



Multispecies blue justice and energy transition conflict: examining challenges and possibilities for synergy between low-carbon energy and justice for humans and nonhuman nature

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Abstract

This paper explores deep insights into sustainability transition tensions and pathways in terms of place-based conflict and potential for synergies between offshore wind energy (OWE) development and justice for humans and nonhuman nature. Specifically, we build a capability and recognition-based multispecies blue justice framework that at once centers ecological reflexivity (i.e., environmental awareness-raising, proxy representation of nature, and institutional recognition and protection of rights of nature and human-nature relationality), decenters anthropocentric frames of justice, and sheds light on injustices, human and nonhuman that climate and energy transitions may create or reinforce. This framework then informs analysis of a sustainability transition conflict, specifically a longstanding OWE conflict on Hiiumaa island, Estonia. This analysis unravels justice concerns, human and nonhuman, raised by proxy representatives of nature (i.e., grassroots actors and environmental stewards), the knowledge contestations involved, and the resolution measures undertaken thus far. Next, we discuss the possible transformative role of the OWE conflict, including how a Supreme Court ruling invalidating the OWE plan has fostered reflexive planning and may have set a legal precedent that may have human and nonhuman justice implications for the handling of future planning cases. We then highlight remaining challenges for socially and ecologically responsive OWE deployment. These include the judicial non-recognition of nature's right as well as environmental values and sociocultural ties to nature as rights worth protecting, and the likely effects that formalization of European Union ambitions to speed-up and ramp-up renewable energy could have locally. These include prospects for environmental stewards and ocean defenders to steer nature-positive, people-centered energy transitions. Last, we propose conditions for enhanced multispecies justice, including how formal interventions (e.g., law) and informal practices (e.g., negotiation, awareness-raising) can be harnessed to unlock productive conflict and align energy transitions with the norms of justice, human and nonhuman.

Keywords Multispecies blue justice · Ecological reflexivity and proxy representation of nature · Energy transition conflict · Capability and recognition of humans and nonhuman nature · Estonia's offshore wind energy and marine spatial planning

Introduction

Oceans and seas are fundamental to life. They cover around 70% of the Earth's surface, contain 80% of all life forms, produce at least 50% of the Earth's oxygen, absorb about 30% of human-induced CO₂ emissions, and provide food

(about 20% of daily intake of animal protein), jobs, medicines, cosmetics and biofuel (from algae), and energy (from wind, waves, and tides) (Scholaert and Jacobs 2022). Coastal communities also depend on oceans for shelter, livelihoods, recreation, as well as spiritual, mental, and physical wellbeing (Gee et al. 2017; Tafon et al. 2023a). Oceans are also vital to the world's economy, with estimates suggesting that the value added generated by ocean-based industry globally could reach USD 3 trillion in 2030, with ocean-related employment estimated to surge above 40 million during the same period (OECD 2016). Oceans thus have the potential to contribute to more than half of the sustainable development goals, including goals 1 (no poverty), 2 (zero hunger), 3 (health and wellbeing), 7 (affordable and clean

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energy), 8 (decent work and economic growth), 9 (industry, innovation and transformation), 13 (climate action), 15 (biodiversity), and 16 (peace and justice). However, ocean health and the wellbeing of organisms that depend on it are under threat from climate change (e.g., through heat and emissions related acidification and oxygen deficiency) and other human-related activities, including seabed mining, and pollution from shipping (e.g., oil spills and underwater noise), plastics, and agricultural, industry and sewage run-offs (Scholaert and Jacobs 2022; Erinoshio et al. 2022). Unabated climate change and blue economic pursuits can also undermine the capabilities of the most vulnerable who depend on the seas and coasts for material and non-material wellbeing and for whom sea-level rise and natural disasters such as storm surges diminish responsive capacities (Nash et al. 2022). Threats to coastal community and ecological wellbeing are also likely to intensify as new maritime sectors such as blue biotechnology, offshore renewable energy, and marine aquaculture intensify (Tafon et al. 2022).

Among new maritime sectors, offshore wind energy (OWE) has gained prominence in supranational energy and climate policy circles as an engine of growth and decarbonization, with the European Union (EU) seeking to up its installed OWE 20-fold (EC 2020a, b). However, OWE deployment across Europe has been slow. Investors, developers, and policymakers alike ascribe this to permit-related issues (EC (European Commission) 2022a),¹ although threats to biodiversity, national defense, and community wellbeing (Tafon et al 2019) as well as recent supply-chain bottlenecks resulting from economic sanctions on Russia are also stalling progress (EC (European Commission) 2022a). Nonetheless, newly proposed measures to accelerate progress, particularly those triggered by the recent ambition to end Europe's dependence on an increasingly volatile and politically weaponized Russian energy well before 2030, have birthed an era of rapid renewable energy (RE) that is setting off an unprecedented massive scale OWE rush. Indeed, despite having just recently (in 2021) raised the Union's RE target (from 32 to 40%), the need to phase out dependence on Russia's energy has resulted in a proposal to further raise the target to 45% (EC (European Commission) 2022a). Furthermore, the European Commission released in May 2022 alone a suite of policy proposals which if formalized, will among other things simplify and fast-track permit-granting procedures for RE projects. Among them, the Proposal to amend RE Directives (EC (European Commission) 2022b) articulates four lines of action, including designing so-called

renewables-go-to areas (in which an environmental impact assessment (EIA) is not required), limiting permit-granting time to one year (for renewables-go-to areas) and two years (for projects outside renewables-go-to areas), speeding-up judicial appeals procedures, and institutionalizing RE as an "overriding public interest" (p. 23).

Given the political nature of the ocean (i.e., the multiple and conflicting stakes, worldviews, values, and power relations), there is urgent need to unravel what rapid energy transition could mean for environmental stewardship and democracy, power relations, and the wellbeing and capabilities of the most vulnerable, human and nonhuman. Responding to calls for a more just sustainability transition at sea (Bennett 2022; Crosman et al. 2022; Tafon et al. 2023b), this paper argues that ocean justice must be conceptualized and pursued beyond prevailing anthropocentric frames and practices (that favor elite humans) to embrace a more encompassing multispecies blue justice (MBJ) concept that extends capabilities and the community of justice to neglected others, human and nonhuman.

In line with the above claim, this paper examines tensions and potential for interface between RE transition and place-based ocean justice concerns relating to wellbeing and capability, human and nonhuman. To do so, we first elaborate a MBJ framework that can be used to critically assess and reform ocean-based sustainability transitions in terms of their sociopolitical and ecological performance. We define MBJ as the wellbeing of all lives (i.e., humans, ecosystems and plants and animals) or their condition and ability to flourish. Our MBJ concept places emphasis on identifying and addressing structural forces (e.g., governance arrangements, norms, power relations) that undermine the rights, needs, and capabilities of marginalized identities, human and nonhuman (White 2013; Tafon et al. 2023a). Defined in those terms, MBJ calls for an ecological reflexivity that supports institutionalized recognition and representation of this silenced constituency, strengthens environmental stewardship and citizenship, and harnesses mutually beneficial relations between humans and nonhuman nature. Starting from the premise that prevailing injustices against humans and nonhuman nature result from structural inequalities, MBJ seeks recognition and better involvement of marginalized humans and nonhumans, through either direct or proxy² representation at the supranational, national, and local levels of policy and decision-making (Schlosberg 2007).

Secondly, we examine through our MBJ lens, the stakes involved in an ongoing OWE conflict in Hiiumaa, Estonia, unraveling the role of knowledge in sustaining the conflict, the MBJ concerns raised by various representational proxies of nature and coastal identity in pushing for nature-positive, people-centered RE transition. More explicitly, we examine,

¹ The European Commission launched a public consultation (18 January to 12 April 2022) specifically on how to improve permit-granting procedures for renewables projects, which resulted in a Commission Recommendation.

