

Full length article

## Stakeholder mapping and early detection of tensions in offshore wind development: A press analysis in the Gulf of Roses and Cap de Creus (NW Mediterranean)

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### ABSTRACT

This article presents a methodological framework for analysing the social dimensions of offshore wind energy based on newspaper content analysis to identify stakeholders, examine their positions, and anticipate potential areas of conflict and consensus in the early stages of planning. The case study focuses on the Gulf of Roses and Cap de Creus in the north-western Mediterranean (Spain). It combines a systematic review of 319 press articles (1777 stakeholder mentions) with validation through a participatory workshop involving 68 local actors. Together, these complementary analyses provide a mixed-method approach linking media representations with local perceptions, allowing a more grounded understanding of stakeholder visibility, perceived power relations, and potential areas of agreement or tension. This framework also enables the construction of an interest-power matrix and the exploration of discursive dynamics across time and media scales. The results show that newspapers not only report but also shape debate, giving early visibility to particular actors. Regional outlets played a central role in structuring the public conversation, whereas the fisheries sector, prominent in other European contexts, was largely absent from coverage. A Procrustes comparison between press-based positions and workshop outcomes showed strong correspondence ( $r = 0.845$ ,  $p = 0.003$ ), indicating that media analysis can serve as a reliable proxy for stakeholder mapping in early planning phases. The findings demonstrate that press analysis provides a methodologically grounded approach to support more inclusive and context-sensitive marine spatial planning and offshore wind governance, while informing early participatory processes.

### 1. Introduction

The development of offshore wind energy has gained importance in recent years as part of broader efforts to diversify energy sources and mitigate climate change [15]. However, such projects often generate environmental pressures and social tensions, particularly in coastal areas where diverse activities and interests converge [52,63].

In Catalonia, the Gulf of Roses and Cap de Creus ((commonly known

as the Empordà Sea, in the north-eastern Mediterranean) have emerged as particularly sensitive sites from both ecological and landscape perspectives. The debate around offshore wind is therefore unfolding on multiple fronts: social, political, media, and scientific. While some studies frame its development within the urgency of the climate emergency [13], other independent contributions highlight the ecological fragility and biodiversity of the Mediterranean coastline, calling for more precautionary approaches [36,60]. Against this backdrop of

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multiscale controversy, it becomes crucial to identify which actors are shaping the debate and how their positions are represented in the public arena.

Understanding these overlapping dynamics requires the identification of key stakeholders. Stakeholder mapping helps reveal different forms of influence, territorial connections, and potential areas of conflict [47]. It can be defined as the systematic process of identifying and analysing individuals or groups who affect or are affected by a project, based on their interests, power, and interrelations [24,47]. This is particularly relevant in contexts where marine spatial planning plays a central role, as stakeholder analysis can support institutional decision-making by clarifying positions and expectations [24,40,56].

Offshore wind energy projects typically involve public authorities, energy companies, fisheries and tourism sectors, coastal residents, and environmental organisations with strong place-based ties [11,23,25,50,51,7]. These stakeholders differ in their interests, knowledge, and ability to influence outcomes, all of which can affect public acceptance and the trajectory of project development [17,61]. A stakeholder-centred perspective is therefore essential for identifying concerns [37], analysing tensions [1], and creating the conditions for more inclusive and legitimate governance processes [47].

In this study, the term *stakeholder* (or *actor*) is used in a broad sense to encompass any individual, organisation, institution, or collective entity that can influence, or be influenced by, the development of offshore wind energy lease areas or projects. This includes not only decision-making bodies and economic sectors but also social groups and symbolic entities that gain visibility or agency in public debate [26,39,47]. Such an inclusive definition is essential in early planning phases, when formal participation channels are still limited and much of the controversy unfolds through media communication.

Conventional approaches to stakeholder identification include interviews [4], surveys [9], participatory workshops [8], and the analysis of planning and administrative documents [3]. These methods have been widely used in offshore wind studies to explore perceptions, territorial disputes, and institutional challenges [18,2,30,44]. While effective, they are often constrained by limitations of time, budget, or representativeness, particularly in the early stages of planning [32,47].

In this context, our study adopts a mixed-method approach that combines systematic press analysis with participatory validation. The first analysis identifies and categorises stakeholders based on their visibility and positions in newspaper coverage, while the second contrasts these findings with the perceptions of local actors through a workshop held in the study area. By comparing both perspectives, the study explores the correspondence between mediated representations and self-perceived dynamics of influence, providing a robust basis for early detection of tensions and consensus. As a complement, media content analysis has gained increasing attention in social and environmental research [33,41]. Newspapers provide broad thematic coverage and amplify voices that may not be present in formal decision-making arenas [34]. Their analysis makes it possible to trace how issues are framed, who participates in public debate, and how positions evolve over time [49]. To date, these approaches have focused mainly on narratives, discourse, or risk perception in environmental conflicts and renewable energy debates [19,26,53], but not on the systematic identification of stakeholders in offshore wind projects.

The press plays a central role in shaping environmental controversies through processes of agenda setting and framing. According to classic agenda-setting theory, the media not only inform audiences but also influence which issues are perceived as socially relevant [14,38]. Framing analysis has further shown that the selection and emphasis of specific narratives, actors, or metaphors can affect how problems are defined and which solutions are considered legitimate [19,6]. In this sense, newspapers do not merely reflect public debate but actively participate in constructing it, influencing power relations and the visibility of stakeholders within the public arenas of environmental governance [26,53].

Despite its growing use in environmental governance research [22,47], very few studies have applied press analysis explicitly to stakeholder mapping in offshore wind contexts. Existing contributions have mainly examined media coverage and discourse, such as the South Fork Wind and Vineyard Wind I projects in the United States [12], or developments in Germany and Norway [27,54]. These works provide valuable insights but rarely advance towards a systematic classification of actors.

The aim of this article is to examine how media coverage reflects stakeholder visibility and positions, and to assess the extent to which press analysis can contribute to actor identification and to the study of discursive and power dynamics in early planning phases. To the best of our knowledge, this is the first study to apply such a systematic approach in the context of offshore wind in the north-western Mediterranean. At the same time, the offshore wind lease area selected for this study (Gulf of Roses and Cap de Creus) serves as a testing ground for a methodological framework that can be adapted and replicated in other offshore wind contexts. This mixed-method approach contributes to advancing stakeholder mapping methodologies by providing a transferable tool for the early detection of conflicts and consensus in new planning areas. The press is considered here not only as a diagnostic tool for stakeholder visibility, but also as a medium that actively shapes public narratives and power relations in a territory of high social and environmental sensitivity.

