

Exploring the Black Box of Relationship Between Place Attachment and Residential Renewable Energy Technologies - A Systematic Literature Review

Zhu Yijun¹, Nabsiah Abdul Wahid, Shaizatulaqma Kamalul Ariffin²

¹Graduate School of Business, Universiti Sains Malaysia, Pulau Pinang, Malaysia

²Graduate School of Business, Universiti Sains Malaysia, Pulau Pinang, Malaysia

ARTICLE INFO

Received: 12 Oct 2024

Revised: 10 Dec 2024

Accepted: 22 Dec 2024

ABSTRACT

Introduction: Place attachment enables people to embrace sustainability discourses and deal with social change and action on renewable energy technologies, often deployed strategically for environmentally friendly consumption behaviors. Despite the growing number of studies examining the influence of place attachment of pro-environmental behaviors and renewable energy technologies, limited studies have explored the effectiveness of place attachment in influencing social acceptance and purchase intention of household renewable energy technologies through a literature synthesis. Thus, there has been no systematic consolidation of the research in place attachment to identify the effectiveness of place attachment established for their role in determining the social acceptance and purchase intention of renewable energy technologies to provide a detailed understanding of how it has evolved over the years to the researcher's knowledge.

Objectives: This study aims to conduct a structured review and bridge the gap by examining the evolution of effectiveness of place attachment of renewable energy technologies in the last twenty years and offer further promising directions for future research by bibliometric analysis.

Methods: Based on the PRISMA four-stage identification, screening, eligibility, and study inclusion technique, this study explored the usefulness of bibliometric analysis for the analysis of 68 articles.

Results: Through bibliometric analysis, the leading authors, outlets, countries/regions, and articles of healthy aging research were visualized over 15 years (2010-2024). It provides a comprehensive overview of the effectiveness of place attachment in renewable energy technology research, demonstrates intellectual advances in the field, and detects promising research directions in the future.

Conclusions: The findings of the study identify influential authors, articles, and journals over 15 years (2010-2024), illustrate the intellectual structure of the literature, and better understanding the important of place attachment on renewable energy technology which provide an opportunity to improve energy promotion and transformation around the world to reduce carbon emissions.

Keywords: place attachment, renewable energy technologies, social acceptance, purchase intention.

INTRODUCTION

Energy is what drives the global economy and is found in the form of electricity and primary energy resources (Wang et al., 2023). According to (Bp, 2021), oil and natural gas reserves could last just 53.5 and 48.8. Although coal is the most abundant fossil fuel, it is also predicted to become extinct in 139 years (Al-abadi & Al-qatrani, 2023). Globally, these fossil fuels contribute 85% of primary energy consumption (Ağbulut & Sarıdemir, 2021). However, these leading fossil fuels combustion that contribute to greenhouse gas emissions and climate change which threaten

sustainable development and even caused millions of deaths and serious diseases as a result of harmful gas emissions (Zhang & Li, 2023). The dominance of fossil fuels threatens the sustainability of energy systems has become a worldwide phenomenon on an ecological and social level (Bashir et al., 2024). According to the International Renewable Energy Agency, energy transition is the process of moving away from fossil fuels and toward zero-carbon energy by the second half of the 21st century (Carrington & Stephenson, 2018). It calls for a transition from fossil fuel-dominated electricity mix to one that is dominated by renewable sources of energy and technologies such as clean fuels and conversions. The displacement of fossil resources by low carbon and, especially, renewable energy resources is imperative to mitigate these threats (Wang & Azam, 2024).

