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Integrating Framing Approaches as a Tool for Managing Complex Transitioning to Renewable Energy (TRE) Projects: The Yatir Wind Farm Case Study

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Abstract: Transitioning to renewable energy is an urgent global goal. Wind energy is a promising renewable source with contentious obstacles. Using the Yatir Wind Farm project in Israel as a case study, we explore the potential of framing in identifying and mitigating obstacles in a wind farm project. The cognitive and strategic frames employed by stakeholders were elicited through 18 semi-structured interviews and more than 100 documents. This analysis highlights three conflicting issues: potential or perceived harm to neighboring residents, protecting birds and bats, and adapting to changing regulations throughout the process. Regarding residents' opposition to feared harm from the project, initial cautious curiosity was followed by distrust and deep disappointment due to a lack of transparency and a sense of abandonment facing perceived existential threats to their health and homes. This led residents to conduct legal battles, which resulted in their claims being rejected. It also led to the breakdown of relationships among neighbors opposing and promoting the wind farms. In the case of bird and bat protection, stakeholders initially framed concerns emotionally until the dialogue shifted to scientific discourse, resulting in the successful refinement of mutually agreed upon regulatory guidelines. The structural appeal mechanisms effectively addressed evolving regulations, overcoming the lack of mutual understanding and resulting in the adoption of the majority of the new regulatory requirements. The analysis underscores the importance of understanding stakeholders' frames for effectively working through the complex and transdisciplinary nature of sustainability transitions and achieving successful outcomes. It also reveals the need for formal mechanisms to validate stakeholder needs and integrate them into decision-making processes. Recommendations include early and meaningful public involvement, process improvement for stakeholder engagement, and enhanced transparency in decision-making processes.

Keywords: framing; frame theory; transition to renewable energy (TRE); mutual understanding; sustainability; resilience; wicked problem; regulatory framework; decision-making; governance



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1. Introduction

The transition to renewable energy is a critical, international goal for mitigating climate change risks [1,2]. One of the main agreements of the COP28 is to move away from the use of fossil fuels with a "swift, just and equitable transition" towards renewable energy. Wind energy, while promising, is a contentious source of renewable energy [3–5]. The focus of this research is on how stakeholders understand and communicate the process of transitioning to wind energy, as exemplified by the Yatir Wind Farm project in Israel.

This study was conducted after the Yatir Wind Farm project plan in Israel was approved and was being appealed, leaving uncertainties about the next steps. This situation provided an opportunity to witness and learn about the way different stakeholders frame the wind farm on the local, regional, and national levels.

The article begins with a literature review and then defines the research purpose and questions. The methodology and findings of this case study follow. The analysis

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applies framing theory and sustainability transition research to explore the process and outcomes and the conclusion suggests a synthesized approach to framing for analyzing and managing challenges related to transitioning to renewable energy.

2. Literature Review

This section reviews the literature on transitioning to renewable energy, emphasizing its multi-level, multi-disciplinary nature and the challenges stakeholders face in terms of resilience. Given the diversity of stakeholders involved, it explores the potential of frame analysis as an approach to studying how these stakeholders understand, communicate, and change their perspectives throughout the process. The impact of mutual understanding, emotions, and legitimacy and power are explored as well.

2.1. Transitioning to Renewable Energy (TRE)

The concept of transitioning has evolved into a rapidly growing academic domain, particularly focusing on sustainability [6,7]. This complex transdisciplinary endeavor encompasses parallel interdependent developments, including technologies, policies, infrastructures, and supply and distribution chains [8]. It involves multiple stakeholders on multiple levels, each with their own resources, capabilities, beliefs, and interests, and requires balancing stability and change. The challenges of sustainability transitions are typical of wicked problems in that they can involve long-term and open-ended processes, characterized by uncertainty and disagreements. Normative directionality should clarify the goals of sustainability transitions, balancing the public good and private stakeholder interests through public policies, such as environmental regulations, taxes, and subsidies. One of the key challenges of sustainability transitions lies in the need to build bridges among diverse disciplines [8].

2.1.1. Multi-Level Perspective

Transition research has adopted a broader Multi-Level Perspective (MLP), moving beyond a technological–economic viewpoint to include societal change and its consequences [9]. Geels et al. [6] emphasized the importance of considering changes in social factors, such as actor coalitions and formal rules, when evaluating transition pathways. Teschner and Paavola [10] describe four dynamic transition pathways—discourse, institutions, policies, and technology—that interact to produce pathways of varying success.

2.1.2. Transitioning as a Wicked Problem

The transition to renewable energy involves social challenges that encompass multiple needs competing for change that involves uncertainty and risk [11]. These wicked problems may manifest as "policy controversies" [12], leading to diverse solutions and resulting in intractable deadlocks. Rein and Schön [12] proposed a frame-reflective approach involving stakeholder reciprocal inquiry. Concepts like "collaborative governance" are suggested by Termeer et al. [13] as strategies to manage multiple frames. In analyzing case studies of transition pathways, Geels et al. [6] noted that, beyond the focus on the institutional and technological level, there is a need for research on stakeholders' struggles as influential factors.

2.1.3. Resilience

Given the urgency of the transition, resilience may play a significant role in successfully transitioning to renewable energy. Resilience in this context is defined as "the ability of individuals, groups or organizations to respond flexibly and effectively in situations of adversity" [14] (p. 295). It is the amount of disturbance a system can absorb while remaining intact, showcasing its self-organizing, adaptive abilities [15]. Community mobilization, goal legitimization, and strong social ties within a learning network were identified as successful resilience approaches [16]. Unequal economic and political factors should also be considered in resilience research and policymaking [17].

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2.1.4. Science and Culture

In the sustainability transition, stakeholders with diverse knowledge and cultural perspectives must consider science-based technologies together with ethical and political considerations [18]. On the one hand, stakeholders may differ in their belief in science [5]. On the other hand, they have increasing access to knowledge through media. Brunner [18] views this diversity as an opportunity for progress. He states, "Like any other threat to common interests, global climate change is an opportunity for diverse groups to advance their respective interests by various means..." [18] (p. 292).

2.1.5. Diverse Stakeholders

Stakeholder groups who often interact in the context of transitioning to renewable energy include members of civil society—residents; developers; government authorities on multiple levels; and environmentalists including Non-Governmental Organizations (NGOs) [4,19,20] (see Figure 1, below).

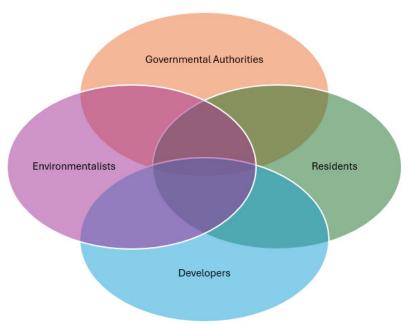


Figure 1. Stakeholders involved in transitioning to renewable energy.

Each group may perceive the challenge, their roles, and their impact on the ecological system differently. Their understandings and actions can influence each other. Identifying positions and underlying agendas can enhance mutual understanding and explain intractability [21]. Framing can contribute by eliciting root causes and discovering solutions [22].

2.2. Framing

The concept of framing has been applied to reflect how one does the following: (1) cognitively interprets or makes sense of an issue; (2) strategically communicates in order to achieve a goal; (3) changes one's own frame through interpreting others' frames (see Figure 2, below). Factors such as mutual understanding, emotional responses, and perceived legitimacy and power may influence how people frame issues. These are explored in the following sections.

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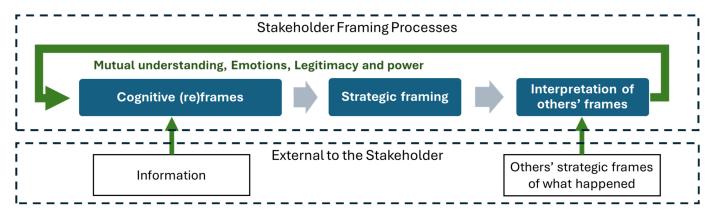


Figure 2. Frame dynamics: from cognitive understanding to strategic communication through interpreting others.

2.2.1. Frame Analysis

Frame analysis identifies underlying issues inherent in a conflict. For instance, Ben Gal et al. [23], in their examination of a spatial–religious conflict using frames, revealed that conflict origins were related to process and values—posing a threat to identity and 'sense of place', rather than the issues themselves.

Frame analysis is often performed around predefined characteristics, such as how stakeholders attribute problem sources (for example, blame or responsibility), the most prominent threat, and distinctions between good and evil [24]. Shmueli [25] and others identified taxonomies of frames commonly found in environmental conflicts, including identity, process, and characterization.

Various methods exist to elicit how stakeholders frame an issue [26,27]. Shmueli [25] adopted a conflict assessment process involving semi-structured interviews, analysis, consensus-building process design, and report writing with interviewee approval to elicit frames. Mendonça and Simões [27] conceptualized the frame analysis process as an examination of social interactions, viewing each frame as an interpretive package. They proposed investigating interaction sequences in conversational fragments as a discourse-based method for studying framing, including how each participant's actions affect the dynamics of the interaction.

Stakeholders' frames identified through these processes may be cognitive frames, representing accurate representations of their understanding, or strategic frames, formulated to purposefully influence others. Stakeholders' interpretations of each other's cognitive and strategic frames can influence their own by, for example, polarizing viewpoints or, conversely, facilitating reframing processes that lead to novel understandings. For example, if one party's strategic frame is perceived as a threat, the other party might try to defend themselves—resulting in an escalation. Conversely, if they understand that the other party's intention was not to threaten but rather an attempt to deal with another concern, a new insight might result that might enable both parties to come up with new solutions [28]. Factors that affect stakeholders' comprehension of others' frames include emotional responses (both their own and how they understand those of the other), perceived power and legitimacy, and mutual understanding (that is the degree to which the stakeholder's understanding of the intentions of the other aligns with the latter's actual intentions).

2.2.2. Cognitive Frames

Framing theory helps to understand how parties make sense of an issue—like a picture frame separating relevant elements within it from what lies beyond [29,30]. Erving Goffman [31] defined a frame as a "schemata of interpretation" that enables individuals "to locate, perceive, identify, and label occurrences within their life space and the world at large" [31] (p. 21)—assigning meaning to their experiences and guiding their actions. The "Cognitive (re)frames" box in Figure 2, above, refers to this process. In conceptualizing

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frames as a way of organizing experience, Goffman emphasized the need "to examine what it is that persons are allowed (or obliged) to treat as their official chief concern, not whether or not they actually do so" [31] (p. 201). Moreover, it is not always clear how a person is framing a situation, and that lack of clarity can serve the person's interests. Changes in frames can improve a situation or deteriorate it into a conflictual or chaotic process [31]. Syna [32] focused on both of the following: (1) the cognitive frames used by diverse stakeholders to interpret experiences while negotiating terms of engagement; (2) interaction framing that involves co-construction of meaning through their interaction.

An important aspect of framing is that different parties may frame the same issue completely differently, for example, in terms of the parameters included, their importance, and its morality [33]. On the individual level, framing reflects the way a person makes sense of complex information [34–36]. James [37] proposed that "real" objects are those that are seen as interesting and important to us, and this is determined by "whatever excites and stimulates our interest emotionally".

