had to take place under police protection. The mayor described the situation the following way:

> "*It was a real storm that was hard to beat in terms of clarity, with whistles and a tractor outside the municipal council meeting and 100 people chanting and shouting, so it was very violent.*" (Mayor)

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[6] Germany introduced the Wind an Land (Wind on land) law in July 2022 that aims to designate two percent of each federal state area for wind energy by 2030 (Bundesgesetzblatt (BGBI. I S. 1353), Article 4, 2022).

For the mayor, the rejection was a significant setback since members of his own party voted against the project. Local council member 2 suggested it might have been better to postpone the decision rather than make it in such a heated environment. A referendum would have been another option, which a neighbouring municipality chose (with 70% of the local population supporting the project). According to the local council member 3, concerns were also raised by the local population that this decision has been taken too quickly and that the municipality has to consider wind energy. In November 2022, the local council defined preferential areas for wind energy, and brought the topic once more back to the agenda. According to our interviewees in fall 2022, the receptions were quite different than 1.5 years before. The context changed and the local population seemed to be more concerned about climate change and energy independence topics. Local council member 3 explained, "*Last year energy was irrelevant, but now everyone is thinking about it*". Therefore, there was a push from the local council, but also from the local population for locally produced energy.

5. Findings

The following section presents our findings from the four case studies. From the analysis of the case studies, we were able to identify four main factors that influence the dynamics of local responses: the assessment of the mayor and the local council; other relevant stakeholders, such as project developers and oppositional groups; project communication, transparency and the processes; and changes caused by external events.

5.1. The assessment of the mayor and local council

Many of our interviewees mentioned the importance of the mayor and the local council's support for implementing wind energy projects and local acceptance. Our case studies confirm the findings in the literature that the approval of the mayor and the local council for a project seems to be pivotal to success (Busch and McCormick, 2014; Gürtler and Herberg, 2021). Approval of a project by the mayor is no guarantee of successful implementation, but disapproval of a project proposal seems to hinder project development in the first place. Local political actors (e.g., local council member 1 of CS1) and project developers (e.g., project planner of CS2) from our case studies indicated that the mayor's openness to potential projects is essential for wind energy development. Furthermore, during scanning potential case studies, we could not identify any wind energy projects opposed by a mayor. Our inability to find such projects suggests that approval might be a prerequisite in Bavaria for initiating a project, which our interviewees also confirmed.

As local political figures, mayors are representatives of their communities but also their political parties or groups. We found that the local leadership of the mayors tends to be independent of the national standpoint of the affiliated political parties regarding the energy transition, similar to Adesanya et al. (2020). Even though some participants argued that the political parties of the mayors and council members could steer responses to projects, we found no correlation between these factors in the case studies.

The influence of mayors on the project outcome is twofold. Firstly, they can stop projects directly since they have to adapt the land use plan. The project developer of CS3 stated that they do not start projects without the approval of the local council and the mayor since they need to change the land use plan. The project developer explained that many projects fail because the mayor says "no" thinking "why should they get themselves into trouble?". Secondly, mayors can also have an influence on local responses. They can play a mediating role between project developers, planners, and the local population, providing them with a strategic position through encouraging and inviting the public to participate in projects, addressing concerns, or acting as intermediaries. Their vision of their town and their leadership could significantly impact

the project's development. Nonetheless, mayoral support does not guarantee local support. Thus, the mayor's support is essential but not sufficient for local acceptance.

Our findings also indicate that mayors need the support of the local council. Especially in municipalities where the projects need to be approved locally, council members directly impact outcomes. In turn, mayors and local council members are also directly affected by the reactions to projects of the local population. They can face pressure from the public, which may affect their attitudes towards project development. Thus, the mayors' responses can change over time, but their influence on the local population can also change and is highly influenced by social norms and trust.