## 2. Materials and methods

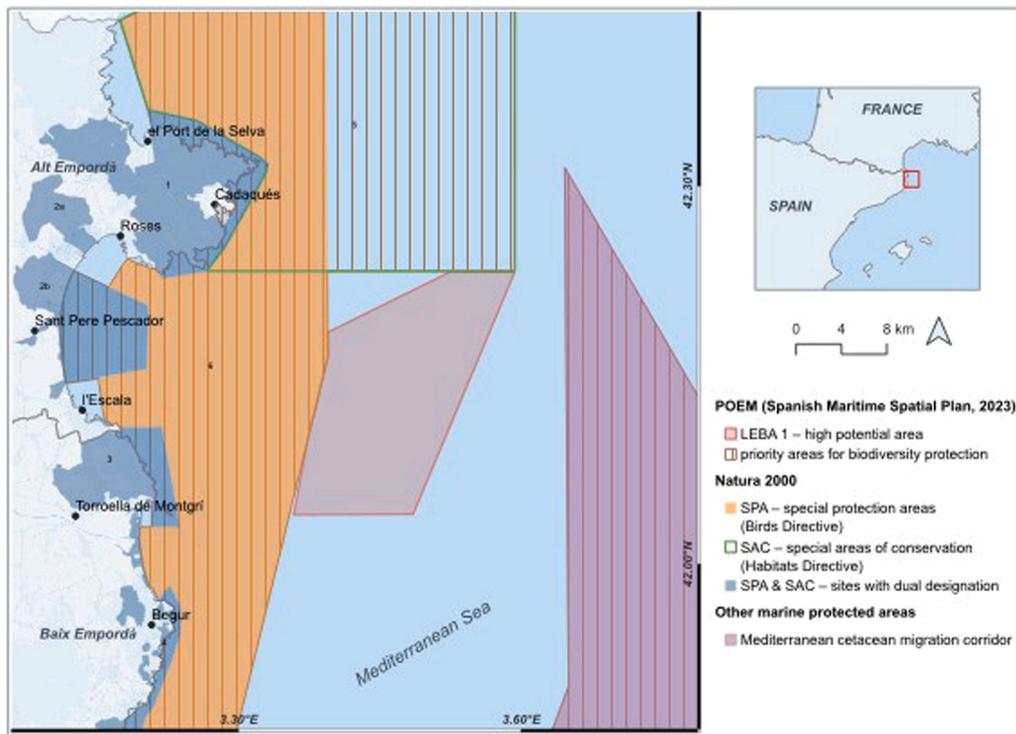
### 2.1. Study area

The study focuses on the Gulf of Roses and Cap de Creus, a coastal and marine area in the north-western Mediterranean characterised by high ecological, scenic and symbolic value. This area was designated as a high-potential zone for offshore wind energy development (LEBA 1) under the Spanish Maritime Spatial Plan (POEM, BOE-A-2023-5704) (Fig. 1). At the same time, it is surrounded by multiple layers of environmental protection. Several Natura 2000 sites overlap in the area, including Special Protection Areas (SPAs) under the Birds Directive, Special Areas of Conservation (SACs) under the Habitats Directive, and sites with dual designation. Many were originally declared as Sites of Community Importance (SCIs), a preliminary category subsequently confirmed as SACs through publication in the *Boletín Oficial del Estado* once their management and conservation measures were approved (Orden AAA/1366/2016). Key examples include Cap de Creus (SPA & SAC), Montgrí-Medes-Baix Ter (SPA & SAC), Aiguamolls de l'Empordà (SPA & SAC), and the Western Submarine Canyon System of the Gulf of Lions (SAC). The area also overlaps with other national designations, notably the Mediterranean cetacean migration corridor, declared a Marine Protected Area in 2018 (Real Decreto 699/2018). The juxtaposition of these protection regimes underscores the environmental sensitivity of the region, while highlighting potential tensions between biodiversity conservation and offshore wind energy development.

### 2.2. Media source selection and timeframe

This study combined multiple methods within a multiscale design [10] to identify, classify, and analyse key stakeholders involved in the offshore wind energy debate in the Gulf of Roses and Cap de Creus. Media outlets were selected according to three criteria: (1) territorial representativeness across local, regional, national, and international scales; (2) consistent coverage of environmental, political, and territorial issues; and (3) their capacity to shape public debate and make stakeholders visible in discussions on offshore wind.

Seven newspapers were selected: one local (Hora Nova), three regional (Diari de Girona, El Punt Avui, and ARA), two national (La Vanguardia and El País), and one international (The New York Times). This selection enabled a geographical analysis of media coverage at



**Fig. 1.** Map of Cap de Creus and the Gulf of Roses (Spain, NW Mediterranean) showing the location of the LEBA 1 (zone of high potential for offshore wind energy) designated by the Spanish Maritime Spatial Plan (POEM, BOE-A-2023-5704), together with Natura 2000 sites and other marine protected areas. SPA: “Espacio Marino del Empordà” (6); SAC: “Western Submarine Canyon System of the Gulf of Lions” (4); and dual SPA & SAC sites: Cap de Creus (1), Aiguamolls de l’Empordà (2a, 2b), Montgrí-Medes-Baix Ter (3), and Litoral del Baix Empordà (8). The Mediterranean cetacean migration corridor is also included (5).

different scales: local (towns of Alt Empordà), regional (province of Girona), and national (Spain). Table 1 presents the selected media, detailing their territorial scale, geographical reach, number of articles retrieved, and total number of stakeholders identified.

The analysis covered the period between February 2021, when the first offshore wind project was publicly announced in the study area, and March 2023, shortly after the official approval of the Spanish Maritime Spatial Plans (Planes de Ordenación del Espacio Marítimo, POEM).

**Table 1**

Overview of selected media outlets, their territorial scope, and quantitative contribution to the analysis of offshore wind energy in the Gulf of Roses and Cap de Creus (February 2021 - March 2023).

Newspaper	Scale	Reach
Hora Nova	Local	Distributed across multiple localities within the Alt Empordà region, serving as a local reference medium.
Diari de Girona	Regional	Primarily distributed across the province of Girona, functioning as a provincial reference medium.
El Punt Avui	Regional	Originating from Girona, it now covers a regional area within Catalonia, serving as a provincial-regional reference medium.
ARA	Regional	Regional reach within Catalonia, addressing state and international issues with particular emphasis on environmental and energy-related topics. A regional reference medium.
La Vanguardia	National	A traditionally Catalan medium, now with extensive national reach and state-wide influence.
El País	National	Distributed nationwide, El País is a reference medium with a strong focus on environmental and energy-related issues.
The New York Times	International	An international reference medium that has reported on the situation.

### 2.3. Article retrieval and corpus definition

Articles were retrieved through systematic searches in the digital archives of the selected newspapers, in both Catalan and Spanish, using a predefined set of keywords. These included *Parc eòlic marí*, *Parc Tramuntana*, *Parc experimental* and *POEM*, which refer to offshore wind projects and related institutional planning tools. The additional keyword *Parc eòlic* (wind farm) was also used to detect generic references to wind energy, allowing differentiation between onshore and offshore cases. This step was essential to ensure the specificity of the corpus for the study area. The full list of keywords, together with their English translations and classification, is provided in Table S1 (Supplementary Materials).