Framing has been found to contribute to understanding and managing conflicts, particularly with respect to public policy and environmental issues [29,34]. Framing may influence how a conflict evolves, contributing to its (in)tractability [5]. Types of frames found to play a key role in environmental domains include identity, characterization, and conflict management frames [34,38]. Shmueli [25] identified recurring frames in environmental conflict analyses, including values frames such as fairness, justice, rights, and power; identity frames including individual self-conception and group affiliation; and characterization frames, which assess a person's own and others' behavior. Framing theory suggests that by analyzing conflicts using frames underlying issues may be highlighted, promoting mutual understanding and even contributing to conflict resolution [39].

2.2.3. Strategic Framing

Strategic framing refers to "deliberative, utilitarian, and goal directed" proactive communication [24] (p. 624). The "Strategic framing" box in Figure 2, above, refers to this. In studying how the media frames messages communicated by the elite, Entman [40] defined framing as the process of "selecting and highlighting some facets of events or issues, and making connections among them so as to promote a particular interpretation, evaluation, and/or solution" [40] (p. 417).

Factors found to influence the impact of competing strategic frames on public opinion include the strength and prevalence of the frame, the knowledge and motivation of recipients, and the other concurrently presented frames [41]. Strategic framing processes designed to recruit social movement members include bridging among different frames, amplifying existing values and beliefs, extending frames, and frame transformation [24]. Highlighting co-benefits rather than trying to shift understanding was an effective form of strategic framing for encouraging action on climate change [42]. Bartholomé et al. [43] found that some journalists frame their messages based on the issues—with a high level of substantiveness and 'hard' information—while others frame them strategically, aiming more at achieving goals rather than deliberation. They found that messages perceived as strategic were interpreted with increased cynicism.

2.2.4. Reframing and Other Frame Changes

The way stakeholders deal with gaps in each other's frames may differ. Dewulf and Bouwen [44] identified five interaction strategies for "doing differences in issue framing": incorporating others' frames into one's own, disconnecting by discounting the issue, polarizing the issues by exaggerating them, accommodating others' frames by changing one's own frame, and reconnecting by legitimizing both frames and removing their incompatibility.

In intractable conflicts, frames may be resistant to change, particularly when associated with identity and values frames. At other times, stakeholders reframed their original interpretations and increased their willingness to resolve an issue [29]. While it may be difficult to achieve consensus, stakeholders can adopt a neutral and inclusive meta-

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consensual process, avoiding polarization and enabling decision-making that takes into consideration all stakeholders' frames [45].

Frame changes can be triggered by explicit or implicit communication (as described by Bateson's notion of meta-communication), where, for example, a friendly gesture can suddenly be reinterpreted as an aggressive one [46]. Looking at communications from other stakeholders' as inputs to frames may expose their impact on the evolution of frames over time [36,47,48]. This, in turn, may open the analysis to the "dynamic processes of meaning construction within and across groups, organizations and fields" [47] (p. 5). The "Interpretation of other's frames" box in Figure 2, above, refers to this aspect of framing—each stakeholder, when receiving a communication from others, interprets the other's strategic framing, which, in turn, may affect how the receiver understands the issue.

2.2.5. Factors Affecting Framing and Reframing

A number of factors may affect framing and reframing when stakeholders interact, including mutual understanding, emotions, and legitimacy and power.

Mutual Understanding

Picard and Siltanen [49] described the importance of attending to parties' deeper-level values, often related to strong beliefs about justice and rights. By interpreting each other's actions in terms of values, parties may learn that the other's intention need not be a threat, and acceptable, new solutions to problems emerge [49]. Learning something new about the way another party frames an issue often proves important.

Emotions

James [37] described how a person's emotional response contributes to the perspective taken in framing, with strong emotions affecting how a person defines reality. Picard et al. [49] found that learning often happens together with strong emotions. They proposed that, instead of avoiding or judging emotions, they should be seen as a signal that something is important and may involve a change in perspective (learning). Identifying emotion in the framing process may contribute to learning about stakeholders' frames.

Emotions have also been identified as signposts for needs. Sites (1990, p. 22, as cited in [50] (p. 24)) stated: "Because needs cannot be directly observed, all we can do is to conceptualize a need as existing when certain emotions are observed... needs are tied to emotions." Heifetz [50] defines emotions as "energies in motion"—that mobilize the body into action and communicate both to ourselves and others when needs are (un)met".

Legitimacy and Power

The concept of legitimacy alludes to a measure of someone or something's level of acceptance [51]. While independent objective knowledge might be legitimate, it still is dependent on others to determine its legitimacy. The power to act upon the world is defined by a relation that "creates belief in the legitimacy of the words and the person who utters them" [52] (p. 148) and is only as effective as the ability of one to recognize legitimacy in the other.

While parties negotiate substantive issues, another dynamic may be present: 'shadow negotiations' include how parties manage impressions of their 'relative positioning' in relationships [53,54]. In the course of negotiations, each move or action taken by a party and the other party's response can impact the shadow negotiations in addition to the issue itself [53]. When the scope of a frame is amplified it gains enough legitimacy and power to create new shared meanings within and across levels [47].

2.2.6. Additional Framing Perspectives

Frames and Identities

Van Hulst and Yanow [55] recommend exploring "the intertwining of framing and frame-makers' identities" [55] (p. 92) to uncover mutual perceptions of identity in policy

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analytic framing. Forester's quotation exemplifies the identity concerns of public deliberation participants: "Are we so stigmatized that political authorities and professionals will shun us, or will they join us...?" [56] (p. 66).

Frames as a Source of Policy Issues

Mah et al. [57] extended the use of frame-critical analysis of policy documents from identifying the stakeholders' issues to agenda setting. They propose that: "Frame-critical analysis is instructive for exposing and also predicting tensions that impede forward progress on difficult policy issues. Accordingly, such analyses may be helpful in not only dissecting how policy can become 'stuck' in the process of change but in active reframing towards new policy solutions." [57] (p. 1).

3. Research Purpose and Questions

The transitioning literature highlights the complexities and diversity of knowledge and stakeholders involved in sustainability. Framing theory offers a method for exploring these different perspectives in the context of a case study. This research aims to understand how diverse groups achieve the following: (1) frame challenging issues that arise in the transition process; (2) strategically communicate their understanding; (3) change their approach throughout the process as a function of mutual understanding, emotion, and legitimacy and power. The research questions address the role of framing in identifying and mitigating obstacles in a wind farm project, the cognitive and strategic frames employed, the dynamics of framing through interactions, and their impact on the process and outcomes. The article aims to offer insights for policymakers and local authorities and contribute to academic knowledge on framing and transitioning.

4. Methods

To elicit the cognitive and strategic frames used by stakeholders in this case study, 18 semi-structured interviews were conducted and over 100 documents were analyzed. A computer-assisted qualitative data analysis software (CAQDAS)—ATLAS.ti—was used as both a repository and an analytical tool for the collected data. The interviews captured narratives from 18 stakeholders engaged in the Yatir Wind Farm project and/or the wind energy regulatory framework. Eight of the interviewees were identified through project documents such as the project plan and transcripts of the hearings. Ten were recruited via recommendations from interviewees (snowball methodology).

The documents analyzed included artifacts within local, regional, and national business processes (e.g., meeting protocols, minutes, recordings, forms, and reports) and news articles, which were publicly accessible on government and other websites.

Stakeholders were invited via a personalized email and document highlighting the research's significance. Some promptly expressed interest, others postponed interviews due to conflicts, some ignored the invitation, and some declined based on negative previous experiences. For the list of 18 interviewees and their affiliations, see Appendix A.

Interviews, in person or via Zoom, were recorded. The duration ranged from 30 to 120 min. The consistent protocol provided an overview, emphasized the value of personal narrative, explained the analysis process, and assured privacy. The interviews covered questions about interviewees' roles and perspectives on the process and outcomes. Analysis involved transcribing interviews, identifying cognitive and strategic frames within the narratives, highlighting the existence or lack of changes in these frames including reframing, and applying codes that reflect related themes.

The document analysis followed a grounded theory approach [58,59], iteratively analyzing text and mapping the codes to Shmueli's [25] environmental conflict framing typology.

The sources were synthesized to describe the Yatir Wind Farm case study in the Findings section below. Then, three conflict issues were identified and analyzed in terms of cognitive and strategic framing, identifying changes before and after turning points. Conclusions about the challenges associated with transitioning to renewable energy follow.

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Finally, based on the analysis and suggestions from the interviewees, practical lessons learned are provided.

5. Findings—The Yatir Wind Farm Case Study

Developing a wind farm project involves three parallel tracks: (1) Approval through the statutory planning committees (in this case, district and national) (Israeli society plans spatially, with strong centralization of mandates to make decisions, a hierarchical system of local plans embedded in district and national plans, and reliance on statutory master plans as the primary tool of planning implementation. Local plans are approved by district planning committees; district level plans are approved by the National Planning and Building Committee); (2) A license from the Energy Authority; (3) A contract with the Israel Land Authority, which provides a license to lease the government land for creating wind energy in return for leasing fees.

5.1. The Statutory Planning Process

In 2011, Enlight Renewable Energy Ltd. and the Beit Yatir and Carmel agricultural associations [60] initiated the Yatir Wind Farm project in a limited partnership under the name of Karmey Haruach (the structure of the partnership changed ownership, for example, on 3 September 2018 [61]), which was officially founded on 9 January 2014 [61]. Beit Yatir and Carmel hold agricultural land rights for the project's designated site. This site is in proximity to the Beit Yatir, Har Amassa, and Shani Livne communities (see Table 1, below for more on these stakeholder communities).

Table 1. Stakeholder communities, their p	population, and regional council status.
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Name	Regional Council	Families (#)	Residents (# 2021)	Land Rights?
Beit Yatir Cooperative Moshav	Mount Hebron Regional Council	100 ¹	500 ²	Yes
Carmel Cooperative Moshav	Mount Hebron Regional Council	103 ³	$467^{ ext{ }^4}$	Yes
Har Amassa	Tamar Regional Council	90 ⁵	240 ⁶	No
Shani Livne	Mount Hebron Regional Council (Under dispute)	150 ⁷	550 ⁸	No

 1 https://www.hrhevron.co.il/11/ (accessed on 16 May 2023); 2 https://www.homee.co.il/%D7%9E%D7%A6%D7%93%D7%95%D7%AA-%D7%99%D7%94%D7%95%D7%93%D7%94/ (accessed on 16 May 2023); 3 https://www.hrhevron.co.il/carmel/ (accessed on 16 May 2023); 4 https://www.cbs.gov.il/he/settlements/Pages/default.aspx?mode=Yeshuv (accessed on 16 May 2023); 5 Har Amasa website—http://haramasa.co.il/%D7%90%D7%95%D7%93%D7%95%D7%AA%D7%99%D7%A0%D7%95/ (accessed on 16 May 2023); 6 https://www.cbs.gov.il/en/Settlements/Pages/default.aspx (accessed on 16 May 2023); 7 https://www.hrhevron.co.il/%D7%A9%D7%A9%D7%99-%D7%90%D7%91%D7%A0%D7%94/ (accessed on 16 May 2023); 8 https://www.homee.co.il/%D7%A9%D7%A0%D7%99-%D7%90C%D7%99%D7%91%D7%A0%D7%94/ (accessed on 16 May 2023).