In our case studies, mayors were elected representatives by the local communities, which portrays them as trusted leaders. Trust in mayors as stakeholders played an important role in the distinctive outcomes of these three projects, confirming other studies (Dwyer and Bidwell, 2019; Fast and Mabee, 2015; Titov et al., 2021). However, trust is not the sole explanatory factor for acceptance; other factors impact the relationship between the community and mayors, such as providing a clear vision, project communication, and project characteristics. The current mayor of CS1 and the previous mayor of CS2 have been in office for over ten years and have had long-lasting relationships with their local communities. Here, the mayors were supporting and initiating the projects, and the local population supported them as well, which resulted in the project implementation in the end. Whereas, in CS4, the mayor has been in office for over 20 years and would be arguably perceived as a trusted local leader. However, his initial attempt to launch a project was not successful.

Moreover, mayors have administrative boundaries in wind energy planning as most projects are spread across multiple municipalities. In CS1, neighbouring communities shared different percentages in financial participation in the project, and the town that received lower benefits objected to the extension proposal. Thus, a mayor's leadership in their community may not be sufficient to impact the project's outcome.

5.2. Process of communication

Almost all interviewees agreed that project communication is an essential part. It is not only important what is communicated, but also how, when, and by whom. It is essential to inform the public early about projects to prevent trust-related problems and to avoid the impression that everything is being managed and decided behind closed doors.

This conclusion confirms the findings of many studies (Dai et al., 2015; Dermont et al., 2017; Wolsink, 2007). However, our case studies suggest that the early provision of information is not enough. The "*right timing*" is critical for avoiding raising more questions than it settles. Many of our interviewees agreed that there needs to be a balance between informing early and having enough information to share. When informing early, many factors will be unknown, not assessed, or undecided. This implies that residents will not receive answers to every question they have, which may result in the feeling that local decision makers or project developers are not being entirely open and transparent. The mayor in CS4 saw the timing as one of the reasons for the initial failure of the project. He considered that they had informed the public too early, leaving many questions unanswered. Similarly, the project developer of CS1 described the balance between providing early information and having enough information as a "*tightrope walk*".

Project communication is a process, and alongside the importance of timing, our interviewees agreed on the relevance of how information is provided and how the events are set up. In CS4, one of the reasons for the strong opposition was believed to be the online context of the public information meeting. A positive example is the information event of CS2. Here, our interviewees agreed on the positive influence of the set-up on the constructive dialogue that was enabled. Panel discussions do not seem appropriate to inform the local population about a planned project. Moreover, personal discussions and raising awareness within

the community regarding alternatives to wind energy were described as helpful.

Therefore, how and when the public is informed strongly influences the local responses and, in turn, the project outcome. In other words, information should be communicated when there is considerable room to elaborate, not too early when there are no proposals for siting or project features. Moreover, the context of information sessions tends to impact how meetings proceed. Further, it is crucial that the whole process of the project is explained and that the local population is informed about when they can expect which decision and the respective information. Therefore, the information flow needs to be consistent and the whole planning process needs to be transparent.

5.3. Other stakeholders

Next to the timing, also the people behind the project are highly relevant to local responses. Our interviewees identified project developers and oppositional groups as having an influence on local responses and project outcomes. We identified that it is essential whether the community trusts the project developer, similarly to the findings of previous studies (Dwyer and Bidwell, 2019; Kalkbrenner and Roosen, 2016). Confirming findings from the literature (Goedkoop and Devine-Wright, 2016; Walter, 2014), regional project developers were trusted more than external project developers. Alongside their project role, we analysed how they perceive local responses. Project developers tend to make assumptions about emotional responses toward energy projects. Whether they frame the latter as NIMBY responses and try to solve conflicts through compensation (Perlaviciute et al., 2018) or take the raised concerns seriously affects local responses. Therefore, it is not only relevant *who* the project developer is but also *how* they interpret their role, how they interact with the local population and *how* they set up the project.

Regional project developers were favoured in the four case studies over external corporations. The former were perceived as caring about the region and its inhabitants and trying to ensure that added value stayed in the region. They were perceived as attempting to minimise negative impacts on the local population and the environment. In contrast, the latter is perceived as only interested in maximising profit and output without caring too much about environmental and social consequences.