After applying the relevance and contextual filters, a total of 319 articles were retained. This final corpus excluded onshore wind farm cases and ambiguous references, ensuring that all items specifically addressed offshore wind energy in the Gulf of Roses and Cap de Creus. These 319 articles formed the empirical basis for stakeholder and discourse analysis. Each article was imported into MAXQDA software [59] and reviewed in full to identify the main actors involved in the debate and the language used to describe their actions or positions. These elements were systematically coded and organised within the software, creating a database that provided the foundation for the stakeholder classification described in Section 2.4 and for the construction of the interest-power matrix detailed in Section 2.5.

### 2.4. Temporal segmentation and stakeholder coding

To analyse the evolution of the debate and stakeholder engagement, twelve key milestones were identified within the period between February 2021 and March 2023. These temporal blocks were not based on regular intervals but corresponded to institutional events or phases of intense media activity that marked turning points in the public

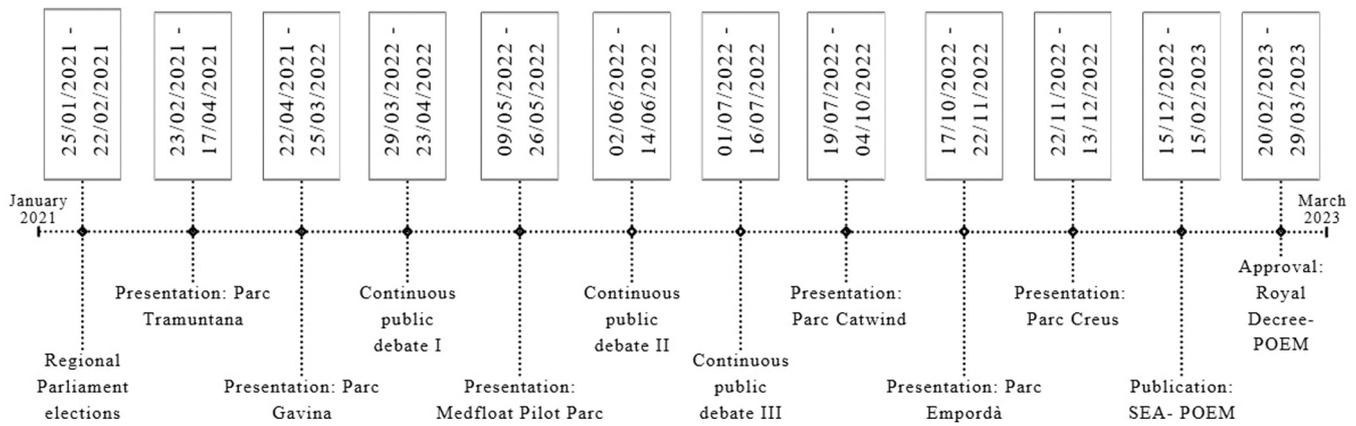


Fig. 2. Timeline of the twelve temporal blocks defined for the media analysis, based on institutional milestones and sustained media activity (February 2021–March 2023). Source: Own elaboration based on content analysis of newspaper articles and official documentation from the Ministry for the Ecological Transition and the Demographic Challenge (MITECO, 2021–2023) and the Spanish Maritime Spatial Plan (POEM, BOE-A-2023–5704).

discussion. Fig. 2 shows the chronology of these blocks and their associated events, while Table S2 provides detailed information on date ranges and documentation. This segmentation made it possible to identify narrative shifts and variations in stakeholder visibility throughout the process.

Stakeholders were identified through a systematic review using MAXQDA of all 319 articles in the corpus. Each article was examined individually to extract explicit mentions of people, groups, organisations, or institutions connected to the debate on offshore wind energy in the study area. Each actor was recorded only once per article, regardless of how many times they were mentioned, in order to avoid the overrepresentation of highly cited stakeholders. The main objective was to identify who participated in the debate and which sector they belonged to, rather than to quantify the frequency of their appearances.

In this study, stakeholders are understood as institutional, collective or symbolic entities that exert or represent influence within decision-making arenas or in media discourse. Symbolic entities refer to actors that, although not formal organisations, acquire discursive relevance in the public sphere, for instance a specific project or territory that becomes emblematic of the conflict. Accordingly, each offshore wind project proposed up to March 2023 was treated as a distinct actor, as each had its own media presence and public identity.

Each stakeholder was classified into one of six overarching groups, further divided into specific subcategories according to their institutional level, economic activity or organisational type: (1) Public administrations (European, national, regional and local levels); (2) Economic sectors, including fisheries and agriculture, the wind energy industry, other industrial activities (such as port operations, construction or small-scale manufacturing), and the tourism sector. The wind energy industry was treated separately from the other industrial activities, as offshore wind represents an emerging activity in an area with little existing industry. Mentions referring to the offshore wind industry were coded when the press referred to companies or the sector in general, without specifying a particular project; (3) Scientific and technical community, encompassing research institutions and specialised experts; (4) Environmental and social organisations, including NGOs, Natural Parks and other civil society groups; and (5) Projects and initiatives, referring to specific offshore wind proposals, both private and public, such as *Parc Tramuntana*, *Gavina*, *Medfloat Pilot Parc*, *Catwind*, *Empordà*, *Creus* and *PLEMCAT*. In addition to this sectoral classification, a discursive coding was applied during the reading of the texts to position each actor within the quadrants of the interest-power matrix. Each mention was highlighted with a colour corresponding to a specific combination of power and interest, based on the type of verb or expression surrounding the actor. This approach draws on principles from Critical Discourse Analysis applied to the study of agency and

representation [16,20,58], where verbs and grammatical structures function as indicators of authority, involvement or discursive subordination. The full set of power-interest combinations and representative discursive indicators is summarised in Table S3.

Each article was treated as an independent coding unit, in which actors received a single colour assignment according to their dominant context. The coded data were then exported through a Code-by-Document Matrix, an analytical tool that cross-tabulates applied codes (rows) with the documents analysed (columns). In this case, each row corresponded to an identified actor and each column to one of the articles in the corpus.

The resulting binary table recorded the presence or absence of each actor in every article, together with the assigned power and interest category. This structure facilitated both the total count of mentions and their temporal distribution, since the documents were already grouped into the twelve blocks defined in Fig. 2. In doing so, the matrix enabled the identification of peaks of visibility and shifts in media representation of stakeholders over time, serving as a bridge between the qualitative discourse analysis and the quantitative assessment developed in the following section.

### 2.5. Interest-power matrix construction

The aim of this step was to evaluate differences in the influence and degree of engagement of the actors identified in the media debate. To this end, an Interest-Power Matrix was developed as an analytical tool widely used in stakeholder studies to position participants according to two dimensions: their capacity to influence decision-making processes and their level of interest or involvement in the issue [39,47].

In this case, the objective was to translate this conceptual framework into a media analysis, allowing us to observe how newspapers discursively construct the relative positions of the different actors and what forms of power or commitment are publicly attributed to them. The resulting matrix provides a synthetic representation of the relations of visibility, authority and involvement that emerge from media discourse during the early phase of offshore wind planning.