A transition away from fossil fuels involves important issues of social acceptance of technology, and public participation is likely to play a significant role (Rilling et al., 2024). A key aspect of the transition to a sustainable energy future is the adoption and continued use of renewable energy technologies (Al-Emran & Griffy-Brown, 2023). It is therefore important to understand the relationship between economic development and energy consumption, and effectively improve renewable energy transition for a better relationship and sustainable development. A greater understanding of what drives social acceptance and engagement in the renewable energy technology have become increasingly important as the global demand for renewable energy increases, particularly at the household and community levels (Almrafee & Akaileh, 2023; Masukujjaman et al., 2021). It has emerged that residents' attachment to their local community plays a crucial role in influencing their acceptance and purchase intention towards renewable energy (Kim et al., 2023; Parkins et al., 2018; Pei, 2019).

Place attachment refers to the ties between a particular place of residence and the social network of that place, as well as the relationships between interpersonal relationships and social networks defined by Kasarda & Janowitz (1974). Attachment to a place or community can give rise to an individual sense of responsibility for the environment of that place, thereby encouraging environmental sustainability behaviors (Daryanto & Song, 2021). The existing literature on community renewable energy projects suggests that a sense of place attachment can strongly influence consumer pro-environmental behavior and purchase decision-making (Bauwens & Devine-Wright, 2018; Mjahed Hammami & Abdulrahman Al Moosa, 2021). Given the strong relationship between social acceptance of renewable energy technologies and place attachment, there has been increasing studies on the role of place attachment in household sector (Cousse, 2021; Reis et al., 2021; Roddis et al., 2020; Segreto et al., 2020). Besides, there is evidence on the motives of participants in community wind energy projects has shown that it is particularly community identity and attachment, rather than financial motives, that motivate residents to become users (Radtke et al., 2022). Rural residents with low place attachment would have lower acceptance and adoption intentions, would be less willingness to accept and support renewable energy in their communities, and they would not feel comfort at home when using renewable energy compared to consumers with high place attachment (Goudriaan et al., 2023). Considering this, it's not surprising that academic attention to place attachment has been actively increasing, providing in-depth insight into the social acceptance and purchase intention of renewable energy technologies.

From the marketing perspective, adoption of the renewable energy technologies has been seen as a promising and emerging trend due to it contribute to local economic growth and jobs creation by boosting smart grid infrastructure and providing valuable flexibility services to be traded in emerging markets, thus accelerating the low-carbon transition (Reis et al., 2021). In the communities, since rural and isolated areas have a problem with electricity and heat supply, the renewable energy technologies are organized as the solution which including hydro, biomass, photovoltaic and wind (Rahman et al., 2022). It has been proven that place attachment enables people to embrace sustainability discourses and deal with social change and action on renewable energy technologies, often deployed strategically for environmentally friendly consumption behaviors (Hesari et al., 2020; Kim et al., 2023; Le et al., 2023; Nasr et al., 2022).

The existing literature has attempted to investigated different types of place attachment that contribute to pro-environmental behavior, for example community resilience in city emergency (Wang et al., 2023), climate-related civic engagement (Pradhananga et al., 2021), reduce plastic bag consumption (Le et al., 2023), residents' household waste recycling intention (Hua et al., 2021; Pei, 2019), urban residents' environmental citizenship behaviour (Soopramanien et al., 2023), locals' eco-environmental conservation in protected areas (Zhang et al., 2020) and sustainable consumption behavior (Dong et al., 2020). However, the degree of place attachment that influence the social acceptance and purchase intention is challenging due to the differences in some factors, including individual

characteristics (i.e. socio demographics, length of residence and social bonds) (Dlamini et al., 2021), social factors (i.e. social capital) (Kuo et al., 2021), physical factors (i.e. presence of place) (Casakin et al., 2021) and contextual factors (i.e. population size and density) (Ma, 2021).

In terms of renewable energy technologies, some studies also found that different types of place attachment have formed different attitudes and actions on community-based renewable energy projects or large-scale renewable energy technologies (Buchmayr et al., 2021; Goudriaan et al., 2023; Roddis et al., 2020; Veelen & Haggett, 2017). It is therefore imperative for place attachment research to go beyond the research boundaries of psychological aspects of behavior motivations and constraints in order to promote an understanding of social acceptance and purchase intention of renewable energy technologies.