In CS2 and CS3, concerns were raised by the public. However, they were addressed differently by the project developers. The project planner of CS3 argued that the public was prejudiced against the project from the beginning. In contrast, in CS2, an external developer was associated with a failed project, which the current developer had taken over. Moreover, the external developer of CS3 explained the advantages of the project for the town in terms of siting and distance from the residential areas, whereas the regional developer of CS2 emphasised first the social, environmental, and economic advantages for the community and only afterwards the profits for their company. The communication between the local population, municipality and the developer of CS3 was also found to be problematic due to the absence of the provision of information and leadership. Particularly in CS3, the project developer failed to be transparent and informative about the process, leaving unanswered questions and eventually avoiding contact with the local community. This difference in the project presentation narrative might also have led to the different local responses in these two case studies.

Moreover, when a project developer is perceived as caring about the people and the region, this correlates positively with the local responses and in turn, the project outcome. This is also strongly linked to the set-up of the project. Regional project developers were associated with project set-ups to benefit the municipality or community either financially or in other ways.

The local population plays a vital role in wind energy projects since they influence outcomes in two ways. First, through democratic and participatory processes - for instance, lawsuits, objections, and referendums. Second, their influence on local political figures (Jolivet and Heiskanen, 2010). As political actors, a mayor's position relies merely on the community's support. However, one challenge our interviewees mentioned is to assess the community's opinion as a whole and ensure that not only the people are heard to voice their opinions. Because opposition groups tend to be more audible and visible, taking into account the responses of the whole community becomes difficult. A local community member of CS3 stated that when people feel threatened or endangered, they tend to respond emotionally. On the other hand, the relevance of considering members of the silent majority who either do not have strong emotions or do not express their opinions about wind energy projects (Stephenson and Lawson, 2013) was also highlighted in our case studies. In both cases, it was argued that the two sides of the spectrum stayed in their own bubble, creating problems in changing attitudes and behaviour.

In our case studies, we explained these polarised public views through social norms, similarly to Huijts et al. (2012). Responses to energy projects tend to create a *domino effect*, which might enforce strong opposition, like in CS3 and CS4. In CS3, proponents did not want to voice their opinion since the opposition was very intense. Similarly, in CS4, the opposition group directly influenced the local council's voting behaviour. In other examples like CS1 and CS2, where the public raised similar concerns, norms are argued to cultivate the responses in the other direction. Consequently, mayors have a significant role in shaping local community social norms, but their impact alone is not always the deciding factor.

5.4. Temporality and impact of external events

Research on social acceptance reflected on the dynamic process of project development mainly in temporality (Batel, 2018; Küpers and Batel, 2023; Labussière & Nadaï, 2018). Earlier studies proposed a U-shaped curve, suggesting that responses to the project become more favourable over time (Devine-Wright, 2005; Wolsink, 2007). Even though the U-shaped curve considers the temporality aspect and changes within project planning and development, it is argued to simplify acceptance to adaptation and familiarisation (Rudolph and Clausen, 2021). Our findings show a similar curve in which temporality is fundamental in dynamic responses to project outcomes.

Despite local actors and factors, recent developments in the world play a determinative role in changing attitudes towards energy technologies. After the 2011 Fukushima disaster, Germany rigorously shifted its energy policies towards renewable energy sources, impacting public perspectives (Betzer et al., 2011). Thus, countries create new regulations and national narratives concerning the energy technology transition following such catastrophic events (Malone et al., 2017). Our results show that recent events incline to change responses to renewable energy projects.

In 2022, the Russian war against Ukraine impacted all of Europe, bringing the topic of energy independence to urgency. Moreover, Germany's new "Wind an Land" regulation puts pressure on each federal state to deliver rapid changes in their localities. In the one-year time between interviews, CS4 decided to re-evaluate the topic of wind energy in their municipality. The energy crisis transformed the attitudes towards wind energy from opposition to tolerance and even project support. The local community preferred to put the cancelled project back on the table since the local council and the local population assessed the situation differently now and they agreed that the expansion of renewables is necessary. According to our interviewees in fall 2022, awareness grew not only regarding energy security and energy independence but also increased climate awareness. Further, the municipality wanted to plan the project rather than encountering a potential top-down proposal. The council's initiation allowed the community to be involved in the process and potentially benefit from it.