To quantify variation in stakeholder positions within the quadrants, a total count of mentions was made for each colour category across all newspapers. For each actor, total power and total interest were calculated as follows:

$$\text{Total Power} = \text{High Power} + \text{Low Power}$$

$$\text{Total Interest} = \text{High Interest} + \text{Low Interest}$$

To obtain continuous coordinates and enable comparison among actors, the data were normalised by calculating the proportion of “high”

cases within each dimension:

Proportion of High Power = High Power / Total Power

Proportion of High Interest = High Interest / Total Interest

These proportions range from 0 (low) to 1 (high) and were used directly to locate each actor within the Interest-Power Matrix, where the X-axis represents Power and the Y-axis represents Interest [47,5].

This operationalisation of power and interest is based on the discursive representation of actors rather than on their formal institutional position. The matrix therefore reflects perceived visibility and engagement in public discourse rather than the actors' actual institutional capacities.

Finally, to understand how these media-based positions relate to the real dynamics of influence and decision-making, this analysis was complemented by a participatory workshop (see Section 2.6), which allowed us to contrast and validate the positions derived from the media analysis with the perspectives of the actors themselves.

## 2.6. Method validation through participatory workshop

To validate the findings derived from the media analysis, a participatory workshop was held in Roses on 24 September 2023 with 68 local stakeholders engaged in the offshore wind debate. Participants represented a broad range of sectors, including local administrations, fisheries, nautical and recreational activities, diving and tourism operators, environmental NGOs, citizen platforms, research centres and technical consultancies. No pre-selection was applied regarding their position on offshore wind energy.

Participants were recruited from the list of stakeholders previously identified in the press analysis via institutional websites and direct outreach, complemented by snowball sampling. All were already involved in, or informed about, the offshore wind discussion in the Gulf of Roses and Cap de Creus (see Figure S1 and Text S1 for recruitment materials and details).

The workshop was part of a broader public event organised by a national research project assessing the potential ecological and social impacts of offshore wind farms in areas of high biodiversity and landscape value, using the Cap de Creus and Gulf of Roses as a case study, with the participatory session held in the morning and a public presentation of project results in the afternoon.

Facilitators defined power as the perceived capacity to influence planning and decision-making, and interest as the level of involvement or concern with the issue. Participants were divided into three groups to encourage active discussion and equal participation. Each group identified key stakeholders and positioned them within an Interest-Power Matrix, following the same methodological framework previously applied to the media corpus. Positions were agreed by consensus.

The three groups converged on a common set of stakeholder categories largely consistent with those used in the media analysis (see Section 2.4). Participants proposed finer distinctions (e.g., separating recreational and commercial fisheries, or diving, nautical and tourism activities) and identified an additional cultural sector. Conversely, the media corpus grouped these activities under broader headings (e.g., tourism sector, primary sector) and treated individual offshore wind projects as separate actors. The three matrices were then consolidated by averaging the positions of each stakeholder to obtain a single validated matrix. Procrustes analysis was performed in RStudio [45] using the *vegan* package [43] to assess the degree of similarity between the two datasets. This method compares matrices by scaling, rotating and translating them, minimising the sum of squared differences.

## 3. Results

### 3.1. Media coverage assessment

Between February 2021 and March 2023 (from the first public announcement of an offshore wind project to the month following the approval of the Spanish Maritime Spatial Plans, POEM), a total of 319 newspaper articles explicitly referencing offshore wind energy in the Gulf of Roses and Cap de Creus were retrieved and analysed (see Section 2.3 and Table S1 for search criteria).

Across this corpus, 1777 mentions of key actors were identified. The distribution of mentions varied substantially across territorial levels. Regional outlets, particularly *Diari de Girona*, accounted for the majority of articles (198) and stakeholder mentions (709), representing 48.6 % and 39.9 % of the totals, respectively. A detailed overview of media outlets, their territorial scope, and quantitative contribution is available in Table S1 (Supplementary Materials).

Stakeholder visibility varied over twelve time blocks corresponding to key institutional milestones or extended periods of sustained public debate. The full temporal segmentation is presented in Table S2 (Supplementary Materials).

Fig. 3 presents a heat map visualising the presence of key stakeholders across the twelve time blocks. The most intense period of media activity occurred between April 2021 and March 2022. Despite the lack of formal milestones, public discourse intensified significantly. During this phase, four actors dominated coverage: the *Parc Tramuntana* wind project (145 mentions), citizen platforms (70), regional administrations (70), and the scientific community (55). This indicates a highly focused debate centred on a few influential voices, even in the absence of new project announcements or regulatory decisions. A second peak in media visibility coincided with the formal approval of the Maritime Spatial Plans in March 2023, when public authorities and offshore wind developers again became prominent. By contrast, other projects (such as *Parc Medfloat* and *Parc Creus*) received far less attention.

Throughout the entire timeframe, commercial fisheries remained largely invisible in the media, suggesting a limited role in public debate or a lack of representation in press coverage. As detailed in Section 2.4, individual offshore wind projects were treated as discursive actors because they acquired their own public identity and symbolic visibility within the media debate. By contrast, *Parc Tramuntana* maintained a steady presence across all twelve time-blocks, reinforcing its role as a central reference point in the media narrative. This pattern reflects the symbolic use of the term *Parc Tramuntana* as a shorthand to represent the entire designated offshore wind development area (LEBA 1), even when articles referred to other projects such as *Gavina*, *Catwind*, or *Medfloat*. This semantic conflation amplified the project's visibility and helped to consolidate its discursive centrality.

This pattern is further illustrated and complemented in Fig. 4, which adds a multiscalar perspective through a bubble timeline. *Parc Tramuntana* features prominently across nearly all time-blocks and media levels, particularly within regional outlets during the early and middle stages of the debate. The figure also highlights how stakeholder visibility varied by context: developers were most visible during project announcements, while the tourism sector and citizen platforms maintained consistent, multi-level presence. Meanwhile, the fisheries sector appeared only briefly, and predominantly in international media between July and October 2022.

Taken together, Figs. 3 and 4 reveal that regional media structured the debate, amplifying the visibility of developers, citizen platforms, and regional administrations, particularly during the early stages of the process. Local newspapers contributed more selectively, often highlighting the role of municipal administrations or community-based groups, while national outlets gave visibility to the approval of the POEM and other institutional milestones. International coverage remained marginal, with isolated peaks linked to global narratives around offshore wind energy and fisheries.



Overall, these trends underscore the central role of regional newspapers in shaping the visibility and perceived relevance of different actors within the offshore wind debate.

### 3.2. Stakeholder relevance

Stakeholder relevance in the offshore wind energy debate was assessed through an Interest-Power Matrix combining data from the media content analysis and a participatory workshop involving 68 local actors. Fig. 5 displays the positions of stakeholders according to both sources (media analysis in blue and workshop results in red). The complete dataset is available in the Supplementary Materials: Table S4 summarises the results derived from the press analysis, while Table S5 presents the averaged power and interest values from the three workshop groups.

The matrix provides a visual interpretation of stakeholder salience, highlighting their perceived degree of involvement (interest, Y-axis) and capacity to influence decision-making processes (power, X-axis).