² We elaborate the notion of proxy representation in Sect. 3.

on the one hand, how Hiiumaa islanders believe the OWE development would impinge on their capabilities to live a good life, including the importance of the environment and nature both as a key aspect of that life and as a right in and of itself. In examining this aspect of our study, we place emphasis on the relationalities between the wellbeing of place-based humans and nonhumans, i.e., we examine how humans in Hiiumaa see how their wellbeing in relation to nonhuman nature will be affected by the OWE project (if it proceeds). Additionally, we examine how more formalized proxy representatives of nature (i.e., environmental bureaucrats and agencies) countenance the nonhuman justice effects of proceeding with the OWE project as presently proposed. We emphasize the role and agency of grassroots movements and “expert” proxy representatives of nature as a means to address the methodological challenge of giving direct political voice to nonhumans. By highlighting issues and struggles around multispecies recognition, capabilities, and representation in relation to OWE development, the paper makes a theoretical and empirical contribution to the field of environmental justice, especially more-than-human justice, which while a conceptually burgeoning field, is still in need of empirical grounding not least in a multistakeholder, power-ridden, and conflict-laden context such as marine-based sustainability transition planning and governance.

The remainder of the paper is structured as following. Section two sets our methodological approach. It outlines the importance of examining MBJ in conflict settings and details the methods and materials that we draw on for the empirical analysis. Section three develops a recognition and capability informed MBJ framework for the analysis of injustices, human and nonhuman. The framework then informs analysis in section four, of a longstanding OWE conflict in Hiiumaa, Estonia, focusing on actor positionalities, knowledge contestations, and MBJ justice concerns raised by grassroots actors and other representational “proxies” of nature. Section five considers ways in which the OWE controversy may have positively transformed Estonia’s marine and OWE planning, while also highlighting remaining challenges for socially just and ecologically sustainable OWE deployment. Section six considers ways in which the capabilities necessary for enhancing the wellbeing of Hiiumaa residents and nonhuman nature can be advanced in relation to planning for RE. Section seven concludes the paper.

Methodology

Studying MBJ through ocean conflicts

We situate our empirical examination of MBJ issues in a local environmental conflict setting as a way to gain insights

into how the wellbeing of humans and nonhuman nature is affected by human activities and how this is countenanced by socioenvironmental stewards and defenders (Bennett 2022). Conflict sheds light on how nature and its use and management are framed and organized; how rules, policies, and cultural norms and practices condition this; what values, rights, needs, knowledge, and capabilities (human and nonhuman) are at stake; how and by whom institutionalized norms are resisted, and with what alternative truths, values, and sustainability visions (Smith and Patterson 2018; Temper et al. 2020; Tafon et al. 2022). Conflict portals are thus vital for analyzing and potentially redressing MBJ issues. This is because conflict brings to the fore the socioenvironmental struggles of diverse groups, e.g., small-scale fishers, environmental stewards and activists, indigenous communities, and others, as they raise concerns related to neglected rights, needs, sufferings, and beings and doings (Alexander 2019; Jentoft 2020; Tafon et al. 2023a). These struggles tend to challenge institutions and practices and seek to reverse or minimize injustices and secure recognition and protection of rights to flourish for the marginalized—nonhuman nature, the poor, ethnic and racial minorities, women, children, and future generations (White 2013; Pellow 2018; Scheidel et al. 2020). Conflict thus offers opportunities to spot and potentially institutionalize hitherto unrecognized or undervalued moral regimes, relational cosmologies and practices, and environmental knowledge and stewardship in support of wellbeing, human and nonhuman (Schlosberg 2007) as we highlight both conceptually and in the context of the ongoing OWE controversy in Estonia.

Methods and materials

Empirical material for this paper was obtained through three strategies. First, through online and face-to-face semi-structured interviews with diverse interest groups (see Appendix), including from EIA ($N=1$), the Ministry of Environment ($N=1$), OWE developers ($N=1$), and residents of Hiiumaa ($N=3$) who represent Hiiu Tuul, a grassroots movement. The reason for the limited number of interviews ($N=6$) is mainly because we targeted only actors who are either directly involved in the OWE process (e.g., the developers, or the Ministry of Environment having jurisdiction over EIA matters) or were affected in human and nonhuman justice terms (e.g., Hiiu Tuul). Furthermore, the three Hiiumaa residents were selected based on prior knowledge (e.g., Tafon et al. 2019) of them as key leaders of the Hiiu Tuul group that spearheaded the legal opposition of the OWE project. Other actor groups with stakes in the OWE project (e.g., Hiiu Municipality) did not respond to our requests for interviews. Second, in addition to interviews, we carried out thematic content analysis of written comments ($N=3$) submitted in September 2019 by Hiiu Tuul, the Hiiumaa

Environmental Board, and the Estonian Fund for Nature. These comments were submitted in response to an EIA that the OWE developer had produced in an attempt to revitalize its OWE plan, which the Supreme Court had invalidated in August 2018. These stakeholders were selected on the basis of either being directly affected by the OWE project in human justice terms (Hiiu Tuul) or actively representing nature (the Estonian Fund for Nature, the Hiiumaa Environmental Board, and Hiiu Tuul). While several other actors (e.g., the Port of Tallinn, the Ministry of Defense, the National Heritage Board) also submitted written comments in relation to the EIA, these were not considered in this study because they did not align with our primary focus on MBJ concerns. Our third research technique consisted of (1) a content analysis of the OWE developer's website and a signed Cooperation Agreement between the developer and a coastal municipality, and (2) an online participant observation of bilateral meetings between Hiiumaa municipality and the OWE developer.

The aim of the combination of these research techniques was to broaden and deepen our understanding of how the OWE project is framed, the emerging human and nonhuman justice concerns and related knowledge claims, and the strategies adopted toward securing the project's acceptability. We also sought to trace the conflict trajectory and map out actor positionalities both historically and as the conflict is currently unfolding. Here, we place emphasis on potential alliances and disruptions, agreements and concessions, remaining conflict resolvability challenges, and necessary conditions to move beyond the current stalemate toward rendering the OWE project socially just and environmentally sustainable.

Multispecies blue justice

The past few years have witnessed the expansion of the distinct but interrelated fields of blue justice (Saunders et al. 2020; Parsons et al. 2021; Bennett 2022; Crosman et al. 2022; Tafon et al. 2023a) and climate justice (Schlosberg 2019; Shue 2019; UN 2015). However, both fields frame justice primarily in human terms, with blue justice emphasizing equitable distributions and empowerment of weaker actors, and climate justice focusing on climate disasters, causes, and differentiated responsibilities, vulnerabilities, impacts, and adaptive capacities. Proper understanding of procedural and distributive justice and differential climate change vulnerabilities and responsive abilities is undoubtedly crucial to addressing the "greenhouse gassed and fossil fueled desires" of human "weathermakers" (Neimanis 2019 p. 432). However, overemphasis on distribution and participation, especially within a narrow frame of climate change effects, may obscure and normalize human and nonhuman

injustices that seemingly innocuous technological solutions to climate change (e.g., OWE) may cause or exacerbate (Kaldellis et al. 2016; Lloret et al. 2022). The MBJ framework that we advance here is crucial for transforming RE transition conflict and enhancing wellbeing and capabilities, human and nonhuman. In developing the MBJ framework we focus on capabilities and recognitional justice, which while critical to realizing the other dimensions of justice (Honneth 1995), remain undertheorized, under-examined, and under-pursued in the ocean (Saunders et al. 2020; Tafon et al. 2023a). However, it is important to note that, while the MBJ framework sees capability and recognition as "foundational," all the constitutive elements of a theory of justice (including procedural and distributive justice) are interdependent and indivisible. Furthermore, while for analytical clarity we elaborate MBJ in terms of human and nonhuman justice, in practice they are interlinked and interdependent and should be treated as such.