Since the agricultural land does not belong to a specific municipal or regional council, the Southern District Planning Committee led the statutory process with representatives from a variety of ministries including the Ministries of Environmental Protection, Energy, Health, and Defense as well as the Israel National Parks Authority, the Jewish National Fund, and the Society for the Protection of Nature in Israel (an NGO that represented the environmental NGOs involved in the Committee). The Southern District Planning Committee was responsible for determining the regulatory requirements and guiding the developer through the process, while balancing the needs of other stakeholders (Interview5—Lawyer for Opposing Community—Residents—18 January 2023; Interview8—Representative of the Ministry of Environmental Protection on the Southern District Planning Committee—Government Authority and Environmentalist—22 February 2023; Interview4—Lawyer for Southern District Planning Committee—Government Authority—16 January 2023).

Preliminary planning phase. The Israeli national government published the 12/d/10 National Master Plan (TAMA) in 2014, providing guidelines for wind farm development. These regulations were developed in parallel to the original development of the Yatir Wind

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Farm plan, resulting in many iterations (Interview1—Project Coordinator—Developer—26 December 2022).

In 2015, Karmey Haruach presented their plan for the Yatir Wind Farm and received the requirements and guidelines for conducting an Environmental Impact Assessment (EIA) based on the TAMA 12/d/10, including instructions for surveying birds and bats. In April 2016, the developer submitted the EIA.

The Southern District Planning Committee reviewed this project multiple times throughout 2017 before conditionally depositing it in June 2017. The final deposited plan included ten 180 m wind turbines, producing 42 MW electricity to be deployed on almost 236 dunam of unassigned land and connected to the high voltage electricity network connection.

In parallel to this process, the national authorities gained experience from wind farm projects in the north and, through an interministerial committee, specified new requirements, including those protecting birds and bats. These regulations covering the planning principles of energy infrastructure were published in National Master Plan 41 (TAMA 41). It passed the National Planning and Building Committee who submitted the first draft in September 2019 and the final authoritative plan for government approval on 4 May 2021.

The plan was officially deposited on 12 April 2018, and the public was invited to review it [60].

Objections. One hundred forty-nine individuals and two lawyers representing the Har Amassa and Shani Livne neighboring communities submitted objections to the plan and the developer was tasked with responding to each objection. The investigator, assigned by the Southern District Planning Committee's Appeals subcommittee, listened to the objections over a period of five days and made her recommendations. Often objectors and developers brought in experts with contradictory evidence to support their case.

The investigator submitted a report in July 2019, including a disposition table, responding to each objection. Often the objections were rejected, accepting the developer's responses. The Appeals subcommittee of the Southern District Planning Committee reviewed the investigator's report and decided to accept her overall recommendation to accept the plan, pending corrections while rejecting a small number of recommendations (D20).

Two Southern District Planning Committee team members (Interview8—Representative of the Ministry of Environmental Protection on the Southern District Planning Committee—Government Authority and Environmentalist—22 February Interview9—Representative of Environmentalist NGOs on the Southern District Planning Committee from the Society for the Protection of Nature in Israel—28 February 2023) from the Ministry for the Protection of the Environment and the Society for the Protection of Nature in Israel believed that there were faults in the decisions of Southern District Planning Committee, including the follow: (1) harm to birds and bats; (2) visibility of the turbines in the landscape; (3) internal contradictions; (4) the status of the Nature and Parks Authority as a regulatory body. The committee members claimed that, by ignoring both the new National Master Plan 41 (TAMA 41)—that was developed and agreed upon by the national interministerial committee—and the supreme court ruling (HCJ Ruling No. 963/19, June 2019) that thresholds must be upheld, the investigator and Southern District Planning Committee missed implementing important new national regulations designed to protect birds and bats. The Southern District Planning Committee heard the objections and rejected them on the grounds that there were no faults in the decisions made (D123).

In February 2020, the National Appeals Committee hearing discussed the Yatir Wind Farm project based on appeals from the Israel Nature and Parks Authority (Interview7—Lawyer for the Nature and Parks Authority—Government Authority and Environmentalist—14 February 2023) and the neighboring communities. The Israel Nature and Parks Authority prepared an appeal refuting the Southern District Planning Committee's decision in order to ensure that TAMA 41 bird and bat regulations are included.

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Most of the Israel Nature and Parks Authority objections were accepted, but all of the neighboring communities' objections were rejected.

On 25 April 2021, these communities petitioned the Beer Sheva Court for Administrative Issues (D68). Their claims included the following: (1) inappropriately changing the purpose of the land; (2) allowing harm to the landscape and to agricultural and open land; (3) reducing the property's value; (4) limiting future development; (5) planning the turbines too close to sensitive places like residents' homes. All of the residents' objections were rejected again.

On 16 January 2023, the communities' lawyers appealed to the Supreme Court. Once again, all the claims were rejected, primarily on the procedural grounds that the required processes were followed and the court does not address professional issues.

5.2. The Energy Authority Licensing Process

Karmey Haruach received a conditional license for creating 42 MW of wind energy in the Yatir Forest region from the Energy Authority on 19 May 2016. After numerous extensions to the conditional license for a variety of reasons, on 4 September 2022, the licensee sought license cancellation, citing an inability to meet building permit and financial closing milestones. This was granted in March 2023 [D107].

5.3. Contracting with the Israel Land Authority

The Israel Land Authority leases nationally owned land for residential and agricultural purposes. To use the land for other purposes, a change in purpose is requested. The Israel Land Authority reviews the requested usage and estimates the cost of the change. The developer must pay the leasing fee accordingly. The standard leasing fee for wind energy, including the land between the cells, was ILS 650,000 per MW or ILS 27,300,000 in total. The developer claimed that this rate rendered the project uneconomical and requested that the leasing fee be re-estimated by a land value assessor. At the time of the writing of this article, the project is under reassessment. Only after the leasing fee is paid, the Israel Land Authority can sign the building permit and the agreement with the developer.

5.4. Next Phases

If the developer chooses to continue with the project, the next phases include approving a building permit (which is prepared with the planning committee and must be signed by the Israel Land Authority while under license with the Electric Authority), finalizing all the steps for the plan's implementation, and monitoring progress according to the criteria approved in the project plan.

6. Analysis

Three conflictual issues emerged from the Yatir Wind Farm case study analysis: (1) "Potential or Perceived Harm to Neighboring Residents"—involving opposition that was rejected after an expensive process; (2) "Protecting birds and bats on the National Level"—which culminated in a consensus on new regulations in TAMA 41; (3) "Adapting to New Regulations on the District Level"—which underwent a number of appeal processes before the rejection to include the new regulations and was overturned (see Figure 3, below).

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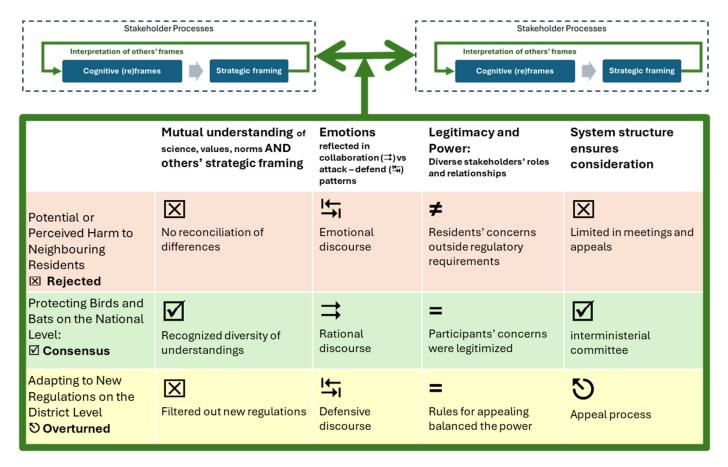


Figure 3. Three conflictual issues with their outcomes: rejected, reached a consensus, and overturned, respectively.

With regard to the first two issues, stakeholders began with a sense of uncertainty and interest. Their initial experiences with other stakeholders led them to experience distrust. This was resolved differently in each case. In the "Potential or Perceived Harm to Neighboring Residents" issue (see Section 6.1, below), the initial distrust escalated into residents' fight against the project on the one hand and the system's delegitimation of their concerns throughout the system structure on the other. In the "Protecting Birds and Bats on the National Level" (see Section 6.2, below), stakeholders went from suspecting the validity of the other's science and from arguing about solutions to listening to what is important to each other and finding solutions. In the "Adapting to New Regulations" (see Section 6.3, below), some District level planning committee stakeholders opposed implementing the new regulations while others promoted them. The appeal process, embedded in the structure of the system, enabled this issue's resolution.

6.1. Potential or Perceived Harm to Neighboring Residents

Figure 4 maps the framing process from the residents' perspective. In the Before TP dashed box, the frames of the first impressions are illustrated. The green arrow represents the mutual understanding, emotional response, and perceived legitimacy and power that contribute to the residents' cognitive frame of the situation after a turning point (in the after TP dashed box).

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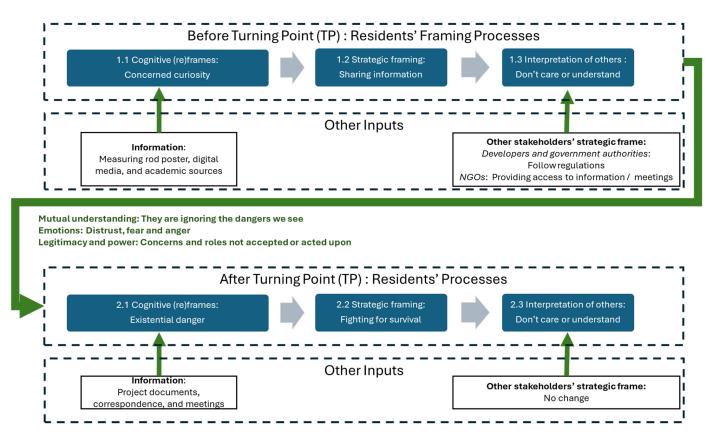


Figure 4. Residents' framing processes.

6.1.1. In the Community

Residents were first introduced to the wind farm project with misinformation about the purpose of a measuring rod poster (see the before TP information box, Figure 4, above). When they asked why they were not told the truth from the beginning "... the developer's lawyer said they didn't have to put up the sign—they did it out of good will" (Interview2—Resident of Opposing Community—Residents—28 December 2022—143:1). This resulted in reduced trust, which persists.

Once they understood there was a plan for wind farms in their region, residents researched their impact through digital media (Google and PubMed) (1.1 in Figure 4). They became concerned with the findings they gathered, which suggested that a wind farm nearby could pose an existential threat to their health, landscape, and quality of life and shared their findings with the hope of collaborating to protect their health (1.2 in Figure 4). They met and even had off-the-record meetings in which they negotiated on parameters such as the minimal distance of wind turbines from homes. When their requests and findings were delegitimized and treated as NIMBY (Not In My Backyard) claims, residents felt that the governmental authorities and developers either did not understand or did not care (1.3 in Figure 4). They perceived that they were alone facing an existential danger (2.1 in Figure 4) and changed their strategy to "war", albeit within legal means (Interview2—Resident of Opposing Community—Residents—28 December 2022, Interview12—Resident of Opposing Community—Residents—4 May 2023), using every opportunity to object using any 'legitimate' issue (2.2 in Figure 4). One lawyer explained: "It's important to understand that all the important claims are not important because the court doesn't understand these things. But if you say they didn't allow the public to participate or they didn't follow procedure, then the courts can intervene" (Interview3—Lawyer for Opposing Community—Residents—29 December 2022, 145:2). In this way, the system structure limited communication of the substance of residents' cognitive frames and encouraged strategic framing related to requirements of the appeal

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structure instead. In the end, residents remained with the feeling that no one cared (2.3 in Figure 4, above).