The Procrustes analysis revealed a strong and statistically significant correlation ( $r = 0.845$ ,  $p = 0.003$ ), indicating an 84.5 % correspondence between both spatial configurations. The  $r$  coefficient represents the degree of correspondence in stakeholder positioning, while the  $p$ -value ( $< 0.01$ ) confirms that this similarity is not random but reflects a shared structure of power-interest relations. This supports the methodological validity of media analysis as a tool for identifying stakeholders and anticipating interaction patterns in early planning stages.

Despite the overall consistency, notable differences emerged. Workshop participants distinguished three administrative levels (local, regional, national), while the media analysis also incorporated the European administration, represented by institutions responsible for energy and environmental planning. Accordingly, regional and national

administrations appeared in the press with high interest but lower power, constrained by European frameworks, whereas in the workshop they occupied the high-power/high-interest quadrant, reflecting their stronger perceived influence at territorial scales.

The offshore wind industry was consistently positioned in the high-power/high-interest quadrant. For comparison, the seven individual projects identified in the press (*Tramuntana*, *Gavina*, *Medfloat Pilot Parc*, *Catwind*, *Empordà*, *Creus*, and *PLEMCAT*) were grouped under the general category *offshore wind industry*, together with other supporting entities.

Conversely, sectors such as commercial and recreational fisheries, local administrations, environmental NGOs, natural parks, and recreational activities clustered in the low-power/low-interest quadrant, reflecting limited visibility and influence. The tourism sector was a partial exception, perceived in the workshop as having slightly greater power due to its economic relevance, yet maintaining low interest in the debate.

The combined analysis thus reveals a highly polarised structure, with no intermediate categories between the high-power/high-interest and low-power/low-interest quadrants. This antagonistic configuration points to a debate dominated by a small number of powerful actors, in contrast with a broad set of local sectors holding marginal or limited influence. Ultimately, this methodological exercise demonstrates that multiscale media analysis can identify key stakeholders, their power-interest relations, and discursive asymmetries in the public debate from its early stages. Its comparison with the participatory workshop further confirms the validity and potential of this approach to anticipate scenarios of conflict or cooperation in offshore wind planning.

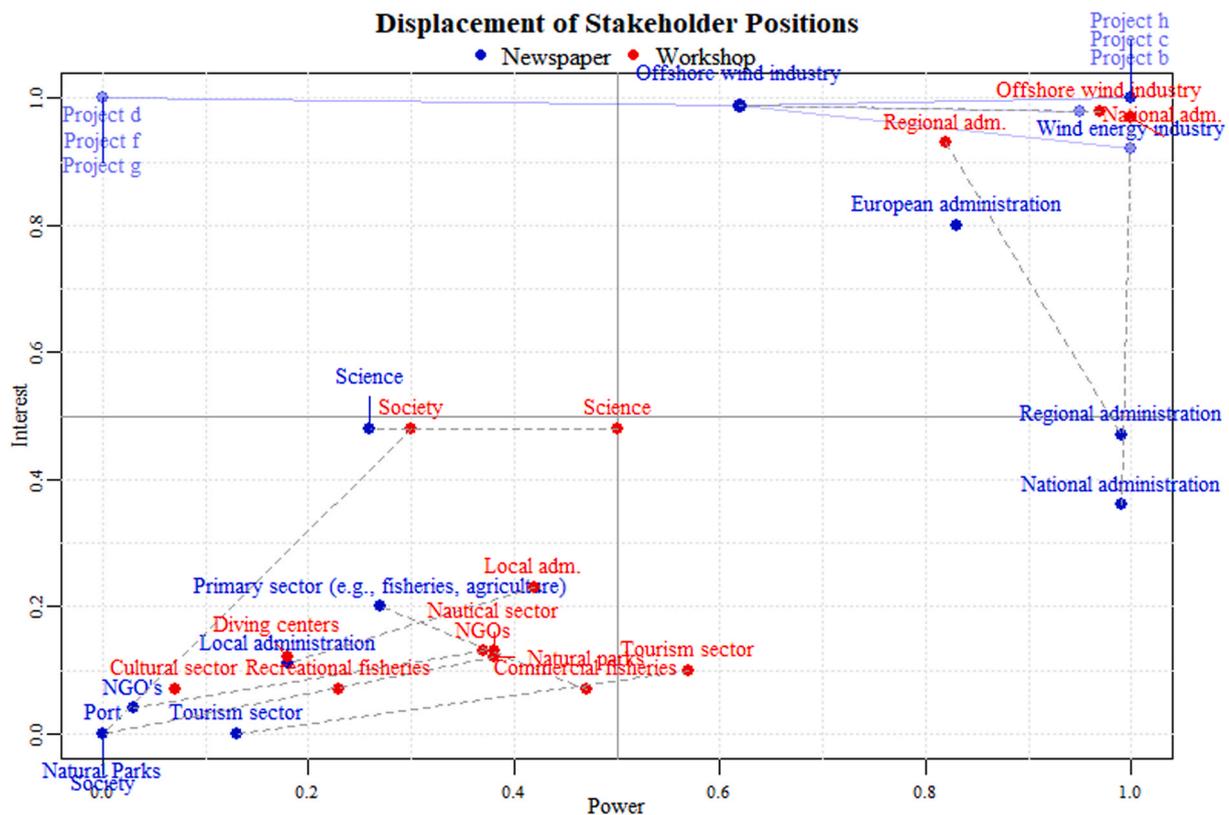


Fig. 5. Positioning of key actors in the Interest-Power Matrix according to press analysis and participatory workshop. The figure compares stakeholder positioning derived from two sources: newspaper coverage (blue) and workshop results (red). Each point represents the centroid of a stakeholder's position along the two dimensions of interest and power. The figure illustrates the degree of alignment between both datasets, highlighting similarities and discrepancies in perceived stakeholder salience.

#### 4. Discussion

This study demonstrates that newspaper analysis can serve as an effective methodological tool to identify key stakeholders, map discourses and explore power dynamics in the early stages of offshore wind planning in the Mediterranean context. Consistent with Carvalho [6] and Entman (1993), our findings indicate that the media not only report events but actively shape public debate by defining which actors, ideas and framings gain legitimacy in public discourse.

One of the most salient insights relates to the variability of stakeholder visibility across media scales. Drawing on Swyngedouw [57] and Devine-Wright and Wiersma [11], our results show that national and international outlets tend to prioritise broader policy frames, such as energy transition or decarbonisation, while local and regional newspapers give greater prominence to territory-specific concerns such as fisheries and landscape protection. Regional newspapers emerged as particularly influential, functioning as the main platform for public debate throughout much of the study period. This was especially evident between April 2021 and March 2022, when media coverage concentrated on a small number of prominent actors, including the promoters of *Parc Tramuntana*, regional public institutions and citizen platforms critical of offshore wind development. The concentration of voices suggests a highly focused, and possibly polarised, media narrative.