Contrary to CS4, local conflicts in CS3 escalated in a year. The project developer company faded away in their role of informing the

community and failed to be transparent. Instead, the concerns over the proximity to residential areas, the negative impacts of wind turbines on fauna and flora and the lack of trust in stakeholders became more prominent. Moreover, the developer company's recent decision to withdraw the proposal from the municipality highlights how top-down regulations can impact democratic local decision-making. Thus, the energy crisis and the top-down measures resulted in two distinct outcomes, accelerating the development of one project and the tension between the stakeholders of the other.

6. Conclusions and policy implications

The energy transition is an important means of addressing climate change. In Germany, decentralised energy production through "Bürgerwind" (citizen wind) projects and energy cooperatives is the backbone of the energy transition. We have presented four case studies from Bavaria, illustrating the importance of the structural frameworks, key stakeholders, and information. Our study adds a unique contribution to the research on social acceptance and has implications for practitioners due to the following conclusions.

This paper has shown that the outcome of wind energy projects depends on multiple interlinked relationships between different stakeholders. Regarding the first research question "What is the role of elected mayors in wind energy projects?", this study shows that the approval of the mayor and the local council for wind energy projects seems important. However, support from the mayors is not always enough to guarantee local support. Our findings also indicate that mayors need the support of the local council members, as shown in CS4, in which case the lack of support of the local council resulted in an initial project cancellation. Additionally, they need to present a clear vision, ensure that the community or the municipality benefits from the project, and clearly communicate why it should be implemented.

The second research question was on the mayor's influence on local responses. A decisive factor in the local responses was how the mayors addressed the concerns. Mayors can play a mediating role between developers, planners, and the local population throughout the project proposal and planning process. Furthermore, mayors could also initiate the projects, defining a strategic position. Thus, their role in the municipality administration and project development sets the tone of the local environment.

Concerning our third research question ("What actors and processes influence local responses over time?"), we identified three main factors: communication as a process, the role of stakeholders, and impact of external events. First, our study shows that early communication with communities and transparency during the decision-making process of wind energy project developments are important factors influencing local responses. Beyond this, our results also highlight the importance of timing and context in communicating with the public. Second, our results suggest that regional project developers may be favoured over external corporations. While regional developers are foreseen as benefiting communities more, external corporations are often perceived as prioritising their own interests over those of local communities. This is strongly interlinked to the project, which needs to enable positive effects for the community or the municipality. Building trust within the local community, local political actors and project developers play an essential role in the outcome of the projects as well. Third, this study confirms that opposition groups play an important role when it comes to wind energy developments. Local responses to wind energy are dynamic and directly and indirectly influence project outcomes. Opposition groups, in particular, impact the social norms in the community. Fourth, the dynamics of project development are subject to change in different times, places, and circumstances. During the one-year time span of data collection, local responses to and processes of our two case studies (CS3 and CS4) changed with the increasing concerns over the energy crisis and independence and recent national regulations. Finally, the whole planning and permitting process is complex and lengthy, creating a

challenge for municipalities, especially small ones. The 10H rule is a burden for municipalities, not only because of the complicated process that needs to be followed if a project fails to satisfy the 10H rule but also because it may put municipalities in a difficult position by giving the impression that they are harming the local population.

Based on these insights, five implications for policymakers and practitioners are derived. First, the role of mayors is not limited to political leadership, as the representative of their community and decision-maker in administration. Their roles can extend to other functions, such as project initiator, mediator, and facilitator in public participation processes. Creating educational and endorsement programs to enhance their mediating skills and competencies could help support them in these activities. Surrounding counties and federal states could establish learning and experience networks and encourage the joint planning of municipalities so that mayors are not left alone. Second, mayors are interested in creating benefits for their municipalities. Thus, implementing policies that offer financial benefits to the municipality (for example, in the form of tax revenues or by pooling systems for distribution of profits) could incentivise interest in projects. Third, early information is essential. However, there needs to be a balance between informing early and having enough information to share. Additionally, the setting of the information event also plays a role. Aside from informing early, it is crucial to keep the information flow open throughout the whole planning process and beyond and to respond to the concerns of the local population. Fourth, the 10H rule was mentioned in all case studies as a burden. Consequently, the 10H rule should be adapted. Finally, to promote fair and inclusive decision-making processes, decisions could be taken by the public through referendums.