Recognitional justice starts from the premise that socio-economic inequalities and insecurities, political exclusions, environmental harms, and inequitable distributions of rights and capacities across humans and nonhumans, time, space, and differentiated identities are rooted in structural arrangements (White 2013; Schlosberg 2007). From this premise, recognitional justice seeks remedy at the structural level of human institutions (e.g., regulation, policy, capitalism, norms etc.) where rules and discourses around environmental rights, needs, citizenship, stewardship, relationships, behavior, identity, vulnerability, participation, and distribution of goods and bads are constructed and organized (Pellow 2018; Tafon et al. 2023a). Recognition is centered on three key principles—love (loving care for the other's wellbeing in light of their needs), respect, (the organization of a system of political and civil rights that bestows on subjects a status of autonomous "personhood" and representation with equal rights as others), and esteem (by which every being should enjoy social esteem according to their achievement as productive beings) (Honneth 1995; Honneth in Fraser and Honneth 2003 p. 139–141). When imbued with a capability approach, these forms of recognition are crucial for advancing MBJ.

In terms of human justice, MBJ considers the different needs and values of vulnerable social groups and the conditions for strengthening and actualizing their capacity to contribute to society and to flourish as autonomous individuals and communities. Here, MBJ addresses the relationship between human needs and the ocean, in the sense that humans depend on oceans for individual and group capabilities. A capabilities-informed account of MBJ thus enables unraveling of why certain things matter to people across time, space, and identities. These include factors that enable fulfillment of material and nonmaterial forms of wellbeing, from coastal identity to supportive personal

relationships, rewarding employment, good psychological and physical health, strong community, financial and personal security, and a healthy and attractive coast and sea. An MBJ thus emphasizes the relationship between place and multidimensional wellbeing and sheds light on the role of political, environmental, economic, social, demographic, and technological processes in either hindering or advancing group capabilities (cf. Robeyns 2020). From this perspective, marginalized groups are understood as requiring recognition qua *love* to meet basic needs; *respect* in the sense of promoting policies, legislation, norms, and rules that foster their agency in processes that affect their lives; and *esteem* in the sense of recognition of their fundamental rights to a decent and full-functioning life. Misrecognition of these human rights and needs interrupts community capabilities and functioning, therefore resulting in socioenvironmental harms and injustices (Schlosberg 2007).

The second way in which MBJ is vital to sustainability transitions is its broadening of the subject of justice beyond anthropocentric frames to encompass the wellbeing of nonhuman nature (White 2013; Pellow 2018), hence the “multispecies” in MBJ. Emphasizing the capabilities of well-functioning ecosystems, MBJ creates a link between ocean health, and the basic needs of humans and nonhumans, whereby ecosystems serve as life support systems for both categories of justice subjects (Celermajer et al. 2020). MBJ is concerned with resilience and responsive abilities linked to threats and conditions for the wellbeing of nature in and of itself, while valuing socio-natural ties, relationships to nature and how a “balance” might be achieved with this broader community of justice subjects. Intrinsically, this means recognizing nonhuman nature as subjects of justice whose wellbeing or flourishing as individuals or a community depends on better treatment of ecosystems and is vulnerable to their abuse (Schlosberg 2013). Relationally and instrumentally, it means avoiding or improving practices that undermine nature-people relationships, and nature’s contributions to society, including oxygen and food production, CO₂ absorption, and more. MBJ thus calls for broadening the moral and legal community of justice to nonhumans (Tschakert et al. 2021) in terms of valuing “all beings” in all their diversity and relationships and composing legal frameworks and relational ontologies of care and solidarity that support nature-positive, people-centered sustainability transitions. This integrative approach shifts focus of blue justice from a mere “social” equity concern around distributions of material benefits and costs, to encompass a wide range of human (i.e., health, rights, identity, culture, food) and nonhuman nature issues (e.g., harm to ecosystems and knock-on effects on climate, and species growth, reproduction, and mortality). Being attentive to the differential wellbeing and responsive abilities of people and nature, MBJ broadens the scope of justice beyond a narrow focus on climate change

(e.g., causes, disasters, and differentiated vulnerabilities, impacts, and adaptations) to encompass injustices, human and nonhuman that innovative technological solutions to climate change themselves may also spawn or exacerbate.

Two theoretico-methodological issues arise. The first concerns an ongoing debate about whether and how we can extend justice frameworks to nonhumans (e.g., between extended capabilities approaches or emphasis on distributional justice through ecological space), and whether it is possible to institutionalize this. Notions of liability for harm, and responsibility for care of the nonhuman (that cannot protect itself) provide moral grounds for extending the community of justice to nonhumans (Wienhues 2020) and are finding their ways into institutionalized statements and legal frameworks (White 2013). For instance, recognizing ecosystem rights and nature rights, the 2008 Constitution of Ecuador explicitly states in Article 71:

Nature... has the right to exist, persist, maintain and regenerate its vital cycles, structure, functions and its processes in evolution. Every person, people, community or nationality, will be able to demand the recognition of rights for nature before the public organisms’ (cited in White 2013 p. 151).

The second concern relates to the challenge of giving political voice to the nonverbal communicating nonhuman nature, in the sense that while humans can verbally express their views and experiences of injustice and what diminished capabilities might entail in light of different stressors, nonhumans cannot (at least, not directly). However, this is a challenge only if, as most critiques of multispecies justice do, think of nonhuman communication strictly in terms of actual and direct presence in democratic conversations and institutions. But as Schlosberg (2007 p. 192) notes drawing on Dryzek’s (1995, 2000) notion of ecological reflexivity, institutionalized recognition and representation of nonhumans in environmental governance entail widening our conceptions of communication to include the nonverbal “speech” of entities that while (seemingly) lacking subjectivity and rationality, have physical integrity and “bodily” processes that should be listened to and respected. Importantly, Schlosberg’s (2007) notion of integrity here, among other aspects, includes consideration of the health and functioning of ecosystems, i.e., including consideration of how human forced changes to ecosystem conditions and qualities impact capabilities of nonhumans to flourish. Practically, it entails listening to the “signals” including species extinction, droughts, flu-ridden birds, climate change (e.g., insect eggs hatching earlier, ocean warming etc.) that the “natural world” communicates through nonverbal speech. Here, Schlosberg’s (2007) notion of proxy representation is useful to both extend the capabilities approach to nonhuman nature and represent this “speechless” Other in decision-making circles.

Proxy representation refers to the use of a variety of actors to represent in environmental institutions the “remote” others who are inarticulate or cannot represent themselves but are (likely to be) impacted by environmental/climate change and decisions. Proxy representation can be a very effective means of ecological reflexivity as a local population and a diverse array of actors with varying degrees and types of connection to and expertise on nonhuman nature can inform environmental decisions on issues native to place (Schlossberg 2007 p. 193–194). Examples of proxies, as we show in our empirical analysis, might include relevant legal advocates, locals with strong socio-cultural and natural ties to the area, non-governmental advocacy organizations, as well as conservation scientists and locals with knowledge of animal and ecosystem wellbeing/suffering, such as local amateur bird surveyors (see Wilsey et al. 2022). A key point is that proxy representatives speaking for nonhumans are assumed to have credible insights into conditions for their wellbeing through a range of means, including but also beyond language and science (Brown 2018). Indigenous and local communities that have adopted a rights of nature ontology and connect with nature convivially through practices such as Ubuntu (Mabele et al. 2022), Buen Vivir (Dancer 2021), or “two-eyed seeing” (Reid et al. 2021) are also useful proxies that can represent nature in environmental decision-making. Some of these relational ontologies (e.g., Buen Vivir) are already enshrined in some domestic legal frameworks, e.g., in Bolivia (Dancer 2021). These efforts reflect a growing realization of the need to confer moral considerability and therefore recognition that strives (at least) to account for the wellbeing of all living beings in decision-making processes (Wienhues 2020).