In contrast with other contexts (including the North Sea, the north-eastern United States, and Galicia in northern Spain), where commercial fisheries have played a central role in debates around offshore wind [15, 23, 28, 55, 62], their media presence in the Gulf of Roses and Cap de Creus was minimal. This may reflect their relatively limited socio-economic footprint in Catalonia, where the fisheries sector accounts for just 0.02 % of regional GDP and supports around 2000 jobs [29]. These figures contrast with Galicia, where fishing generates 4.8 % of GDP and provides approximately 40,000 direct jobs [62], or the northeastern United States, where fisheries employment exceeds 30,000 in some states [42]. The ageing workforce, decline in active fishers, and absence of strong organisational structures [21] may also limit the sector's mobilisation capacity. In some cases, the prospect of financial compensation may further reduce resistance to offshore wind, although other studies suggest such measures do not always address deeper existential concerns among small-scale fisheries [46]. The persistence of regulatory uncertainty regarding spatial coexistence may also contribute to the sector's limited engagement, as observed in comparable European contexts such as the North Sea [35].

Another key finding concerns the anticipatory role of the media in shaping public narratives before formal decisions are made. As shown by Reyes-García et al. [48], media visibility can precede institutional action, granting early discursive advantage to certain actors. In this case, the *Parc Tramuntana* project became a discursive anchor long before other proposals entered the public arena. Its frequent use as a generic reference for the entire offshore wind development zone (LEBA 1), even when other projects were under discussion, consolidated its symbolic centrality in the debate. This form of semantic simplification helped structure the media narrative but also risked obscuring the diversity of initiatives under consideration.

This symbolic prominence illustrates how early exposure can shape media framings of an entire planning area, irrespective of a project's formal status. While such shorthand references may aid public comprehension, they can also concentrate visibility and skew perceptions of stakeholder relevance. These findings underscore the need for greater critical attention to how media narratives evolve, particularly when they privilege certain actors or proposals at the expense of others. From a governance perspective, this anticipatory visibility can enable informal agenda-setting by well-positioned stakeholders, reducing opportunities for inclusive deliberation.

A further methodological contribution of this study is the construction of an Interest-Power Matrix based on press analysis. This tool made it possible to categorise actors according to their perceived level of

interest and influence. Importantly, the matrix was validated through a participatory workshop involving territorial stakeholders, which enabled direct comparison between media-derived results and perceptions expressed during a face-to-face setting. The strong alignment between both sources suggests that media analysis, despite its limitations, can serve as a robust proxy for stakeholder mapping in contexts where direct access to actors may be constrained.

Compared with other qualitative methods, such as surveys [17], in-depth interviews [23] or snowball sampling [47], newspaper analysis offers several advantages. It allows for the systematic observation of how stakeholder discourses are constructed in the public domain, and it captures both institutionalised and emerging actors, including loosely coordinated citizen movements. It also makes visible the moments when specific actors gain prominence, something that more conventional data collection techniques might overlook.

Nevertheless, this approach has limitations. Editorial decisions and market dynamics often favour the voices of powerful and well-resourced actors, such as developers or public agencies, while marginalising less organised stakeholders. Moreover, press coverage does not offer direct insight into actors' subjective views or motivations, reinforcing the value of combining media analysis with complementary qualitative tools such as interviews or ethnographic observation [31].

#### 5. Conclusions

This study proposes a methodological approach for investigating the social dimensions of offshore wind development by combining media content analysis with participatory validation. Applied to a case in the north-western Mediterranean, this method allowed for the identification of key stakeholders, the interpretation of their positions, and the observation of discursive dynamics across territorial scales and actor categories. It also supported the development of an Interest-Power Matrix, offering insights into which stakeholders hold greater discursive or political relevance in the public arena.

The observed alignment between press-based data and participatory workshop findings indicates that newspaper analysis can serve not only as a diagnostic instrument but also as a valuable means of detecting emerging alliances, tensions and claims to legitimacy. This is particularly relevant in contexts where formal participatory mechanisms are absent or underdeveloped. The anticipatory role of the media was also evident, with certain actors gaining visibility and shaping public narratives prior to any official project announcements or decisions.

A particularly notable finding is the limited media presence of the fisheries sector in the Mediterranean case, in stark contrast to other regions where fishers have played a more prominent role in shaping offshore wind debates. This absence points to the structural challenges faced by certain groups in gaining visibility, whether due to limited organisational capacity, resource constraints or exclusion from dominant discourses. To better capture the perspectives of underrepresented actors, complementary qualitative methods, such as in-depth interviews, should be integrated.

This research highlights the value of addressing both discursive and territorial dimensions when analysing stakeholder dynamics. Such an approach reveals how legitimacy is constructed, how asymmetries in power and representation unfold, and how local interests intersect with broader policy agendas. Incorporating this perspective can contribute to more inclusive, context-sensitive, and equitable processes in maritime spatial planning and offshore wind governance.

The case study also illustrates how media coverage shapes symbolic geographies. The recurrent use of *Parc Tramuntana* as a proxy for the entire offshore development area increased its visibility and influenced how the public understands spatial designations and project identities. Acknowledging this discursive influence is critical for fostering transparent and spatially grounded governance.

Beyond its methodological contribution, this study underscores the importance of integrating discursive analysis into the early stages of

maritime spatial planning. Recognising the uneven distribution of stakeholder visibility across the media landscape can inform the design of more transparent, inclusive, and forward-looking governance frameworks. As offshore wind development expands globally, a deeper understanding of these dynamics will be essential to ensure democratic legitimacy and social acceptance, particularly in coastal areas characterised by diverse and unevenly empowered stakeholder communities.

Overall, the study demonstrates that media content analysis, when applied at early stages of offshore wind development, can act as an anticipatory tool for detecting emerging tensions and symbolic framings, providing actionable insights for more inclusive and legitimate marine governance in the NW Mediterranean and beyond.

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Not applicable.

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### CRedit authorship contribution statement

**Sardá Borroy Rafael:** Writing – review & editing, Supervision, Conceptualization. **Paul Wawrzynkowski:** Writing – review & editing, Methodology, Investigation, Formal analysis. **Josep Vila-Subirós:** Writing – review & editing, Supervision, Conceptualization. **Lloret Romañach Josep:** Writing – review & editing, Supervision, Funding acquisition, Conceptualization. **Laura Garcia:** Writing – review & editing, Writing – original draft, Visualization, Methodology, Investigation, Formal analysis, Conceptualization.

### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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### Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at [doi:10.1016/j.marpol.2025.106978](https://doi.org/10.1016/j.marpol.2025.106978).

### Data availability

Data will be made available on request.