The developers' frames of the residents' issues were handled like any other step in the process. Since public participation is required, they informed the public of a measuring rod and eventually provided information about the project plan. In Arnstein's [62] ladder of citizen participation, these interactions were experienced by residents as "manipulations" or, at best, "informing" when the residents' expected to have a concrete say on a development that would have significant impact on them. In particular, residents felt betrayed by the project partners from the neighboring communities who, after years of mutual cooperation and support, imposed this project on them.

This situation was identified by many stakeholders as a moral question and as one of the most important aspects of the process to be addressed:

- "Beit Yatir, an agricultural settlement, reached an agreement with Har Amasa and Shani Livne to use the agricultural land [originally within their municipal boundaries] and ended up using it for wind turbines. We gave you land [for agricultural use] and this is what you are using it for. The problems began at the very beginning. Har Amasa and Shani Livne probably didn't expect Beit Yatir to use the land for wind turbines. Maybe Beit Yatir hadn't decided to go for wind turbines [when they originally requested the land]" (Interview8—Representative of the Ministry of Environmental Protection on the Regional Planning Committee—Government Authority and Environmentalist—22 February 2023—151:11).
- "We need to minimize harm to the climate. But we are doing this 'good' at their [Har Amasa and Shani Livne's] expense. This is problematic—others [the developer/Beit Yatir] will benefit but Har Amasa and Shani Livne will not get anything out of it. I would look for ways that [these two communities] would benefit. They know that others will benefit. It is possible to open with specifically how they can benefit. Not just the greater good" (Interview1—Project Coordinator—Developer—26 December 2022—144:16).

Residents and developers framed their role in the process very differently. Residents anticipated greater levels of citizen empowerment, while developers presented any information shared with residents as meeting and surpassing requirements. Consequently, it is unsurprising that significant breakdowns occurred in the relationships between neighboring communities and the business. Had these stakeholder groups developed a collaborative relationship from the beginning, the results might have been different.

One member of the planning committee explained: "With Beit Yatir [a partner-developer], it is more complicated. They might have started out as good neighbors, helping each other. Now it must be completely different and much more personal. If I was a resident of Beit Yatir, I don't know how I would look residents from Har Amassa or Shani Livne in the eyes" (Interview8—Representative of the Ministry of Environmental Protection on the Regional Planning Committee—Government Authority and Environmentalist—22 February 2023—151:15).

6.1.2. With the Governmental Authorities

Residents framed their role in the planning process and committees as requiring sufficient power to protect themselves against the threats they feared from the project. These threats included harm to health and wellbeing due to noise and infrasound, flickering, increased risk of fire with reduced ability to extinguish fires by air, and changing the nature of the landscape. Their strategy originally was to alert the governmental authorities to those dangers by introducing scientific literature and experts (1.2 in Figure 4, above). These alerts were delegitimized. As a result, residents saw government authorities as not able or willing to help: "Almost none of the politicians helped us... If politicians cannot represent us, there is no governance, no country... That is—no culture of commitment by the people chosen by the public for the public... The most important thing I'd like to say is that it's not fair. We are living our lives and they dump this thing on us. There is something called

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a public defender—but here there isn't such a thing. We must learn the subject ourselves, raise money ourselves, get organized, understand what's happening. No one explains to us. In short, we suddenly have to stop our lives and deal with this. And it is a matter of life and death. Why?"

Some governmental authorities saw their role vis a vis residents, as follows: (1) on a professional level—providing them with reliable information and trying to convince—but "for subjects like infrasound and flickering we could not find authoritative scientific evidence"; (2) on an interpersonal level—empathizing and deeply understanding the residents' concerns (Interview11—Ministry of Energy and Infrastructure—Government Authority—3 April 2023—155:8).

Other governmental authorities saw residents opposing the project as outside their frame—irrelevant to their process ("Legitimacy and Power" in Figure 4): "The issues in the planning committee don't touch on these issues. We focus on the plan... Other issues of mutual complaints are not considered by the planning committee, especially when the plan potentially has large value for the public. They'll ignore the history around the project and focus on the plan. If two neighbors don't get along, it's not the problem or interest of the planning committee" (Interview8—Representative of the Ministry of Environmental Protection on the District Planning Committee—Government Authority and Environmentalist—22 February 2023—151:11). With respect to the plan, the focus was on verifying that the measures will meet the regulatory requirements: "We are not in favor or against. We demand meeting the regulations and thresholds" (Interview6—Regulator for Ministry of Environmental Protection—Government Authority—13 February 2023—159:2). At the same time, there is not always agreement on whether the measures and rules actually protect against the risks: "We recognize that there is a conflict and are working on the interpersonal level to arrive at common rules" (Interview10-Ministry of Energy and Infrastructure—Government Authority—30 March 2023—154:10).

However, these rules do not protect the residents for a number of possible reasons, including the following:

- They are less amenable to being measured and monitored: "There must be consistency and a basis. Monitoring values were set with measures" (Interview15—National Planning Committee—Government Authority—18 July 2023—149:6).
- The objecting residents' claims may be classified as NIMBY, for example: "Our position is based on clear criteria—not on NIMBY. Can you measure feelings and people's experiences? Not relevant. We have criteria. It is the law. It is considered good and we sharpened it for wind turbines." (Interview6—Ministry of Environmental Protection—Government Authority—13 February 2023—159:7); "Often the issues are emotional and psychological. There is no doubt that there is a measure of harm to the residents..." (Interview15—National Planning Committee—Government Authority—18 July 2023—149:6).
- When contradictory scientific evidence was presented during the hearings, the residents' experts were often disqualified. The criteria for resolving the differences between expert opinions did not always appear to be professional. One interviewee said it depends on: "charisma, ability to control the dialogue... I had a strong feeling that the developers' witnesses were convincing, not based on their content... [but by their] wearing a tie, speaking English. The professional opinions had less of an impact. They could have asked the Environmental Protection Ministry, but they didn't..." (Interview8—Representative of the Ministry of Environmental Protection on the Southern District Planning Committee—Government Authority and Environmentalist—22 February 2023, 151:16). The residents' suggestion during the appeals hearings to have mutually agreed upon experts was also ignored.
- Governmental authorities framed those claims as within the domain of the developers: "A large part of the work facing the opposition... is done by the developer. There are things that the developer is more able to do and the government less. The developer can offer compensation or benefits, not as bribery, but rather as sharing

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the facts and minimizing the pain points; for example, social environment compensation such as planting trees, enriching a lookout or scenic path; including elements in the plan that can reduce harm, fears, and hesitations; opening new opportunities to do something important for the residents." (Interview11—Ministry of Energy and Infrastructure—Government Authority—3 April 2023—155:8).

The disparity in expectations between the developer, government authorities, and residents—where the developer prioritizes statutory regulations, authorities aim to implement sustainable energy policies with minimal harm amidst uncertainty, and residents seek protection but often feel excluded and unheard—could elucidate the residents' shift in strategic perspective after months of attempting to engage with the system: "At the end, we felt all we could do in the planning committees was to let off steam. They didn't take anything we said into consideration" (Interview12—Resident of Opposing Community—Residents—4 May 2023—153:29).

Here are some examples of residents' objections and the investigator's responses:

- Preventative caution with respect to noise should be exercised: REJECTED—The noise
 thresholds are already considered conservative criteria and applying preventative
 caution would prevent the development of infrastructure in Israel altogether because
 of the density of the population.
- Turbines will be deployed too close to communities, relative to international, German, and Israeli national standards: REJECTED—Instead, different international standards were presented by the investigator.
- Noise will harm the quality of life of nearby residents: PARTIALLY ACCEPTED— Remeasurement of the noise was required by the Environmental Protection Ministry. The regulations themselves were not revisited.
- Harm due to flickering: REJECTED—Flickering is not expected, due to the distance from sensitive places.
- Harm to plans for expanding the communities: REJECTED—There are other directions in which the community can expand and their current plans have not been approved.
- Risks to safety of the forest and residents due to fire: PARTIALLY ACCEPTED—Added
 requirements to coordinate with the fire department and the JNF with respect to protecting the forest.

While, officially, no reframing has occurred and the residents' concerns were not considered within the process structure, many of the developer and government authority stakeholders, when probed in the interviews, acknowledged that the inclusionary concern is missing and required, as follows.

In the interests of justice:

- "I believe that injustice was done to the residents [of the two other communities]. Had I been involved before the plan was deposited, I would have directed it in completely different directions. I feel sad for them" (Interview8—Representative of the Ministry of Environmental Protection on the Regional Planning Committee—Government Authority and Environmentalist—22 February 2023—151:9).
- "There is more public participation in the last decade. In the past there was less awareness and perhaps we should have included them earlier. We are talking about deeper issues that need to be internalized by all parties" (Interview11—Ministry of Energy and Infrastructure—Government Authority—3 April 2023 155:7).
 - In the interests of the project itself:
- "There are always people who will object to projects. We need to improve the process—making it more organized, explaining, and allowing for requests for changes. We should listen to their dreams—what's important to them. People [developers, committee members] are afraid to listen because they are afraid that listening commits them to making these dreams come true. Encourage people to be involved and thinking instead of accepting all the decisions" (Interview1—Project Coordinator—Developer—26 December 2022—144:15).

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• "We make better decisions when we listen... We do not have the right not to listen. We are a democracy. If we don't listen it will come back at us..." (Interview10—Ministry of Energy and Infrastructure—Government Authority—30 March 2023—154:8).

In this sense, the interview process itself may have opened up an opportunity for reframing.

6.1.3. With Non-Governmental Organizations

The NGO representative partially filled a gap for the residents by providing access to information and participation in planning committee meetings. But, this was insufficient. Communities could have learned more about the process had they built stronger relations with the regulators and NGOs, increasing their chances of success.

6.2. Protecting Birds and Bats on the National Level

Many of the stakeholders interviewed raised the issue of protecting birds and bats as a key obstacle to developing wind farms. This section describes the cognitive and strategic frames of those stakeholders (See Figure 5, below).

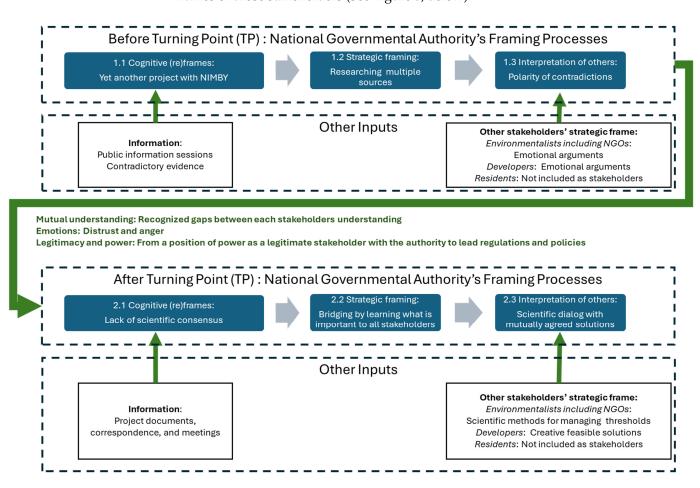


Figure 5. National Governmental Authority's framing process in the "Protecting Birds and Bats" Issue.