Sociopolitical dynamics of Estonia’s offshore wind energy conflict

This section presents an account of the OWE conflict, with emphasis on the conflict trajectory and dynamics, key decisions made, and how these relate to the depoliticization and repoliticization of MBJ.

Conflict dynamics

In 2006, RE company Nelja Energia announced plans to build offshore wind farms (OWFs) with a production capacity of 700–1100 MW near the coast of Hiiumaa, Estonia’s second largest islands whose economy mostly depends on tourism, livestock, farming, fishing, fish processing, and wrecking (marine salvage). The project application for a permit was put on hold pending formalization of a relevant legal framework to regulate OWFs planning and multiuse of the sea. In the meantime, a series of informal meetings on

OWFs related issues were held by the Governor of Hiiumaa, in which coastal residents, municipalities, and the defense sector expressed different concerns to be taken into consideration. In June 2012, formal OWFs planning processes began as part of a county-wide marine spatial planning (MSP) process. The Hiiumaa MSP consultation process lasted four years, culminating in the adoption of Estonia’s first marine plan in June 2016. Among others, the plan allocated three areas—i.e., Neupokojev Bank, and the Vinkov and Apollo shoals—for development of the OWE project. However, the MSP plan was contested in court by a local environmental group (Hiu Tuul) and Emmaste municipality, one of four municipalities of Hiiumaa county. In 2017 a legal decision was reached by a Tallinn court in favor of the OWE, which was later upheld by an appellate court.

Developer’s concessions to secure social acceptance

To ensure the social acceptance of the project, the developer Nelja Energia established a Cooperation Agreement in 2017 with Hiiu Municipality, one of the four municipalities of Hiiumaa county. According to the agreement, in order to minimize the visual footprint of the project, the company has agreed to build the OWE at least 12 km from the island and to use only submerged cables if it chose to connect the OWE to the transmission grid via Hiiumaa. Other benefits included the training of technicians and the setting up of a maintenance operations center of the OWE in Hiiumaa. Nelja Energia also agreed to exclude Neupokojev Bank, an important recreational site, from its planned development area. The developer would also support local not-for-profit initiatives and set up a nonprofit association to which it would donate at least 0.2% of its revenue from the sale of electricity, but not less than €0.32 per MW-hour of electricity produced. Finally, Nelja Energia would also create possibilities for Hiiu Municipality residents to invest in the OWE through buying bonds bearing a fixed 15% annual interest. However, recent events (described below) cast uncertainties on the implementation of the agreement. For instance, in 2018, Estonia underwent an administrative reform that resulted in merging of the four Hiiumaa county municipalities into just one Hiiumaa Municipality, meaning that Hiiu Municipality with whom Nelja Energia had signed the agreement no longer exists.

OWE plan invalidated and a new EIA

In May 2018 Enefit Green a RE subsidiary of Eesti Energia (Estonia’s state-owned energy company) acquired Nelja Energia, thereby inheriting the Hiiumaa OWE project. The new developer also prides itself in putting community wellbeing and environmental care at the heart of its operations. However, these promises did not stop the grassroots group,

Hiiu Tuul from pursuing its opposition to the project. The group, which had gathered over 8000 signatures from residents and tourists, enlisted a charismatic spokesperson and the help of an experienced lawyer in its anti-wind campaign. Just three months after Enefit Green took over from Nelja Energia, Hiiu Tuul's legal campaign culminated in a decision by Estonia's Supreme Court in August 2018 invalidating the OWF project plan. The Court opined that the OWF project had not been subjected to sufficient analysis of potential impacts on the marine environment and land-based activities, including planned mitigation measures. This came shortly after (i.e., 4th May 2018) the Ministry of Environment had dismissed the developer's EIA submitted in 2017, due to impact on nature. Nonetheless, while some actors, including Hiiu Tuul read the Court's verdict as a total cancelation of the OWE project, the developer continued to push for its approval. In 2019, Enefit Green submitted an updated EIA (hereafter EIA2) with two separate options to the Ministry of Environment. In both options, the developer proposes to reduce the scale of the OWFs in the TP1 (in Apollo shoal) and TP2 (in Vinkov shoal) development areas (see Fig. 2). The difference is that Option 1 proposes a maximum a 2.5-km distance between TP1 and a marine protected area (MPA) in Apollo shoal, while in Option 2 the maximum distance is increased to 4 km. However, to ensure the economic and technical viability of the OWE project, the developer has increased the height and production capacity of turbines to 260 m and 15–20 MW respectively. Concerned stakeholders submitted written comments to the Environment Ministry. Below, we analyze the OWE conflict grievances and demands of key actors as expressed in interviews and as written submissions.

Conflict mapping: emerging multispecies justice issues and actor positionalities

In this section, we present different representations of the conflict across actor groups (Table 1). We focus on the concerns of the grassroots group and environmental “experts,” given the focus on this paper on the human and nonhuman wellbeing elements of MBJ.

Grassroots Group Hiiu Tuul

First, in order to legally challenge the OWF in court after adoption of the MSP plan, differently concerned Hiiumaa coastal residents formed an environmental non-governmental organization, Hiiu Tuul. Their legal objection was consciously framed around nature protection concerns, judging that concerns around sociocultural wellbeing would not have legal sway. Of particular importance was the impact of the OWE project on bats and migratory birds in (Vinkov shoal, i.e., development areas TP2, TP3 and TP4) (see Figs. 1 and

2) and on fish habitat and other species in the MPA bordering development area TP1. Non-judiciary-based concerns raised related to sociocultural wellbeing, that is, impacts on coastal tourism, the built environment (property value), and human wellbeing (living environment, health, and esthetics). In terms of human wellbeing, respondents are concerned about disruptions to place attachment but also to emotional wellbeing.

The open sea on the horizon carries in itself a big feeling of relief. The sea frees us from everyday tensions and helps to carry on with life... The turning blades of turbines will pull attention to them, and the sea will lose emotional value and become a random video film [Hiiu Tuul 1].

I feel well knowing that my roots are implanted somewhere [Hiiumaa]. If this is transformed in an unacceptable way, then I have lost an important place. We need a place to which we are attached as a home [Hiiu Tuul 2].

Hiiu Tuul also argued that Hiiumaa could achieve clean and self-sufficient energy through a mix of RE sources developed at small scale, including from biomass, solar, and wind energy. Relatedly, some members cast doubt on OWE as a sufficient and reliable alternative to energy produced from oil shale. They also questioned the greenness of OWE, considering the environmental footprints of OWFs from materials procurement to construction, production, and demolition phases. In their written response to EIA2, Hiiu Tuul reiterated the above concerns, adding that EIA2 lacks data on the different concerns raised in relation to the earlier EIA. These include impacts of dredging and sand extraction on seals and on coastal processes (e.g., erosion), as well as limited data on the depth of foundational dredging and the management of excavated sediment. Another key concern is what they see as the industrialization of a “pristine” Hiiumaa landscape that attracts tourists.

Hiiumaa is a tourism island because of its relatively pure and diverse nature. If hundreds of turbines are seen above the sea, then one of our most valuable natural environments would have become an industrial landscape [Hiiu Tuul 1].