### References

- [1] M. Aitken, Wind power and community benefits: challenges and opportunities, *Energy Policy* 38 (10) (2010) 6066–6075, <https://doi.org/10.1016/j.enpol.2010.05.062>.
- [2] D. Bidwell, The role of values in public beliefs and attitudes towards commercial wind energy, *Energy Policy* 58 (2013) 189–199, <https://doi.org/10.1016/j.enpol.2013.03.010>.
- [3] G.A. Bowen, Document analysis as a qualitative research method, *Qual. Res. J.* 9 (2) (2009) 27–40, <https://doi.org/10.3316/QRJ0902027>.
- [4] A. Bryman, *Social research methods*, 5th ed., Oxford University Press, 2016.
- [5] J.M. Bryson, What to do when Stakeholders matter, *Public Manag. Rev.* 6 (1) (2004) 21–53, <https://doi.org/10.1080/14719030410001675722>.
- [6] A. Carvalho, Ideological cultures and media discourses on scientific knowledge: Re-reading news on climate change, *Public Underst. Sci.* 16 (2) (2007) 223–243, <https://doi.org/10.1177/0963662506066775>.
- [7] A. Chaji, D. Rudolph, S. Kuehn, Public attitudes towards offshore wind power: A review, *Renew. Sustain. Energy Rev.* 178 (2025) 114858, <https://doi.org/10.1016/j.rser.2024.114858>.
- [8] R. Chambers, Participatory rural appraisal (PRA): Analysis of experience, *World Dev.* 22 (9) (1994) 1253–1268, [https://doi.org/10.1016/0305-750x\(94\)90003-5](https://doi.org/10.1016/0305-750x(94)90003-5).
- [9] J.W. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 4th ed., SAGE Publications, 2014.
- [10] J.W. Creswell, V.L. Plano Clark, *Designing and Conducting Mixed Methods Research*, 3rd ed., SAGE Publications, 2017.
- [11] P. Devine-Wright, B. Wiersma, Understanding community acceptance of a potential offshore wind energy project in different locations: An island-based analysis of “place-technology fit”, *Energy Policy* 137 (2020) 111086, <https://doi.org/10.1016/j.enpol.2019.111086>.
- [12] E.P. Diamond, N. Damato, T. Smythe, D. Bidwell, Legitimacy through representation? Media sources and discourses of offshore wind development (Article), *Front. Commun.* 9 (2024) 1401172, <https://doi.org/10.3389/fcomm.2024.1401172>.
- [13] P. Díez-Caballero, M.D. Esteban, D. Greaves, I. López, Environmental compatibility of the Parc Tramuntana offshore wind project in relation to marine ecosystems, *J. Mar. Sci. Eng.* 11 (1) (2022) 25, <https://doi.org/10.3390/jmse11010025>.
- [14] R.M. Entman, Framing: Toward Clarification of a Fractured Paradigm, *J. Commun.* 43 (4) (1993) 51–58, <https://doi.org/10.1111/j.1460-2466.1993.tb01304.x>.
- [15] European Commission. (2020). An EU strategy to harness the potential of offshore renewable energy for a climate neutral future. (COM(2020) 741 final). (<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0741>).
- [16] N. Fairclough, *Analyzing discourse: Textual analysis for social research*, Routledge, 2003.
- [17] J. Firestone, D. Bidwell, M. Gardner, L.A. Knapp, Wind in the sails or choppy seas? People-place relations, aesthetics and public support for the United States’ first offshore wind project, *Energy Res. Soc. Sci.* 40 (2018) 232–243, <https://doi.org/10.1016/j.erss.2018.02.017>.
- [18] J. Firestone, W. Kempton, M.B. Lilley, K. Samoteskul, Public acceptance of offshore wind power: does perceived fairness of process matter? *J. Environ. Plan. Manag.* 55 (10) (2012) 1387–1402, <https://doi.org/10.1080/09640568.2012.688658>.
- [19] W.A. Gamson, A. Modigliani, Media discourse and public opinion on nuclear power: A constructionist approach, *Am. J. Sociol.* 95 (1) (1989) 1–37, <https://doi.org/10.1086/229213>.
- [20] J.P. Gee, *An Introduction to Discourse Analysis: Theory and Method*, 4th ed., Routledge, 2014.
- [21] S. Gómez, J. Lloret, V. Riera, M. Demestre, The decline of the artisanal fisheries in Mediterranean coastal areas: the case of Cap de Creus, *Coast. Manag.* 34 (2) (2006) 217–232, <https://doi.org/10.1080/08920750600686629>.
- [22] M. Gopnik, C. Fieseler, L. Cantral, K. McClellan, L. Pendleton, L. Crowder, Coming to the table: Early stakeholder engagement in marine spatial planning, *Mar. Policy* 36 (5) (2012) 1139–1149, <https://doi.org/10.1016/j.marpol.2012.02.012>.
- [23] T.S. Gray, C. Hagggett, D. Bell, Offshore wind farms and commercial fisheries in the UK: A study in stakeholder consultation, *Ethics Place Environ.* 8 (2) (2005) 127–140, <https://doi.org/10.1080/13668790500237038>.
- [24] R. Grimble, K. Wellard, Stakeholder methodologies in natural resource management: a review of principles, contexts, experiences and opportunities, *Agric. Syst.* 55 (2) (1997) 173–193, [https://doi.org/10.1016/s0308-521x\(97\)00066-1](https://doi.org/10.1016/s0308-521x(97)00066-1).
- [25] C. Hagggett, Over the sea and far away? A consideration of the planning, politics and public perception of offshore wind farms, *J. Environ. Policy Plan.* 10 (3) (2008) 289–306, <https://doi.org/10.1080/15239080802242787>.
- [26] A. Hansen, *Environment, Media and Communication*, Routledge, 2010, <https://doi.org/10.4324/9781315625317>.
- [27] N. Heidenreich, Wind power goes offshore: a comparison of discourses in Germany, Norway and the United States, *Energy Res. Soc. Sci.* 12 (2016) 132–142, <https://doi.org/10.1016/j.erss.2015.12.007>.
- [28] Hogan, F., Hooker, B., Jensen, B., Johnston, L., Lipsky, A., Methratta, E., Silva, A., & Hawkins, A. (2023). *Fisheries and offshore wind interactions: Synthesis of science* (NOAA Technical Memorandum NMFS-NE-291F). National Oceanic and Atmospheric Administration. <https://doi.org/10.25923/n2hx-w639>.
- [29] Idescat. (2022). *Anuari estadístic de Catalunya: Pesca i aqüicultura*. (<https://www.idescat.cat/pub/?id=aec&n=805>).
- [30] A. Jobert, P. Laborgne, S. Mimler, Local acceptance of wind energy: Factors of success identified in French and German case studies, *Energy Policy* 35 (5) (2007) 2751–2760, <https://doi.org/10.1016/j.enpol.2006.12.005>.
- [31] C. Kermagoret, H. Levrel, A. Carlier, A. Ponsoero, Stakeholder perceptions of offshore wind power: A fuzzy cognitive mapping approach, *Soc. Nat. Resour.* 29 (8) (2016) 916–931, <https://doi.org/10.1080/08941920.2015.1122134>.
- [32] J. Kitzinger, Qualitative research: Introducing focus groups, *BMJ* 311 (7000) (1995) 299–302, <https://doi.org/10.1136/bmj.311.7000.299>.