While this study is based on a qualitative sample involving four case studies, we note some limitations that can spur further research here. Firstly, our focus was on the impact of the mayors, while social norms that shape local responses are implicit determinants of relevance to the study. Based on conceptual frameworks that argue that social norms are a significant factor in acceptance, our approach identifies local responses as norms that are connected to the attitudes of the mayors instead of approaching those using standardised measurements. Moreover, all the mayors in our case studies were elected by the locals. In cases when mayors are selected as representatives from the local council, the results might differ. A second limitation was our difficulty in reaching local community representatives for interviews. Through snowball sampling, we identified key spokespersons in each case study who had either raised their concerns or supported the project, but we managed to speak to only a few. Even though this is a common challenge in social acceptance research, the COVID-19 pandemic affected our data collection. Field research with participant observation could create further insights into the norms of the opposition groups. Third, our case studies indicate that local opposition seems to react differently to male and female local leaders in similar circumstances. Compared to three male mayors that supported their local projects, only the female mayor with a hesitant opinion received personal threats concerning the proposed project. However, the sample size is too small to draw conclusions about this factor. Future research could identify whether there are differences between the tactics of political figures and how oppositional groups respond to them, which may be gender-related (i.e., if the latter targets them more aggressively than male leaders). Research into these issues would benefit more attention and help achieve a more just and inclusive energy transition.

CRediT authorship contribution statement

Irmak Karakislak: Conceptualization, Methodology, Software, Data curation, Formal analysis, Writing – original draft, Writing – review & editing, Supervision. **Nina Schneider:** Methodology, Data curation, Formal analysis, Resources, Writing – original draft, Writing – review & editing, Supervision.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: One of the authors of this paper has also been a member of the guest editorial team of the Energy Policy Virtual Special Issue "Dynamics of Social Acceptance", but declares that she has neither been involved in the review process nor the editorial decision of this paper.

Data availability

The data that has been used is confidential.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.enpol.2023.113509.

Appendix

Interview No.	Role or Title	Date of Interview	Format	Duration
Case Study 1				
1	First Mayor of CS1	10.12.2021	Video Call	36 Min.
2	Local Council Member 1 of CS1	14.12.2021	Video Call	33 Min.
3	Local Council Member 2 of CS1	08.12.2021	Video Call	31 Min.
4	Local Council Member 3 of CS1	09.12.2021	Video Call	26 Min.
5	Project Developer of CS1	17.01.2022	Video Call	34 Min.
6	Community Member of CS1	11.05.2022	Phone Call	20 Min
Case Study 2				
7	First Mayor of CS2	09.12.2021	Video Call	32 Min.
8	Second Mayor and Local Council Member of CS2	09.06.2022	Video Call	20 Min.
9	Project Planner of CS2	22.12.2021	Video Call	35 Min.
10	Project Manager of CS2	13.12.2021	Video Call	28 Min.
11	Community Member of CS2	01.06.2022	Video Call	25 Min.
Case Study 3				
12	First Mayor of CS3	09.12.2021	Video Call	42 Min.
13	Local Council Member 1 of CS3	10.06.2022	Video Call	60 Min.
14	Third Mayor and Local Council Member 2 of CS3	26.05.2022	Video Call	60 Min
15	Project Developer of CS3	21.12.2021	Video Call	31 Min.
16	Community Member 1 of CS3	12.01.2023	Video Call	26 Min
17	Community Member 2 of CS3	17.01.2023	Video Call	43 Min
18	Community Member 3 of CS3	17.01.2023	Video Call	43 Min
Case Study 4				
19	Mayor of CS4	07.12.2021	Video Call	38 Min.
20	Local Council Member 1 of CS4	20.01.2022	Video call	18 Min.
21	Local Council Member 2 of CS4	23.12.2021	Video Call	39 Min.
22	Local Council Member 3 of CS4	30.11.2022	Video Call	23 Min
23	Local Council Member 4 of CS4	30.11.2022	Phone Call	19 Min

A: Interview participants list.

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