In addition, the group is applying for termination of the developer's permit for special use of water on the grounds that there is no legal basis for the OWE project following the Supreme Court cancelation decision of 2018. Acknowledging that RE transition is a priority, Hiiu Tuul nonetheless argues that this is no reason to sacrifice nature protection or the norm of democracy that underpins ocean planning. Based on these claims, Hiiu Tuul requests that the Ministry of Environment should not approve EIA2. However, if the

Table 1 Summary of MJB concerns, and areas of tradeoff possibilities/challenges

Studied actors	Key MJB issues raised	Possible tradeoffs	No compromise
Hiitu Tuul	<p>Wellbeing of nonhumans: Threats to bats, birds, seals, seabed, coastal processes, and land-based nature during construction, operation, maintenance, and decommissioning</p> <p>Sociocultural wellbeing: Industrialization of island and effects on nature tourism, built environment, and human wellbeing (health, esthetics and human-nature relationships)</p> <p>Knowledge: Studies relied upon are outdated and do not reflect situated environmental conditions and human-nature relationships</p>	<p>Specify shutdown periods for operational turbines in relation to bird/bat migration season</p> <p>In situ studies on case-specific socioenvironmental effects and measures for their mitigation</p> <p>Development of small-scale RE from a mix of RE sources</p>	<p>Supreme Court decision (invalidating the OWE proposal) is non-negotiable</p> <p>No OWE in TPI area near MPA</p>
Hiiumaa Environmental Board	<p>Wellbeing of nonhumans: threat to the integrity of Natura 2000 sites, collision of avifauna, and destruction of fish spawning grounds, habitat of seals, and feeding ground (seabed reefs and biota) of bottom-feeding waterbirds</p> <p>Ecosystem approach: Sensitive marine areas (Vinkov shoals) are treated separately (in terms of individual development areas) rather than as an ecosystem as a whole</p> <p>EIA relies on bird studies conducted in a site (Kõpu peninsula) other than that proposed for development</p>	<p>Alternative location of OWE and cables outside MPA (TPI area) and Natura 2000 sites</p> <p>Site-specific analysis of effects and mitigation measures for bats, birds, and marine mammals in sensitive (non-protected) sea areas (Vinkov shoals)</p> <p>Temporary shutdown of wind turbines during high bird/bat migration season (August to November)</p>	<p>MPA is a no-go area</p>
Estonian Fund for Nature	<p>Knowledge and wellbeing of nonhumans: EIA relies on bird studies done elsewhere (Kõpu peninsula) and unreflective of situated environmental conditions</p>	<p>Specify effects on marine mammals, mortality rates for bats and migratory birds, and measures for their mitigation</p> <p>Minimal use of drilling during construction</p>	<p>N/A</p>

Fig. 1 Summary of the developed recognition and capability informed MJB framework. The column Justice for humans reflects key recognitional elements that need strengthening in order to enhance capabilities, as well as procedural and distributive justice for marginalized humans, while the column Justice for nonhumans represents recognitional elements that are vital for the capabilities of nonhuman nature, including how proxy representation could enhance flourishing

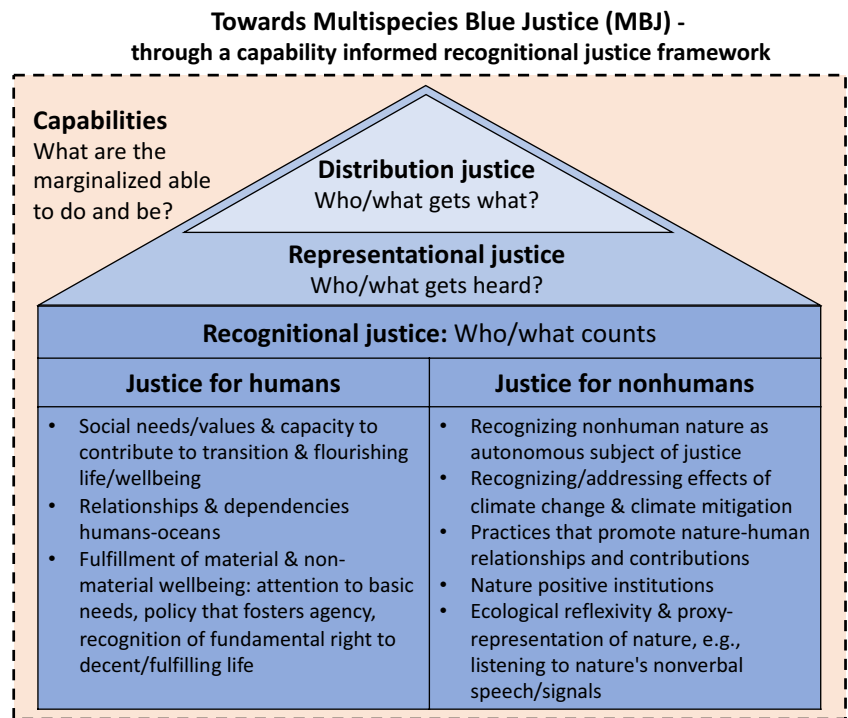
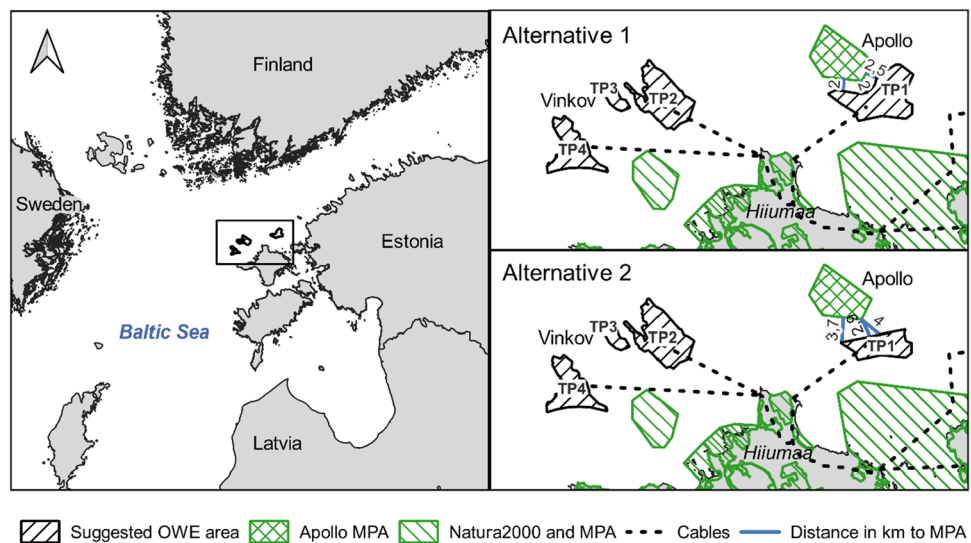


Fig. 2 Map on the left shows the location of the Hiiumaa OWE project north of Hiiumaa island, Estonia. Top and bottom right maps show OWE alternatives as proposed by developer. The difference between alternatives 1 and 2 is the distance of the proposed OWE development area (TP1) from the Apollo MPA. Map of alternatives 1 and 2 are adapted from Skepast & Puhkim and Enefit Green (2019). Data on natura 2000 sites is downloaded from the HELCOM database, Natura2000 (<http://www.eea.europa.eu/legal/copyright>). Map created using QGIS



latter were to be approved, Hiiu Tuul adds, this should be on the condition that a decision is made that restricts the use of windmills (e.g., during migration of birds and bats) and sets stricter limits on the turbine height and total project production capacity (than that currently proposed).