When developers approached government authorities to explore generating energy using wind turbines, they framed it as 'yet another' energy project (Interview11—Ministry of Energy and Infrastructure—Government Authority—3 April 2023). Attending environmentalists' information sessions about wind turbines' risks to birds and bats, interviewee 11 initially framed the concerns as NIMBY—not serious risks (see 1.1 in Figure 5, above). Strategically, she was motivated to learn more about the risks to bats and birds (1.2 in Figure 5). The more she learned, the more she questioned the sources of information. She noticed that different stakeholders presented extreme views and she experienced distrust

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due to the polarity of contradictory evidence (1.3 in Figure 5, above). Government authorities framed the status as a lack of scientific consensus (2.1 in Figure 5) and strategically set out to manage the complexity by bridging between stakeholders (2.2 in Figure 5). A national interministerial team worked over a period of years and eventually agreed on TAMA 41 (TAMA-41 provides guidelines for evaluating the target wind farm region relative to the map of regions that are sensitive to each species for early identification of potential problems, a field survey using the Collision Risk Model (CRM) to add migrating birds to the review, and specified thresholds per endangered species. In comparison, very few lines are devoted to health-related issues such as noise and its measurement, distance between turbines and sensitive areas (including allowing less than 500 m in some cases), and flickering. This gap has not yet been filled for the Yatir Wind Farm. Discussions during the hearing suggest that the participants do not have expertise in the subject matter). The dialog among the stakeholders, for example, between the developers and environmentalists, involved "difficult conversations with a lot of emotion and the environmentalists" ability to wake up the public with a turbulent campaign" (Interview15—National Planning Committee—Government Authority—18 July 2023).

According to interviewee 15, the turning point was when "... we asked them to define what is important to them instead of going into how—that is the developer's role (2.2 in Figure 5). They came back with a threshold document." This move from an emotional dialog to a scientific one was undertaken by a "strong developer (who) made big efforts to bridge the problem—not just in slogans but to bring solutions" (These solutions included how the bird and bat thresholds are calculated per species (resulting in an absolute number), monitored, and how to handle signs of exceeding the thresholds. In addition, the responsibilities of each stakeholder are addressed). It appears that the dialog between the environmentalist and developer stakeholders transformed from emotional to professional once they were each invited to say what is important and leverage their expertise (2.2 in Figure 5). Governmental authorities, including environmentalists, framed this document as a scientific endeavor, not derived from manipulative negotiations (2.3 in Figure 5). While the content is new and untested (therefore, it is still not known if the project will actually be able to stay within the thresholds and run the turbines), there was broad professional agreement that birds and bats will be protected by technologies that were agreed upon with the developers. The formal inclusion of these new guidelines within a regulatory document solidified their place within the systemic structure, enhancing their legitimacy. This formalization facilitated the integration of bird and bat protection measures into the process of structuration, fostering their recognition within stakeholder frameworks and subsequent implementation. Unfortunately, in the context of the interministerial committee, participants observed that there was no public representation and a lack of engagement on the part of the Health Ministry [63]. One opponent expressed this clearly at a hearing: "Sadly, if I look at the whole process of writing the TAMA that took 5 years in an interministerial team, residents were not represented. Our voice was not heard. And worse, the voice of the Health Ministry was not heard in the entire process. So today we have a bird survey but no required health survey" (Opposition Hearing before the Investigator—Meeting Protocol 2019004, February 2019, 51:14).

6.3. Adapting to New Regulations on the District Level

The demand to apply TAMA 41 to the Yatir Wind Farm project came during the appeal hearings and was rejected multiple times. Accepting the change would require the regulators to look at the process from a different perspective (reframing)—from ensuring the developer meets the current requirements as efficiently as possible to ensuring that the most effective regulations are enforced (most regulators interviewed discussed the delicate balance between promoting development and protecting the public and nature). Had this reframing occurred, the issue may have been resolved a lot faster and with fewer resources.

Environmentalists used statutory and legal claims to strategically frame their appeal for including TAMA 41's requirements for thresholds and methods of upholding them in

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the Yatir Wind Farm project; after multiple rejections, they succeeded (After the hearing, the NGO and Environmental Protection Ministry representatives wrote to the District Planning Committee, providing precedents for the Israel Nature and Parks Authority's role of setting absolute thresholds. In the words of the representative of the Environment Protection Ministry's representative: "With the Nature and Parks Authority's claim, my argument was that the decision to adopt the investigator's report had a legal failure because two events occurred in between the time in parallel to this project (1) TAMA 41—an interministerial team focused on wind turbines and winged creatures. It required the definition of threshold values, prevention of reaching these thresholds, and what to do if they are exceeded and (2) An administrative petition was submitted by Yossi Leshem to the Supreme Court about two wind farms in the north—Bereshit and Tel Faris. The court rejected his claims but decided that threshold values have to be defined for wind turbine projects. In my demand to rehear the investigator's recommendations, I claimed that you can't accept them because there is a Supreme Court decision about this issue. The Supreme Court stated that for wind turbine projects, there must be threshold values for harming winged creatures and actions for handling the situation if they are exceeded" (Interview8—Representative of the Ministry of Environmental Protection on the Southern District Planning Committee—Government Authority and Environmentalist—22 February 2023—151:7). When this was rejected, the Israel Nature and Parks Authority appealed to the National Appeals Subcommittee explaining why it is important to protect birds and bats and referring to other projects that adopted its standards. They reached a satisfactory compromise with the developer. It should be noted that the Israel Nature and Parks Authority is also empowered by the Israel Nature and Parks law protecting species, which is above the Planning and Building Master Plans.) (see Appendix B for additional chronological information).

An important lesson from this example is that, when statutory regulations are legitimized by mutually respected experts and objections follow the process accurately, the system can work, even if there is no reframing. According to one interviewee, the Southern District Planning Committee used statutory claims to try to prevent the inclusion of TAMA 41 requirements, missing the opportunity to incorporate new rules early in the process and to save having to repeat the appeal process multiple times: "Had she consulted with us, she would have had a strong basis for a decision and not just (unilaterally) decided. I think she made a mistake that was corrected later. It didn't harm the environment since the mistakes were corrected. But it did cost the public and private opposers and the developers" (Interview8—Representative of the Ministry of Environmental Protection on the Southern District Planning Committee—Government Authority and Environmentalist—22 February 2023—151:4).

Handling disagreements and objections in the Southern District Planning Committee meetings was difficult. Investing in mutual understanding earlier in the process (a collaborative planning process) could have saved resources. Instead, issues that were not on the agenda were often ignored (Interview8—Representative of the Ministry of Environmental Protection on the Southern District Planning Committee—Government Authority and Environmentalist—22 February 2023—151:18). These issues would come back to haunt the committee later. The farther along in the process an issue is managed, the more difficult and expensive it is to mitigate.

Moreover, the existing multi-layer appeal process ensured that the progress made on the national level was included regionally as well (see Appendix B for more on the appeals related to the protection of birds and bats).

The Southern District Planning Committee frames their role as following the regulatory process (1.1 in Figure 6, below). Their initial reluctance to incorporate regulatory changes may be rooted in a sense that stakeholders are just trying to drag out the process. This would explain their strategic framing of seeking legal counsel to prove that the process was followed (1.2 in Figure 6). One member of the district planning committee explained that he was asked to be present at the hearings but to refrain from participating

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(Interview8—Representative of the Ministry of Environmental Protection on the Southern District Planning Committee—Government Authority and Environmentalist—22 February 2023). He explained this as a sign of the pressure the investigator must feel to complete the process as quickly as possible. Another indication is a quote from the Regional Appeals Subcommittee meeting in which one participant said: "The opposition is just digging up problems" (The original Hebrew expression is "Looking under the ground", which implies that they are looking for problems where none exist), which suggests the interpretation that environmentalists are just delaying the process (1.3 in Figure 6).

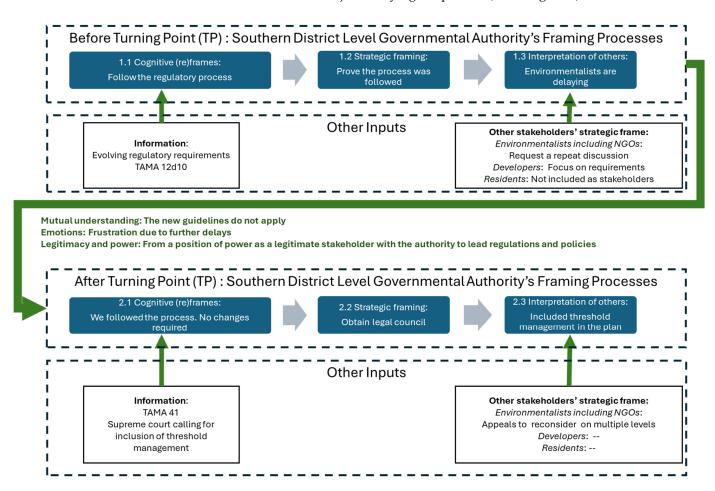


Figure 6. Southern District Planning Committee's framing process.

This may relate to a familiar distrust of the way environmental law, particularly the protection of endangered species, is sometimes used. An example of this reluctance was expressed by Baker when addressing the US Senate on 17 July 1979 with respect to the use of the Endangered Species Act to stop the Tellico Dam project: "We who voted for the Endangered Species Act with the honest intentions of protecting such glories of nature as the wolf, the eagle, and other treasures have found that extremists with wholly different motives are using this noble act for meanly obstructive ends" [64]. This regulatory domain is known to have been misused for a variety of purposes, including economic, political, and NIMBY. While some stakeholders spoke of a qualitative change in mutual understanding (reframing) through communication between the developers and environmentalists, the skeptical frame expressed in the Tellico Dam project raises a question about intentions. In particular, the thorough treatment of issues concerning birds and bats juxtaposed with the relative neglect of residents' health and welfare concerns prompts scrutiny regarding the regulators' commitment to addressing the profound apprehensions elicited by a project, encompassing intense emotions, risks, uncertainties, and the vulnerability of residents [65].

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Further thought and guidance on how the new bird and bat regulations should be applied to projects currently being planned may be another link in the process to be framed and even reframed, to help reconcile between the urgency regulators feel to deploy renewable energy and the importance of ensuring people and the environment are not harmed along the way.

7. Conclusions

7.1. Applying an Integrated Approach to Frame Analysis

From the above analysis, we can see how using a framing approach that combines looking at cognitive and strategic frames and their impact on changes in others' frames illuminates stakeholders' understandings and their influence on the interactions between them. It shows that when there is a gap between stakeholder thoughts (based on their cognitive frames) and communications and actions (based on strategic framing) the process and outcome may be less effective.

While the "Protecting Birds and Bats on the National Level" issue began with heated emotional discourse, the government authority and developer stakeholders acknowledged the legitimacy of each other and the issue of bird and bat protection. Within the system structure, they formed an interministerial government team and transformed the dialogue from emotional argumentation to scientific work, resulting in a consensus on quantitative, measurable requirements and feasible mitigations. In a sense, this is an 'easier' issue in that protection of birds and bats is already rooted in the regulatory framework and was reframed by team members.