- [33] K. Krippendorff. *Content analysis: An introduction to its methodology*, 4th ed., SAGE Publications, 2018.
- [34] H.D. Lasswell, The structure and function of communication in society, in: L. Bryson (Ed.), *The Communication of Ideas*, Harper & Row, 1948, pp. 37–51.
- [35] J. Leiva López, Marco normativo sobre los parques eólicos marinos en España, *Rev. Aragón. De. Adm. óN. Pública* 60 (2023) 65–89. (<https://dialnet.unirioja.es/servlet/articulo/9021085.pdf>).
- [36] J. Lloret, P. Wawrzynkowski, C. Dominguez-Carrió, R. Sardá, C. Molins, J.M. Gili, A. Sabatés, J. Vila-Subirós, L. García, J. Solé, E. Berdalet, A. Turiel, A. Olivares, Floating offshore wind farms in Mediterranean marine protected areas: A cautionary tale, *ICES J. Mar. Sci.* 82 (3) (2023) 731–740, <https://doi.org/10.1093/icesjms/fsad131>.
- [37] J.M. Loring, Wind energy planning in England, Wales and Denmark: Factors influencing project success, *Energy Policy* 35 (4) (2007) 2648–2660, <https://doi.org/10.1016/j.enpol.2006.12.007>.
- [38] M.E. McCombs, D.L. Shaw, The Agenda-Setting Function of Mass Media, *Public Opin. Q.* 36 (2) (1972) 176, <https://doi.org/10.1086/267990>.
- [39] R.K. Mitchell, B.R. Agle, D.J. Wood, Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts, *Acad. Manag. Rev.* 22 (4) (1997) 853–886, <https://doi.org/10.5465/amr.1997.9711022105>.
- [40] A. Morf, J. Moodie, J. Piwowarczyk, M. Kull, K. Gee, G. Kelleher, Advancing marine spatial planning: a call for action, *Mar. Policy* 104 (2019) 103423, <https://doi.org/10.1016/j.marpol.2019.01.007>.
- [41] K.A. Neuendorf. *The Content Analysis Guidebook*, 2nd ed., SAGE Publications, 2017.
- [42] NOAA, Fisheries economics of the United States, 2021, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, 2023. (<https://www.fisheries.noaa.gov/national/commercial-fishing/fisheries-economics-united-states>).
- [43] Oksanen, J., Simpson, G.L., Blanchet, F.G., Kindt, R., Legendre, P., Minchin, P.R., ... Wagner, H. (2024). *vegan: Community ecology package* (Version 2.6-8) [R package]. (<https://CRAN.R-project.org/package=vegan>).
- [44] R. Phadke, Resisting and reconciling big wind: Middle landscape politics in the new American West, *Antipode* 43 (3) (2011) 754–776, <https://doi.org/10.1111/j.1467-8330.2010.00838.x>.
- [45] R Core Team, R: A language and environment for statistical computing, R Foundation for Statistical Computing, 2023. (<https://www.R-project.org/>).
- [46] N. Reckhaus, *The ongoing conflict between offshore wind farms and the fishing industry in the North Sea (Master's thesis)*, University of Groningen, 2022.
- [47] M.S. Reed, A. Graves, N. Dandy, H. Posthumus, K. Hubacek, J. Morris, L. C. Stringer, Who's in and why? A typology of stakeholder analysis methods for natural resource management, *J. Environ. Manag.* 90 (5) (2009) 1933–1949, <https://doi.org/10.1016/j.jenvman.2009.01.001>.
- [48] V. Reyes-García, O. Andrés-Conejero, A. Fernández-Llamazares, I. Díaz-Reviriego, A road to conflict: Stakeholder's and social network analysis of the media portrayals of a social-environmental conflict in Bolivia, *Soc. Nat. Resour.* 32 (4) (2019) 452–472, <https://doi.org/10.1080/08941920.2018.1544687>.
- [49] D. Riffe, S. Lacy, B.R. Watson, F.G. Fico. *Analyzing Media Messages: Using Quantitative Content Analysis in Research*, 4th ed., Routledge, 2019.
- [50] D. Rudolph, J.K. Kirkegaard, I. Lyhne, Ringing the bells of public participation in planning: A tale of three wind energy projects, *Energy Res. Soc. Sci.* 39 (2018) 216–234, <https://doi.org/10.1016/j.erss.2017.11.010>.
- [51] Y. Rydin, M. Lee, S.J. Lock, L. Natarajan, Public engagement in decision-making on major wind energy projects, *J. Environ. Law* 30 (1) (2018) 107–133, <https://doi.org/10.1093/jel/eqx024>.
- [52] Ó. Saladié, Percepción social de los parques eólicos marinos, in: M. De Andrés, C. Zografos, E. Roca (Eds.), *Cambio global, cambio climático y políticas públicas: Perspectivas desde la geografía*, Oikos-Trea, 2014, pp. 267–286.
- [53] M.S. Schäfer, M. Taddicken, Mediatization of science as a public good: Researching the media coverage of climate change, *Stud. Commun. Sci.* 15 (2) (2015) 233–245, <https://doi.org/10.1016/j.scoms.2015.03.002>.
- [54] A. Schmidt, Media frames and policy learning: A comparative study of nuclear power in Germany and Norway, *Polit. Policy* 44 (3) (2016) 430–456, <https://doi.org/10.1111/polp.12157>.
- [55] M.F. Schupp, M. Bocci, D. Depellegrin, A. Kafas, Z. Kyriazi, I. Lukic, G. Krause, Toward a common understanding of ocean multi-use, *Front. Mar. Sci.* 8 (2021) 614725, <https://doi.org/10.3389/fmars.2021.614725>.
- [56] L.C. Stringer, A.J. Dougill, E.D.G. Fraser, K. Hubacek, C. Prell, M.S. Reed, Unpacking “participation” in the adaptive management of social-ecological systems: A critical review, *Ecol. Soc.* 11 (2) (2006) 39. (<https://www.jstor.org/stable/26267801>).
- [57] E. Swyngedouw, Scaled geographies: nature, place, and the politics of scale, in: E. Sheppard, R.B. McMaster (Eds.), *Scale and Geographic Inquiry: Nature, Society, and Method*, Wiley-Blackwell, 2004, pp. 129–153.
- [58] T. Van Leeuwen, *Discourse and Practice: New Tools for Critical Discourse Analysis*, Oxford University Press, 2008, <https://doi.org/10.1093/acprof:oso/9780195323306.001.0001>.
- [59] VERBI Software. (2020). MAXQDA 2020 [Computer software]. VERBI Software. (<https://www.maxqda.com>).
- [60] P. Wawrzynkowski, C. Molins, J. Lloret, Assessing the potential impacts of floating Offshore Wind Farms on policy-relevant species: a case study in the Gulf of Roses, NW Mediterranean, *Mar. Policy* 172 (2024) 106518, <https://doi.org/10.1016/j.marpol.2024.106518>.
- [61] M. Wolsink, Wind power implementation: the nature of public attitudes: Equity and fairness instead of ‘backyard motives’, *Renew. Sustain. Energy Rev.* 11 (6) (2007) 1188–1207, <https://doi.org/10.1016/j.rser.2005.10.005>.
- [62] Xunta de Galicia (2024). *Anuario de pesca de Galicia 2024*. Consellería do Mar, Xunta de Galicia. (<https://mar.xunta.gal>).
- [63] C. Zografos, Conflictos ambientales, participación pública y justicia distributiva: Una visión crítica, in: E. Roca (Ed.), *Conflictos ambientales: El papel de la participación pública*, Icaria, 2010, pp. 19–39.