Hiiumaa Environmental Board

Hiiumaa Environmental Board is a decentralized, policy application and monitoring oriented organ of Estonia’s Ministry of Environment based in Hiiumaa. While its role

in the early planning phase of the OWE project was seen by some coastal residents as biased toward the developer (see Tafon et al. 2019), its position vis-à-vis EIA2 is rather critical. For instance, the Board sees the 4 km distance away from the MPA in Option 2 as insufficient and not consistent with the 2018 recommendation by the Ministry of Environment to consider alternative locations outside of the MPA. The Board thus proposes complete exclusion of TP1 from OWE development. It also argues that EIA2 was supposed to also provide analysis of impacts on the ecosystem and organisms in the Vinkov shoal (TP2, TP3, and TP4) and

mitigation measures. While not having a protection status like Apollo shoal (TP1), the Board argues that from an ecosystem perspective, the entire Vinkov shoal is important to migratory Arctic waterbirds (e.g., long-tailed duck, eider, greater scaup), with significant risk of collisions and disruption of feeding and breeding. The shoal is also home to seals, bats, and fish (e.g., eel, garfish). According to the Board, Enefit Green's reliance on bat studies conducted elsewhere (Kõpu peninsula) without actual site-specific studies where its OWE is planned, is insufficient to justify the decision not to propose mitigation measures for impacts on organisms in the Vinkov shoal. However, Enefit Green relied on an existing site-specific ornithological study in developing EIA2. As the study found that the number of waterbirds stopping in any one of the three development areas in Vinkov shoal did not exceed 20000 individuals at a given time, the developer interpreted this as not meeting the Ramsar protection requirements to justify its decision to maintain TP 2, TP3, and TP 4 development sites. However, the Board argues that together, the Vinkov shoal as a whole is a valuable ecosystem and should be considered as such, not in terms of individual development areas. It also believes that the OWE construction will alter and deteriorate the seabed habitat and biota on which numerous bottom-feeding waterbirds depend, and argues that the developer has failed to provide a clear account of feeding area that will be lost for bottom-feeding waterbirds.

The Board also notes that the most important spawning grounds for pikeperch in Estonian coastal waters are located in Hiiumaa. However, it argues, the EIA2 does not report on impacts on pikeperch spawning grounds, as well as on fish (pike, eel) migratory routes, and operations-related noise on fish (especially for a project that will use gravity foundations). Finally, the Board also notes that submarine cables will affect the permanent habitat of gray seal and ringed seal under protection, and that underground cables connecting the OWE to the electricity grid on land will be detrimental to the integrity of Natura 2000 sites on land, as cables are planned to pass through several protected sites, including the Tahkuna, Kukka-Luhastu, and Väinameri nature reserves. The Board thus sees the planned activity as conflicting with guidelines for OWE development as stipulated in different policies, including Energy Development Plan until 2030, the Nature Conservation Plan until 2020 etc. According to the Board, proposals contained in EIA2 seem to be guided by cost efficiency without serious consideration of environmental impact.

Estonian Fund for Nature

The Environmental NGO, Estonian Fund for Nature (hereafter EFN) is concerned that the section on the effects of OWE projects on marine mammals and bats is largely based

on studies done elsewhere and does not reflect the realities of the particular project area. In relation to bats, they argue that EIA2 is inconsistent with the EU 2014 EUROBATS "Guidelines for consideration of bats in wind projects" as well as the Estonian Nature Conservation Act, noting that the developer's assertion that the OWE project will not adversely affect the migratory corridor of bats is a mere assumption based on very limited data, and thus insufficient for an EIA. They also deem the assertion that "no significant death or injury will occur" (for bats) as insufficient and superfluous for an EIA, as it does not specify mortality rates. They also argue that the statement that developers will reduce the speed of turbines during avian migration periods is vague, as it does not specify the time period and speed limit. Furthermore, they also request minimal use of drilling or ramming for gravity foundation. They hope that undue consideration or "carelessness in carrying out the EIA will not be an obstacle to carrying out the [OWE] project necessary for the Estonian renewable energy transition". They also recommend that the developers reflect further on the Supreme Court's decision that annulled the project.

Transformations flowing from the conflict and remaining challenges for MBJ

In this section, we discuss favorable conditions for MBJ that the OWE conflict seems to have engendered, while highlighting remaining challenges.

Transformations: legal precedent and a more reflexive marine planning?

Coastal residents and local environmental group, Hiiu Tuul have been at the forefront of the socioenvironmental conflict surrounding the Hiiumaa OWE project since it was formally announced in 2006. While opposition by the defense sector as well as the environmental concerns raised by the Estonian Fund for Nature may have also played a key role, it is largely to the over-a-decade-long campaign led by Hiiu Tuul that delays in implementing the OWE project can be attributed, at least judging from a key element on which the Supreme Court (case 3–16-1472) based its annulment ruling, viz., insufficient scientific analysis of the project's environmental impacts and mitigation measures. Importantly, experience from the Hiiumaa MSP and related OWE controversy (including the resistance of coastal residents and Hiiu Tuul, as well as the resultant invalidation of the OWE project) seems to have contributed toward transformation of ocean planning in Estonia in two ways. First, it resulted in the Supreme Court OWE plan annulment ruling, effectively establishing a planning judicial precedent in Estonia. Indeed, the Court established that while MSP is only subject

to strategic environmental assessment (SEA) requirements (meaning that it is expected to be less detailed than project specific EIAs), SEA studies should not be limited to minimum statutory requirements in terms of depth and breadth. Beyond MSP, this may also have implications for the planning or development of major infrastructure projects on land or at sea.

Second, the Hiiumaa OWE controversy became a point of reference for stakeholders and planners engaged in the Estonian national MSP process that took place between May 2017 and May 2022. In an attempt to avoid the Hiiumaa “blunder” in which locals dragged the Hiiumaa marine plan in court for at least 2 years, the Estonian government decided to put on hold, until 2027, considerations of OWE development in marine areas that are important for fishing. This decision, which guarantees stability for fishers until 2027 when the situation will be re-evaluated, was reached after strong opposition from fishers about developing OWE in these areas (ERR 2021). It therefore seems that the Hiiumaa marine planning and OWE conflict may have contributed toward changing the attitude of the Estonian government and marine planners toward conflict, from a predominantly negative position to one in which they increasingly take the concerns of diverse sea users more seriously, and proactively taking steps toward addressing the environmental and distributive effects of marine spatial plans. Indeed, in order to avoid a repetition of the Hiiumaa OWE legal controversy, the recent Estonian MSP plan has laid down over 20 conditions for the development of OWE, including the location of wind farms at least 11 km from the coastline (to reduce visual impacts), avoidance of overlap with traditional fishing, respect of natural assets, mitigation of environmental impacts (on fish spawning and the migratory movement of birds and bats), development of a mechanism for the inclusion of locals in the construction and maintenance of turbines, and more (ERR 2021). Furthermore, marine planners also took concrete steps to map the sociocultural values of coastal communities during the national MSP process (Pikner et al. 2022).

Remaining challenges: administrative reform, nonrecognition of sociocultural values and socio-natural ties, and MBJ implications of rapid energy transitions

The above analysis supports our previous argument that conflict is relevant for MBJ analysis in terms of highlighting the (re)politicization of justice, which is in tune with the conflict literature (Bennett 2022; Temper et al. 2020; Scheidel et al. 2020) which foregrounds socioecological conflict as an opportunity to harness diversity and align transitions with the principles of ecological reflexivity, justice, and rights, human and nonhuman. However, despite the positive

changes registered at the national MSP level in Estonia, there still remain important obstacles to MBJ and capabilities. First, the merging of all four Hiiumaa municipalities into one larger municipality (through the 2017 administrative reform) has distanced local decision-making, including on ocean and OWE planning issues further away from communities, with adverse implications for political voice, connections to place and nature, health, culture, environmental citizenship and stewardship, and proxy representation of nature.