In contrast, the "Potential or Perceived Harm to Neighboring Residents" issue reveals stakeholder polarization instead of mutual understanding and collaboration (with no reframing). This is attributed to a lack of collective deliberation since residents had no legitimate involvement in the planning structure. This lack of legitimacy, coupled with the government's policy of promoting renewable energy quickly, may have hindered motivation to address residents' concerns. In response, residents felt compelled to communicate strategically about issues that did not always express their concerns—fighting for protection, which was more expensive than anyone expected. Importantly it also caused painful harm to the relations between developer and opposing communities, which raised moral questions in addition to regulatory ones.

The "Adapting the Plan to New Regulations" issue illustrates how the structure and process built into the system can compensate for a lack of mutual understanding between stakeholders. The cost of this process to the system and stakeholder frustration suggest that early collective deliberation could have been a more worthwhile approach.

Taken together, this study suggests the importance of formal mechanisms to legitimize and understand the priorities of stakeholders, especially those who are not adequately represented, and to adapt the structure in order to integrate them into the decision-making process and give them a voice. Given the intricate and urgent nature of transitioning to renewable energy, particularly amidst conditions of uncertainty and the utilization of relatively new and evolving science and technology, alongside dynamic regulatory guidance, the establishment of such mechanisms is crucial. Mah et al.'s [57] approach to leveraging stakeholder frames as a gateway to agenda setting for creating new policies may be useful here.

7.2. The Wind Farm Case Study as a Sustainability Transition

Exploring the case study in terms of challenges facing the sustainable transition to renewable energy (TRE) offers another useful perspective.

The Yatir Wind Farm project can be seen as a sustainability transition—a complex transdisciplinary endeavor involving bridge building and collaborative governance. The three issues highlighted all entail uncertainty and complexity. Decisions were made without always possessing the requisite knowledge and experience to inspire confidence. Additionally, they commenced without a comprehensive platform for scrutinizing the is-

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sues, thereby increasing the risk that each stakeholder group would perceive the project solely through the lens of their own interests. Such zero-sum decision-making jeopardizes the overarching goals of the government (Interview11—Ministry of Energy and Infrastructure—Government Authority—3 April 2023).

Addressing these challenges necessitated transdisciplinary efforts across various fronts to reconcile conflicting viewpoints and interests, thereby assembling a comprehensive understanding amidst fragmented inputs and divergent objectives. Take, for instance, the endeavor to safeguard birds and bats; this approach was instrumental in establishing national directives like TAMA 41, which were subsequently integrated into the regulatory framework governing the Yatir Wind Farm project at the district level.

Yet, in the case of 'Potential or Perceived Harm to Neighboring Residents', the concerns of those most impacted by the wind turbines remained unaddressed within the statutory framework, presenting a significant flaw in the process. This complex issue, with its profound repercussions for local residents, revealed a critical deficiency. It appeared that, while agreed-upon statutory regulations aimed at protecting residents' health and quality of life were in place, these regulations lacked the requisite scientific underpinning or universally accepted metrics, leaving residents uncertain about their safeguarding. While the residents attempted to gather information regarding regulatory requirements related to health and welfare, they sometimes found that those requirements changed and they were left uninformed. This excluded them from having the power to defend themselves (an example of this is the change in requirements for measuring infrasound, without sharing the change with the residents: "Only after the national committee, the developer's lawyer showed a letter from [the Environmental Protection Ministry] saying it's ok to use the literature instead of a simulation, although he previously wrote that there had to be a simulation. I think this was written a week before the discussion on purpose. Because they wanted to help the developers. It is regulatory capture" (Interview5—Lawyer for Opposing Community—Residents—18 January 2023—147:5)). Marginalized from legitimate stakeholder status, residents found themselves excluded from decision-making processes, left to entrust their wellbeing to entities whose interests may not necessarily align with their own or, as one interviewee put it, they were expected to trust "the cat to watch over the cream". (Interview2—Resident of Opposing Community—Residents—28 December 2022—143:49). Had the information been proactively offered to them (and any other member of the public who was interested), there probably would have been more trust and fairness in the decision-making process.

The result that the residents' felt the need to resort to 'legal warfare' prompts questions regarding the process, such as the inclusion of residents as legitimate stakeholders and the establishment of statutory provisions that align with residents' demand for endorsed health and quality of life standards. While descriptions of the public participation process placed this example at the lowest rungs of Arnstein's ladder of citizen participation [62] (Arnstein's eight rungs on a Ladder of Citizen Participation include the following: (1) Manipulation; (2) Therapy; (3) Informing; (4) Consultation; (5) Placation; (6) Partnership; (7) Delegated power; (8) Citizen control. Rungs 1–2 are considered "nonparticipation", 3–5 are considered "degrees of tokenism", and 6–8 are considered "degrees of citizen power" [62] (p. 217), it spotlighted the need for more collaborative governance that could have enhanced the overall effectiveness of the project and reduced the number of appeals.

Resilience. Using Mogensen and Mikkelsens' [14] definition of resilience as the ability to respond well to difficult situations, the 'Potential or Perceived Harm to Neighboring Residents' issue portrays residents' responses to the Yatir Wind Farm project with a sense of catastrophic adversity on the horizon. This situation calls for resilient self-organization and adaptation [66] by working collectively among themselves. Different government and developer stakeholders understood residents' strategy differently. Some dismissed their concerns as standard NIMBY responses. Some dismissed their unwillingness to negotiate saying there is no one to talk to, unaware of previous off-the-record attempts at discussion. Others empathized with the residents of the two adjacent communities because

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the potentially negative impact on their quality of life was clear—although there seemed to be no recourse.

Residents' resilience was ineffective in achieving their goal, possibly because they only reorganized within their own stakeholder group. Observing how the developers were "all smiley" with the judges in court and feeling like they [the residents] were a 'tick' or a 'mosquito' seen as just bothering the process, there may have been emotional and social barriers that made it difficult for residents to establish a resilient relationship with stakeholders outside their own identity group. While stakeholders involved in the protection of birds and bats issue succeeded in responding flexibly—reorganizing the allocation of responsibilities and learning together—the residents' concerns were never absorbed into the system, their status was never legitimized, and they were excluded from the overall learning network. Having to fight to be heard by hiring their own scientific experts and legal aid, they struggled with the unequal economic and political factors (emphasized as important to consider by Chinis [17]) that reduced their chances of success and which they perceived as unfair, unjust, and undemocratic.

A major gap in the process is the lack of a legitimate, interministerial, transdisciplinary way to work through the residents' concerns. The cost of this gap involved visiting every possible appeals committee and court room to hear the residents' objections with no benefit to any of the stakeholders involved—an expensive lose–lose process.

Change and Social Conflict. Learning from change in other domains as well as in TRE, it is possible to anticipate how different stakeholders might experience the transition and proactively manage the conflicts that arise. While most of the stakeholders interviewed framed the TRE as an uncertain, new process with gaps in knowledge and regulations, many strategically framed the issues with exaggerated certainty. Some stakeholders distrusted that certainty, motivating them to gain the knowledge independently (These included Interview2—Resident of Opposing Community—Residents—28 December 2022, Interview11—Ministry of Energy and Infrastructure—Government Authority—3 April 2023 and Interview12—Resident of Opposing Community—Residents—4 May 2023) or, alternatively, "declare war" (In particular, this approach was adopted by the residents interviewed (Interview2—Resident of Opposing Community—Residents—28 December 2022; Interview12—Resident of Opposing Community—Residents—4 May 2023)) since the others' expert opinions were used strategically as a way to win rather than to deliberate for the best overall outcomes. Conversely, in the "Protecting Birds and Bats" issue, diverse perspectives and knowledge gaps were openly acknowledged; stakeholders collaborated to address them to achieve shared objectives; and the conflict evolved into a constructive process with positive outcomes. These different relational responses to professional disagreements while handling uncertainty—exaggerating certainty versus acknowledging differences—are probably affected by the social and cultural norms set by the context in which the interactions took place. Further research is required regarding what can facilitate collaborative, constructive, reliable, and efficient TRE processes.

8. Recommendations for Transition to Renewable Energy and Other Wicked Problems

The following suggestions may be derived from this case study:

At the level of governance, address both the greater good and the protection of individuals. Sometimes the counterintuitive approach to slow down enough to address both issues, even in the face of time-sensitive challenges, is worthwhile. This involves inquiring about the deeper values and concerns—acknowledging that there might be a gap between what was said (strategic frame) and what was meant (cognitive frame). The resolution of the issues must address the underlying concerns of the other party based on mutual understanding. For example, instead of immediately responding to residents' 'declaration of war', learn how residents understand the situation and the threats they experience to their health and homes. It may be necessary to look into the historical relationship between parties, at least enough to ensure that the real concerns are being addressed.

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Involve the public in the process early—especially in the planning stage. Enable collaborative planning and ensure participants' input is considered and acted upon. Assessing the economic costs of not communicating and reconciling differences early might provide motivation to all stakeholders for early inclusion.

While there may always be NIMBY problems, they can be mitigated by involving all stakeholders (potential opponents as well proponents) when developing the plans (that is, before depositing them). A number of stakeholders came up with suggestions for managing/mitigating concerns of residents with turbines close to their homes by including them, listening to their aspirations for the region, listening to their 'soul bird'—that they are passionate about.

Include intercommunity relationship-building events to compensate for anticipated friction that may result from complex projects like wind farms. Have regular milestones throughout the process to update and query parties—positions, interests, and willingness to engage change dynamically.

In-kind compensation is also a tool that can balance the damage caused by the proximity of the wind turbines to residents' homes and offer other benefits that may outweigh the harm. This involves identifying the impacted community's other important values, needs, and desires (for example, schools, playgrounds, and health centers). A caveat to this recommendation is that offering material compensation when the threats are on a human values level may compound the problem [67].

Consider having a public defender or a mutually agreed mediator who can coordinate all the concerns of the public who are affected. Align those concerns with the appeal process so that participants' true concerns are addressed without having to manipulate the system with unrelated strategic frames.

Create a working environment that is safe for all stakeholders to be constructively critical, including debating the issues substantively and respectfully. Establish a validated process for updating all parties of changes in the statutory framework, including their status as mandatory versus recommended. Ensure that the process is enforced by authorities that have the confidence of all stakeholders. When the parties do not fall within predefined structures, take the initiative to provide compensatory measures. Do not assume that if someone does not speak that they agree. There are situations when they are asked (explicitly or implicitly) not to speak.

Enhance transparency throughout the process using digital platforms to provide the latest regulatory requirements, processes, and results, including a comprehensive overview of the scientific underpinnings within the statutory framework, as well as elucidating the parameters under observation and the methodologies employed for data collection.

Facilitate peer reviews by a consensus-driven panel of impartial specialists, ensuring a departure from the practice of stakeholders relying solely on their preferred experts. This could be implemented a number of different ways: (1) in the process, for example, by changing the structure of meetings from experts competing to collaborating; (2) in the selection of experts from a repository of mutually agreed, non-partisan experts who are devoid of vested interests. These impartial experts would contribute to creating new regulations and be responsible for data collection, monitoring, and evaluation, thereby eliminating the practice of stakeholder groups engaging their own experts. The milestones from planning through to sun-setting should be agreed upon in advance by representatives from all the appropriate stakeholder groups.