Second, the judiciary does not formally recognize socio-cultural values and socio-natural relationships. This nonrecognition reflects the Estonian planning law, which largely reduces impact assessment to consideration of environmental effects in scientific cognitive terms. This increases the likelihood that existing threats to environmental values will materialize and intensify, especially those related to the sociocultural wellbeing of Hiiumaa islanders, including the ability to enjoy recreational activities, bodily health, sensory engagements with the open sea, and emotional bonds of affiliation with one another in relation to the sea. As we have discussed earlier, it is based on their understanding that coastal/marine sociocultural values are not formally recognized that led Hiiu Tuul to focus their legal opposition to the OWE project mainly on environmental arguments, and in scientific cognitive terms. But the issue of nonrecognition of sociocultural rights to the sea/coast is not exclusive to Hiiumaa. This is corroborated by a recent ruling made by a first-tier Tallinn administrative court in relation to a complaint filed by Saaremaa rural municipality councilor, in opposition to the recently adopted Estonian MSP plan, particularly the section that designates areas for OWE development in Saaremaa coastal waters. As reported by ERR (2022), while the court found that the complainant’s concerns about the inadequacies of the EIA could in themselves be well founded, this does not provide sufficient grounds for a complaint for the protection of the “subjective rights” of a person, including the applicant’s “property rights, and the right to health and a quality living environment”.

Finally, lingering uncertainties surrounding the broader geopolitical context of Russia’s invasion of Ukraine and the changing EU policy context on RE deployment as a response to the recent energy crisis are likely to shape RE conflict relations both in Hiiumaa and elsewhere in Estonia. While formalization of the over 20 conditions for OWE development referenced earlier (ERR 2021) will give coastal communities and authorities a degree of political voice in OWE related decisions, there is a risk that this will amount almost to nothing by way of recognition and protection of socio-environmental rights, including the wellbeing and capabilities of affected communities and nonhumans. Rather, these capabilities are likely to be trampled by the EU top-down measures (e.g., EC (European Commission) 2020a, b, 2022a, b) to ramp-up and scale-up RE development, including making

RE an overriding public interest, formalizing renewables go-to areas, easing-up and speeding-up judiciary processes and permit-granting procedures, among others. Indeed, their institutionalization in Estonia is likely to shape the Hiiumaa OWE conflict, in terms of changing power relations and arguably countering at least some interpretations of the Supreme Court ruling, thereby weakening the position of those that are seeking to maintain a “natural” Hiiumaa and a nature-positive energy transition. Another potential risk is the reversal of the local successes registered thus far in halting the human and biodiversity impacts of the OWE project. When combined with huge financial incentives (to RE investors and developers), the EU measures discussed above are thus also likely to weaken the environmental activism and stewardship of grassroots actors and environmental “experts” (i.e., the Hiiumaa Environmental Board, the Estonian Fund for Nature) as the project proceeds. Diminishing the agency of these proxy representatives of nature poses severe risks for the wellbeing and capabilities of vulnerable humans and nonhumans, while ironically relieving industry from the requirements of social accountability and environmental responsiveness. Put together, the EU measures risk setting in motion energy transitions that privilege speed and scale over principles of democracy and wellbeing, human and nonhuman. De-risking the human and nonhuman nature threats of rapid and massive scale RE would require acknowledgement of existing inequities in responsive abilities and resilience between and across differentiated identities, including species, class, gender, age.

Toward nature-positive, people-centered RE transitions

This section explores possibilities to enhance justice for nonhumans and the capabilities of marginalized Hiiumaa islanders in relation to their care for nature, socioecological values and relations, and processes to work toward transforming the existing conflict toward productive, just, and sustainable outcomes. That is, we are concerned with ecological injustices that affect the nonhuman life itself, but also undermine human capabilities that are regarded as valuable and worth protecting.

Hiiu Tuul has expressed concerns that developing the OWE would effectively shift the Hiiumaa seascape (or *islandscape*) from a “*natural place*” to an “*industrial place*,” in the sense that “*Hiiumaa can no longer advertise itself as an island of untouched nature*” [Hiiu Tuul 1]. This view expresses both a social concern to perpetuate “an island way of life” but also implicitly contains within it a concern to preserve a place-based relationship to the nonhuman nature as it is currently experienced. In these two aspects, multiple capabilities are being touched on. The view that

Hiiumaa (and related marine environs) would become an industrial seascape reflects a concern among islanders that nonhuman nature would be adversely affected by the development of OWE, an issue that is supported by concerns over possible bird and bat collision fatalities, and habitat degradation or loss for marine mammals and fish spawning. It also suggests that cultural continuity and socio-economic prospects (i.e., wellbeing and enhanced capabilities) for islanders are intertwined with maintaining and further developing existing interdependent relationships to nature (e.g. through nature-based tourism development and experiences), which is consistent with the literature (Gee et al. 2017; Lepoša and Knutsson 2022).

While institutionalized processes, such as MSP commonly consider environmental implications more or less conventionally, this is cast purely in scientific cognitive and instrumental terms and linked to conceptions of nonhuman nature as a resource and/or biodiversity with no subjective interests, or arguably only concern for how the basic material conditions for life can be met. While we see instrumental representation of nonhuman nature’s functionality as important to get insights into basic material conditions for wellbeing, it is insufficient as it does not adequately capture human and nonhuman capabilities (or means to live a good life) whether intrinsically or in relation to one another. This is not to say that recognizing and representing nonhuman nature’s values are straightforward. As Kenter and O’Connor (2022) note: nature representations can sometimes cut across value justifications. As our reading of islanders’ (especially Hiiu Tuul) concerns shows, the resilience of Hiiumaa ecosystems supports different values and capabilities—a “pristine” Hiiumaa conserves nature (e.g., bats, birds etc.) for its own sake, benefits islanders economically, and supports human-nature relations (Hiiumaa as a nature-based place). In terms of relational and instrumental values, one Hiiu Tuul member stated in an interview that there had been little to no consideration in the EIA on the:

“impact of the activity on nature tourism, which is one of the main types of tourism... People’s wellbeing is not only related to their health, but also to their living environment, including the surroundings, views, or the beach. There is no assessment of property and living environment” [Hiiu Tuul 3].

Such relational and instrumental representations were also clearly stated in Hiiu Tuul’s written submission. But so too were representations of nature’s intrinsic values, as expressed in the following quote:

“[There are no studies on impacts] on the migratory routes of birds, bats and seals... or how OWFs will be maintained when the sea is frozen. This may be important for the effects on seals, as the noise from construction,

operation and decommissioning significantly disturbs seals during calving” [Hiiu Tuul written submission].

A similar concern was expressed by environmental “experts” (the Hiiumaa Environmental Board and the Estonian Fund for Nature), albeit from a purely scientific cognitive viewpoint of nonhuman nature. In the EIA submissions, several of these experts raised concerns that the wellbeing of bats, fish, birds, seals etc. would be harmed through the development of the OWE as proposed, thereby meaning that the OWE proposal reflects a lack of consideration of the wellbeing of different nonhuman species. This is captured in the following quote by the Hiiumaa Environmental Board:

“At the time of writing the EIA report, no bat surveys have been carried out in the proposed area of operation, although there are extensive bat and spring migrations of bats in the proposed area of OWFs. The effects of the project on migratory bats at sea remain essentially unexplored, as such an assessment can only be based on fieldwork carried out on the project” [Hiiumaa Environmental Board].