The following are recommendations from this study that might be applied to other escalating situations, beginning with a conflict assessment, are as follows:

- 1. When listening to others' strategic communication, if there is strong emotion, ask curious questions [28] to identify the issues and assign them a higher degree of legitimacy. An important take-away from this case study is that stakeholders may not initially be recognized or considered legitimate and, therefore, can be overlooked. Looking for strong emotions may provide a sign of a stakeholder who needs attention.
- 2. Ensure that all stakeholders—people who care—have a seat at the table.

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3. Undergo the same process for all the stakeholders, encouraging them to learn about each other's concerns and validate understanding. Check the strategic framing of communication against the understanding and feelings of each stakeholder (Is my communication (strategic framing) aligned with my understanding (cognitive frame)? Is my understanding of the other's strategic framing of the issue aligned to what the other really thinks?).

4. Include structural mechanisms to support this process and circumvent attempts to delegitimize by meeting in a safe place, setting conversational ground rules, and dispositioning every issue.

It is hoped that, by adopting these recommendations, practitioners will be able to contribute to the COP28 agreement to transition from fossil fuels towards renewable energy with a "swift, just and equitable transition".

Limitations and Assumptions: This study takes a qualitative approach to analyzing a single case study, using the principles of grounded theory [68,69]. It explores the narratives of stakeholders on the national, regional, and local levels whose roles include development, regulatory oversight, and resistance. This exposed dynamics that a broader, more comparative approach would not be able to describe as fully. While the depth might provide meaningful insights, the singularity of experience might limit the transferability of its results. As a qualitative study, it suits the real-world complexities of the transition to renewable energy [7]. At the same time, policymakers and businesses might perceive quantitative data to be more legitimate. A challenge of this study is to share the findings in a pragmatic, applicable way that, where appropriate, is seen as sufficiently legitimate to learn from.

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Appendix A. Participants

All of the participants, listed in Table A1 below, were directly involved with the Yatir Wind Farm project and/or in the regulation of wind energy at some time in the process.

Table A1. List of interviews organized by stakeholder group.

Stakeholder Group	Interview #	Role	Interview Date
Developer	Interview1	Project Coordinator	26 December 2022
	Interview4	Lawyer for Southern District Level Planning Committee	16 January 2023
Government Authority	Interview6	Ministry of Environmental Protection	13 February 2023
	Interview10	Ministry of Energy and Infrastructure	30 March 2023
	Interview11	Ministry of Energy and Infrastructure	3 April 2023

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Table A1. Cont.

Stakeholder Group	Interview #	Role	Interview Date
	Interview15	National Planning Committee	18 July 2023
Corrown on the Authority	Interview16	The Settlement Division	25 June 2023
Government Authority	Interview17	Energy Licensing Authority	5 July 2023
	Interview18	Ministry of Agriculture Responsible for Planning	18 July 2023
C (A (1 ')	Interview7	Lawyer for the Nature and Parks Authority	14 February 2023
Government Authority and Environmentalist	Interview8	Representative of the Ministry of Environmental Protection on the Regional Planning Committee	22 February 2023
Environmentalist	Interview9	Representative of Environmentalist NGOs on the Southern District Level Planning Committee from the Society for the Protection of Nature in Israel	14 February 2023
	Interview13	Society for the Protection of Nature in Israel	22 February 2023
	Interview2	Resident of Opposing Community	28 December 2022
Resident	Interview3	Lawyer for Opposing Community	29 December 2022
Resident	Interview5	Lawyer for Opposing Community	18 January 2023
	Interview12	Resident of Opposing Community	4 May 2023

Appendix B. Milestones in the Project Timeline Including the Appeal Process Regarding Birds and Bats

To gain perspective in the sequence of events, Table A2 provides a chronological list of key appeals, claims, and responses relevant to this article.

Table A2. Milestones in the project timeline including the appeal process regarding birds and bats.

Date	Where Was the Appeal?	What Were the Claims	What Were the District Planning Committee's Responses
2016–2017	Planning Committee by JNF, Nature and Parks Authority	Issues in developer's bird and bat monitoring techniques	Plan conditionally approved, pending compliance with bird and bat survey requirements
June 2017	Southern District Planning Committee		Plan conditionally deposited
2018	National Subcommittee for principled planning issues (Valnata) D125	Include a member of Israel Nature and Parks Authority in the monitoring committee and adopt thresholds	Southern District Planning Committee rejected their decision
February 2018	Southern District Planning Committee	Legal opinion requested on process, including handling of birds and bats	Process was implemented appropriately
April 2018	Southern District Planning Committee		Plan deposited
September 2019	Interministerial committee D 134	Draft of TAMA 41 submitted to National Council	

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Table A2. Cont.

Date	Where Was the Appeal?	What Were the Claims	What Were the District Planning Committee's Responses
2019	Regional Appeals Hearings by Nature and Parks Authority	Demand to adopt the thresholds	Rejected—the thresholds may change and it is recommended to have the monitoring committee decide on them. Partially accepted—with reference to the interministerial committee, once their thresholds are agreed upon they should be added as guideline values (instead of thresholds)
23 June 2019	Supreme Court		Supreme Court ruling that thresholds must be included
July 2019	Regional Appeals Hearings		Decision to approve plan
August 2019 D84 September 2019	Regional Appeals Hearings Reconsideration Meeting (Sept)	Request (Aug) by NGO and Environmental Protection Ministry representatives to reconsider bird and bat decisions due to legal or planning error and to require absolute threshold numbers defined by the Israel Nature and Parks Authority (among other requirements) to be included in the plan. This was based on adoption of the new requirements by other wind farm projects and the Supreme Court ruling that thresholds must be included	Rejected No need to change requirements every time new regulations emerge and the process was conducted properly.
February 2020	National Appeal Subcommittee by the Nature and Park Authority	The birds and bats section of TAMA 41 should be followed. This was based on adoption of the new requirements by other wind farm projects and a supreme court ruling that thresholds must be included	Accepted most of the Nature and Park Authority's claims
July 2020		Plan approved (D105)	
May 2021			TAMA 41 submitted for final approval

References

- 1. United Nations Adoption of the Paris Agreement. Proposal by the President. | UNFCCC. Available online: https://unfccc.int/documents/9064 (accessed on 22 November 2021).
- 2. UNFCCC COP28 Agreement Signals "Beginning of the End" of the Fossil Fuel Era | UNFCCC. Available online: https://unfccc.int/news/cop28-agreement-signals-beginning-of-the-end-of-the-fossil-fuel-era (accessed on 16 December 2023).
- 3. van Wijk, J.; Fischhendler, I. The Effect of Institutional Memory on the Diffusion of Wind Energy. *Environ. Innov. Soc. Transit.* **2022**, 45, 318–336. [CrossRef]
- 4. Bues, A. Social Movements against Wind Power in Canada and Germany: Energy Policy and Contention. Available on-line: https://www.routledge.com/Social-Movements-against-Wind-Power-in-Canada-and-Germany-Energy-Policy/Bues/p/book/9780367439552 (accessed on 9 November 2021).
- 5. Kühne, O.; Parush, D.; Shmueli, D.F.; Jenal, C. Conflicted Energy Transition: Conception of a Theoretical Framework for Its Investigation. *Land* **2022**, *11*, 116. [CrossRef]
- 6. Geels, F.W.; Kern, F.; Fuchs, G.; Hinderer, N.; Kungl, G.; Mylan, J.; Neukirch, M.; Wassermann, S. The Enactment of Socio-Technical Transition Pathways: A Reformulated Typology and a Comparative Multi-Level Analysis of the German and UK Low-Carbon Electricity Transitions (1990–2014). *Res. Policy* **2016**, *45*, 896–913. [CrossRef]
- 7. Zolfagharian, M.; Walrave, B.; Raven, R.; Romme, A.G.L. Studying Transitions: Past, Present, and Future. *Res. Policy* **2019**, *48*, 103788. [CrossRef]

Sustainability **2024**, 16, 3164 27 of 28

8. Köhler, J.; Geels, F.W.; Kern, F.; Markard, J.; Onsongo, E.; Wieczorek, A.; Alkemade, F.; Avelino, F.; Bergek, A.; Boons, F.; et al. An Agenda for Sustainability Transitions Research: State of the Art and Future Directions. *Environ. Innov. Soc. Transit.* **2019**, *31*, 1–32. [CrossRef]

- 9. Smith, A.; Voß, J.-P.; Grin, J. Innovation Studies and Sustainability Transitions: The Allure of the Multi-Level Perspective and Its Challenges. *Res. Policy* **2010**, *39*, 435–448. [CrossRef]
- Teschner, N.; Paavola, J. Discourses of Abundance: Transitions in Israel's Energy Regime. J. Environ. Policy Plan. 2013, 15, 447

 –466.