The Hiiumaa Environmental Board also believes that other aspects of the EIA for the OWE project do not adequately address either proper data collection or lack mitigation measures:

“Sections 3.3.6 and 5.4 of the EIA state that there is an impact on marine habitats and that the loss of marine habitats may occur in 1.2 km²..., which is directly below the wind turbines. At the same time, the EIA report does not provide numerical correlations for the extent to which the feeding area for demersal birds will decrease..., taking into account both the loss of the food base and the avoidance of the wind farm area” [Hiiumaa Environmental Board].

Drawing on our framing of MBJ, engaging productively in conflict presents opportunities for a contextualized sustainability that is likely to establish conditions and relations for enhanced MBJ, as well as successful project implementation. This would include the OWE developers actually performing site-specific social and environmental studies, rather than extrapolating from studies conducted for OWE projects elsewhere. It would also necessitate engaging more meaningfully with the environmental concerns of the Supreme Court and the environmental “experts,” but also with those of Hiiu Tuul in relation to taking better account of the values, capabilities, and wellbeing of humans and nonhuman nature, including their interdependencies and relationalities, in the OWE planning process. Admittedly, similarly to the Hiiumaa Environmental Board and the Estonian Fund for Nature, the Supreme Court ruling was limited to cognitive and regulatory understandings of nonhuman nature as codified in the

planning law—it took no explicit interest in relationality between islanders and nature or the socioecological wellbeing of islanders more explicitly. We argue that ecological reflexivity through proxy representation and institutionalized recognition and protection of nonhuman nature rights and needs (e.g., as in Ecuador’s Constitution) and human-nature relationalities (e.g., as in Bolivia’s Constitution) could be contextualized to support a deeper understanding and consideration in the planning process of the wellbeing of nonhuman nature and the different human experiential, cultural, emotional, environmental, and socio-economic relations to nonhuman nature (Dryzek 1995; Schlosberg 2007). Ineffective recognition, including participation and proxy representation in decisions that affect capabilities to live a good life, maintains environmental relations and develops related socio-economic opportunities, undermines capabilities, and is therefore likely to harm the interdependent relations between islanders and nonhumans. Such recognition would work toward an attentiveness to ecological flows of human and nonhuman connectivity (Celermajer et al. 2020), which would then work to illuminate how pathways for interventions such as OWE can at least take into account the implication of breaking or disturbing relations that currently may be regarded as just and sustainable. Advancing and enhancing multispecies capabilities would also require promotion of educational and awareness-raising programs to build more and better engaged environmental citizens and proxy representatives to support more responsible, cognitive, sympathetic, and convivial engagement with nature, and nurturing the wellbeing of placed-based humans in relation to nonhumans. It recognizes that limited ecological reflexivity is likely to lead to diminished wellbeing, human and nonhuman.

Concluding remarks

The MBJ approach employed here focusses on the intrinsic rights of nature and marginalized humans and the relationships or entanglements between human and nonhuman wellbeing. This enables insights into the relationality between how different human actors see the threat to their wellbeing posed by the OWE proposal—socio-economically, socio-culturally, and socio-environmentally—as well as threats more intrinsic to the nonhuman nature, with which they have a relation. This framework thus decenters anthropocentric interpretations of blue justice, making a case for the rights of nonhumans, but without subverting (especially in the face of rapid RE transitions) the sociocultural, economic, and ecological relationships of local communities with ocean/coastal ecosystems and organisms. The approach taken to handling the conflict (in the Supreme Court ruling) does not seem to countenance the threats to the islanders’ wellbeing directly, as it implicitly, at least, does not recognize

the relationship between human and nonhuman wellbeing. The concerns that have stalled (or in some views canceled) the OWE plan in the Hiiumaa MSP process relate to a lack of evidence presented about the likely impact on different aspects of nonhuman nature and more broadly environmental values, if the proposal were to proceed.

There are opportunities within the existing conflicting actor positions to open-up lines of exploratory engagement to find common ground. This would be beneficial both to advance the OWE project as well as to give certainty around the future for islander actors concerned about the project's implications for multispecies wellbeing. Most promising among these relate to the proponent undertaking of more detailed studies of the ocean's intrinsic, relational, and instrumental values and relatedly developing context specific mitigation strategies in concert with islanders and different environmental "experts" and proxy representatives of nature. While seemingly not a formal requirement on the OWE proponents, it would benefit conflict relations if future EIA work would include different islander socio-cultural relations and economic aspirations linked to environmental values. These possible points of engagement would need to be grounded with the various actors to see whether they could form the basis of productive exchange between the various conflicting positions. Of course, what would benefit such an engagement toward long-term people-centered and nature-positive OWE deployment beyond the case at hand would be the institutionalization of rights of nature, sociocultural values, and human-nature relationalities in planning regulation.

Connected to the above point, adoption of a more ecologically centered viewpoint would recognize the valuable role that the unprotected ecosystems (e.g., the Vinkov shoals when treated as an integrated ecosystem) play in the provision of habitat for migratory birds, bats, and other species. From a MBJ viewpoint, these shoals, among other ecological functions, are integral to supporting species' capacities to fulfil their lifecycle. Recognition of the importance of these shoals also relates to islanders' concerns about the potential of the OWE project transforming a pristine "island landscape" (or seascape) to an industrial landscape (or seascape).

The energy security imperative exacerbated by the existing situation with Russia implies that there will be increased time pressure on building RE capacity. This may also mean that a more conducive public sentiment toward RE is generated. Regardless, steps should be taken (e.g., through environmental education and awareness-raising as well as institutionalized ecological reflexivity and relatedly, proxy representation of nature) to ensure that speed in RE deployment does not undermine norms of democracy, ecological integrity, social wellbeing, and socioecological interlinkages.

Finally, through a case study of an OWE proposal in Estonia, this article has revealed insights on conflict and potential for interface between energy transition and MBJ. In a more general sense, this provides contextual appreciation

of frictions and opportunities for synergies between several of the UN SDGs, particularly in relation to contributions to climate action (and clean energy), biodiversity, health, wellbeing, peace, and justice. While actor positions were found to be rather conflictual, our MBJ approach exposed pathways to constructively engage in these tensions to pursue a more multidimensional and contextualized sustainability that is able to simultaneously deliver additional OWE capacity, meaningfully take into account islanders' economic aspirations and socio-environmental relations, and ensure nonhuman nature's capabilities to flourish.

Appendix List of interviewees with dates and method

<i>Interviewee</i>	<i>Date of the interview</i>	<i>Means of conducting the interview</i>
Member of Hiiu Tuul, inhabitant of Hiiumaa [Hiiu Tuul 1]	16 th March 2022	Face-to-face meeting
Member of Hiiu Tuul, inhabitant of Hiiumaa [Hiiu Tuul 2]	16 th March 2022	Face-to-face meeting
Legal advisor of Hiiu Tuul [Hiiu Tuul 3]	10 th March 2022	Online communication platform
Public official at the Ministry of Environment	30 th March 2022	Online communication platform
Environmental expert involved in assessing potential MPAs, inhabitant of Hiiumaa	24 th April 2022	Communication through e-mail
Representative of Enefit Green	17 th May 2022	Online communication platform

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Author contribution RT: conceptualization, theory, methodology and data acquisition, analysis and interpretation, writing—original draft, writing—review and editing. FS: conceptualization, analysis, theory, writing—original draft, writing—review and editing. TP: data acquisition, analysis and interpretation, writing—original draft, writing—review and editing. All authors have approved the final article. MG: analysis, interpretation and figure, writing—original draft, writing—review and editing.

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Declarations

Ethics approval Not applicable.

Consent to participate All interviewees granted consent to participate in the research.

Consent for publication All authors consent to the publication of this manuscript.

Competing interests The authors declare no competing interests.

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