 [CrossRef]
- 11. Hart, P.; Kleiboer, M. Policy Controversies in the Negotiatory State. Knowl. Policy 1995, 8, 5–25. [CrossRef]
- 12. Rein, M.; Schön, D. Frame-Critical Policy Analysis and Frame-Reflective Policy Practice. Knowl. Policy 1996, 9, 85–104. [CrossRef]
- 13. Termeer, C.J.A.M.; Dewulf, A.; Breeman, G.; Stiller, S.J. Governance Capabilities for Dealing Wisely with Wicked Problems. *Adm. Soc.* **2015**, *47*, 680–710. [CrossRef]
- 14. Mogensen, M.; Mikkelsen, E.N. What Makes Resilience?: An Ethnographic Study of the Work of Prison Officers. In *The Routledge Companion to Anthropology and Business*; Routledge: New York, NY, USA, 2020; ISBN 978-1-00-305245-6.
- 15. Folke, C.; Carpenter, S.; Elmqvist, T.; Gunderson, L.; Holling, C.S.; Walker, B. Resilience and Sustainable Development: Building Adaptive Capacity in a World of Transformations. *AMBIO A J. Hum. Environ.* **2002**, *31*, 437–440. [CrossRef] [PubMed]
- 16. Vargas, C.A.C.; Romero, S.H.; León-Sicard, T. Resilience to Climate Variability: The Role of Perceptions and Traditional Knowledge in the Colombian Andes. *Agroecol. Sustain. Food Syst.* **2020**, *44*, 419–445. [CrossRef]
- 17. Chinis, I.; Pozoukidou, G.; Istoriou, T. Renegotiating Spatial Planning Practices: The Role of Collective Initiatives and Informal Networks. *Eur. Plan. Stud.* **2024**, *32*, 263–280. [CrossRef]
- 18. Brunner, R.D. Global Climate Change: Defining the Policy Problem. Policy Sci. 1991, 24, 291–311. [CrossRef]
- 19. Balthasar, A.; Schreurs, M.A.; Varone, F. Energy Transition in Europe and the United States: Policy Entrepreneurs and Veto Players in Federalist Systems. *J. Environ. Dev.* **2020**, *29*, 3–25. [CrossRef]
- 20. Glasbergen, P.; Driessen, P.P.J. The Paradigm Shift in Environmental Politics. In *Greening Society: The Paradigm Shift in Dutch Environmental Politics*; Driessen, P.P.J., Glasbergen, P., Eds.; Environment & Policy; Springer: Dordrecht, The Netherlands, 2002; pp. 3–25, ISBN 978-94-015-9958-0.
- 21. Asah, S.T.; Bengston, D.N.; Wendt, K.; Nelson, K.C.; Reframing, I. Diagnostic Reframing of Intractable Environmental Problems: Case of a Contested Multiparty Public Land-Use Conflict. *J. Environ. Manag.* **2012**, *108*, 108–119. [CrossRef] [PubMed]
- 22. Antal, A.B.; Friedman, V.J. Learning to Negotiate Reality: A Strategy for Teaching Intercultural Competencies. *J. Manag. Educ.* **2008**, 32, 363–386. [CrossRef]
- 23. Gal, M.B.; Collins-Kreiner, N.; Shmueli, D.F. Framing Spatial-Religious Conflicts: The Case of Mormon Development in Jerusalem. *Tijdschr. Voor Econ. En Soc. Geogr.* **2015**, *106*, 588–607. [CrossRef]
- 24. Benford, R.D.; Snow, D. Framing Processes and Social Movements: An Overview and Assessment. *Annu. Rev. Sociol.* **2000**, *26*, 611–639. [CrossRef]
- 25. Shmueli, D.F. Framing in Geographical Analysis of Environmental Conflicts: Theory, Methodology and Three Case Studies. *Geoforum* **2008**, *39*, 2048–2061. [CrossRef]
- 26. Guimarães, M.H.; McKee, A.; Lima, M.L.; Vasconcelos, L.; Boski, T.; Dentinho, T. Putting Transdisciplinarity into Practice: A Mixed Mode Procedure for Stakeholder Participation in Natural Resource Management. *J. Environ. Plan. Manag.* 2015, 58, 1827–1852. [CrossRef]
- 27. Mendonça, R.F.; Simões, P.G. Frame Analysis. In *Research Methods in Deliberative Democracy*; Ercan, S.A., Asenbaum, H., Curato, N., Mendonça, R.F., Eds.; Oxford University Press: Oxford, UK, 2022; ISBN 978-0-19-284892-5.
- 28. Picard, D. Practising Insight Mediation; University of Toronto Press: Toronto, ON, Canada, 2016.
- 29. Shmueli, D.F.; Elliott, M.; Kaufman, S. Frame Changes and the Management of Intractable Conflicts. *Confl. Resolut. Q.* **2006**, 24, 207–218. [CrossRef]
- 30. Kaufman, S.; Smith, J. Framing and Reframing in Land Use Conflicts. J. Archit. Plan. Res. 1999, 16, 164–180.
- 31. Goffman, E. Frame Analysis: An Essay on the Organization of Experience; Frame Analysis: An Essay on the Organization of Experience; Harvard University Press: Cambridge, MA, USA, 1974; ISBN 978-0-674-31656-0.
- 32. Syna, H.D. Diversity Management in Places and Times of Tensions: Engaging Inter-Group Relations in a Conflict-Ridden Society; Springer: Berlin/Heidelberg, Germany, 2020.
- 33. Brummans, B.H.J.M.; Putnam, L.L.; Gray, B.; Hanke, R.; Lewicki, R.J.; Wiethoff, C. Making Sense of Intractable Multiparty Conflict: A Study of Framing in Four Environmental Disputes. *Commun. Monogr.* **2008**, *75*, 25–51. [CrossRef]
- 34. Lewicki, R.; Gray, B.; Elliott, M. Making Sense of Intractable Environmental Conflicts: Concepts and Cases; Island Press: Chicago, IL, USA, 2013; ISBN 978-1-61091-287-7.
- 35. Kahneman, D.; Tversky, A. Prospect Theory: An Analysis of Decision under Risk. Econometrica 1979, 47, 263–292. [CrossRef]
- 36. Purdy, J.M.; Gray, B. Conflicting Logics, Mechanisms of Diffusion, and Multilevel Dynamics in Emerging Institutional Fields. *Acad. Manag. J.* **2009**, 52, 355–380. [CrossRef]
- 37. James, W. The Principles of Psychology; Macmillan: London, UK, 1890.
- 38. Davis, C.B.; Lewicki, R.J. Environmental Conflict Resolution: Framing and Intractability—An Introduction. *Environ. Pract.* **2017**, 5, 200–206. [CrossRef]

Sustainability **2024**, 16, 3164 28 of 28

39. Kaufman, S.; Shmueli, D.F. Framing in Public Decision Interactions: Transferring Theory to Practice. In *Framing Matters: Perspectives on Negotiation Research and Practice in Communication*; Peter Lang Inc.: Lausanne, Switzerland, 2011; pp. 167–190.

- 40. Entman, R. Cascading Activation: Contesting the White House's Frame After 9/11. Political Commun. 2003, 20, 415–432. [CrossRef]
- 41. Chong, D.; Druckman, J. Framing Theory. Annu. Rev. Political Sci. 2007, 10, 103–126. [CrossRef]
- 42. Bain, P.G.; Milfont, T.L.; Kashima, Y.; Bilewicz, M.; Doron, G.; Garδarsdóttir, R.B.; Gouveia, V.V.; Guan, Y.; Johansson, L.-O.; Pasquali, C.; et al. Co-Benefits of Addressing Climate Change Can Motivate Action around the World. *Nat. Clim. Chang.* **2016**, *6*, 154–157. [CrossRef]
- 43. Bartholomé, G.; Lecheler, S.; de Vreese, C. Towards A Typology of Conflict Frames. J. Stud. 2018, 19, 1689–1711. [CrossRef]
- 44. Dewulf, A.; Bouwen, R. Issue Framing in Conversations for Change: Discursive Interaction Strategies for "Doing Differences". *J. Appl. Behav. Sci.* **2012**, *48*, 168–193. [CrossRef]
- 45. Johansson, A. Managing Intractable Natural Resource Conflicts: Exploring Possibilities and Conditions for Reframing in a Mine Establishment Conflict in Northern Sweden. *Environ. Manag.* 2023, 72, 818–837. [CrossRef] [PubMed]
- 46. Dewulf, A.; Gray, B.; Putnam, L.; Lewicki, R.; Aarts, N.; Bouwen, R.; Woerkum, C.M.J. Disentangling Approaches to Framing in Conflict and Negotiation Research: A Meta-Paradigmatic Perspective. *Hum. Relat.* **2009**, *62*, 155–193. [CrossRef]
- 47. Gray, B.; Purdy, J.M.; Ansari, S. From Interactions to Institutions: Microprocesses of Framing and Mechanisms for the Structuring of Institutional Fields. *Acad. Manag. Rev.* **2015**, *40*, 115–143. [CrossRef]
- 48. Purdy, J.; Ansari, S.; Gray, B. Are Logics Enough? Framing as an Alternative Tool for Understanding Institutional Meaning Making. *J. Manag. Inq.* **2019**, 28, 409–419. [CrossRef]
- 49. Picard, C.; Siltanen, J. Exploring the Significance of Emotion for Mediation Practice. Confl. Resolut. Q. 2013, 31, 31–55. [CrossRef]
- 50. Heifetz, D. The Map to Compassion: A Systems-Based Model of Human Needs. J. Aware. Based Syst. Chang. 2023, 3, 41–74. [CrossRef]
- 51. Grenfell, M.; James, D. Change in the Field—Changing the Field: Bourdieu and the Methodological Practice of Educational Research. *Br. J. Sociol. Educ.* **2004**, *25*, 507–523. [CrossRef]
- 52. Bourdieu, P.; Wacquant, L. (Eds.) An Invitation to Reflexive Sociology; Repr.; Polity Pr. Cambridge, UK, 2007; ISBN 978-0-7456-1032-0.
- 53. Kolb, D.M. Staying in the Game or Changing It: An Analysis of Moves and Turns in Negotiation. *Negot. J.* **2004**, *20*, 253–268. [CrossRef]
- 54. Kolb, D.M.; Williams, J. *Harvard Business Review*; Graduate School of Business Administration, Harvard University: Boston, MA, USA, 2001.
- 55. van Hulst, M.; Yanow, D. From Policy "Frames" to "Framing": Theorizing a More Dynamic, Political Approach. *Am. Rev. Public Adm.* **2016**, *46*, 92–112. [CrossRef]
- Forester, J. Deliberative Planning Practices—Without Smothering Invention: A Practical Aesthetic View. In *The Oxford Handbook of Deliberative Democracy*; Bächtiger, A., Dryzek, J.S., Mansbridge, J., Warren, M., Eds.; Oxford University Press: Oxford, UK, 2018; ISBN 978-0-19-874736-9.
- 57. Mah, C.L.; Hamill, C.; Rondeau, K.; McIntyre, L. A Frame-Critical Policy Analysis of Canada's Response to the World Food Summit 1998–2008. *Arch. Public Health* **2014**, 72, 41. [CrossRef] [PubMed]
- 58. Glaser, B.G.; Strauss, A.L. *The Discovery of Grounded Theory: Strategies for Qualitative Research*; 5. Paperback Print.; Aldine Transaction: New Brunswick, NJ, USA, 1967; ISBN 978-0-202-30260-7.
- 59. Glaser, B.G.; Strauss, A.L. Grounded Theory; Huber: Bern, Switzerland, 2010; ISBN 978-3-456-84906-5.
- 60. Planning Administration Plan 699-0272872, Wind Turbines—Yatir. Available online: https://mavat.iplan.gov.il/e0c8d37d-2d80-4598-8f8a-de38b184bdd9 (accessed on 24 February 2024).
- 61. CheckId KARMEY HARUAH, LIMITED PARTNERSHIP—550253231. Available online: https://en.checkid.co.il/company/KARMEY+HARUAH,+LIMITED+PARTNERSHIP-jbB2DPO-550253231 (accessed on 24 February 2024).
- 62. Arnstein, S.R. A Ladder Of Citizen Participation. J. Am. Inst. Plan. 1969, 35, 216–224. [CrossRef]
- 63. Doctors Only Audit by the Association of Public Health Physicians on the TMA-41 Plan for Planning (Hebrew). Available online: http://publichealth.doctorsonly.co.il/2019/09/173082/ (accessed on 19 March 2024).
- 64. Snail Darter Controversy. Available online: https://en.wikipedia.org/w/index.php?title=Snail_darter_controversy&oldid=1202 928000 (accessed on 13 February 2024).
- 65. Tucker, W. Environmentalism and the Leisure Class: Protecting Birds, Fishes, and above All, Social Privilege. *Harpers* 1977, 51–56, 73–80
- 66. Folke, C.; Carpenter, S.; Elmqvist, T.; Gunderson, L.; Holling, C.; Walker, B.; Bengtsson, J.; Berkes, F.; Colding, J.; Danell, K.; et al. *Resilience and Sustainable Development: Building Adaptive Capacity in a World of Transformations*; Report for the Swedish Environmental Advisory Council 2002:1; Ministry of the Environment: Stockholm, Sweden, 2002.
- 67. Atran, S.; Axelrod, R. Reframing Sacred Values. Negot. J. 2008, 24, 221–246. [CrossRef]
- 68. Corbin, J.; Strauss, A. Grounded Theory Research: Procedures, Canons, and Evaluative Criteria. Qual. Sociol. 1990, 13, 19. [CrossRef]
- 69. Corbin, J.; Strauss, A. Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory, 3rd ed.; SAGE Publications, Inc.: Thousand Oaks, CA, USA, 2008; ISBN 978-1-4129-0644-9.

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