Despite the growing number of studies examining the influence of place attachment of pro-environmental behaviors and renewable energy technologies, limited studies have explored the effectiveness of place attachment in influencing social acceptance and purchase intention of household renewable energy technologies through a literature synthesis. Thus, there has been no systematic consolidation of the research in place attachment to identify the effectiveness of place attachment established for their role in determining the social acceptance and purchase intention of renewable energy technologies to provide a detailed understanding of how it has evolved over the years to the researcher's knowledge. Some researchers proven that such a holistic review is crucial to conduct since it allows for a comprehensive systemic review and provides future directions that are instrumental to develop promoting renewable energy technologies and relevant research in the future (Elahi et al., 2022; Wijekoon & Sabri, 2021; Zhang & Dong, 2020).

To provide a better understanding regarding the effectiveness of place attachment that influence social acceptance and purchase intention on renewable energy technologies, this study aims to conduct a structured review and bridge the gap by examining the evolution of effectiveness of place attachment of renewable energy technologies in the last twenty years and offer further promising directions for future research by bibliometric analysis. Comprehensive literature reviews are intended to establish a reference framework for any field of research, however, they are also associated with author judgement bias (Babic et al., 2019; Klamer et al., 2017). Through bibliometric analysis, a literature review can be supplemented with a broader understanding of the intellectual structure that can be visualized by current and future researchers alike (Donthu et al., 2021a; Donthu et al., 2021b). Besides, bibliometric analysis can also be helpful for identifying emerging themes over time from a large body of literature and gain a one-stop overview (Donthu 2021; Ye et al., 2020). Bibliometric analysis has been widely applied in business research (Donthu et al., 2021; Forliano et al., 2021; Kumar et al., 2020), green marketing research (Liu et al., 2023; Qin et al., 2022; Saleem et al., 2021) and sustainable consumption behaviors for household renewable energy technologies (Ashraf Fauzi et al., 2023; Kumar & Harichandan, 2022; Vergura et al., 2023) to visualize cumulative knowledge development across different research fields.

Specifically, articles published in leading green marketing and renewable energy journals on place attachment as the determinants of social acceptance and purchase intention for renewable energy technologies topics are extracted from the Web of Science (WoS) database and synthesised through bibliometric analysis to a) highlight publication trends and outlets, b) investigate the intellectual structures of the evolution and development of effectiveness of place attachment in influencing the social acceptance and purchase intention research for renewable energy technologies, c) explore the direction of future research.

This paper contributes in three ways. Firstly, the analysis method based on bibliometrics can be used to describe the evolution and overall status of the effectiveness of place attachment established for their role in influencing the social acceptance and purchase intention for renewable energy technologies research and can provide more relevant and reliable statistical analysis. Secondly, very few reviews and summaries that concern the place attachment as the determinants of social acceptance and purchase intention for renewable energy technologies to the research's knowledge which emphasize the originality of this paper. Finally, the existing inconsistency in whether place attachment effectively influence social acceptance and purchase intention for renewable energy technologies and a lack of adequate explanation of it. It has been demonstrated in previous studies that individuals may have a sense of place attachment, but social acceptance and purchase intention may not necessarily lead them to make renewable energy technologies acceptance and purchases (Corbett et al., 2022a). Along with the absence of a review addressing this issue, prompted the author to review existing relevant literature on inconsistency as related to social acceptance

and green purchasing behavior and contributes to deeper understanding of the related research and offers scholars' orientation for future studies in this field.

The remaining parts of this paper is organized as follows. Firstly, the methodology section provides more details on the data collected and software used. Then, a bibliometric analysis of literature will be presented with performance analysis and science mapping. Finally, the final section of the paper summarizes main findings and discusses limitations of the study as well as future research directions.

METHODS

An initial step in a bibliometric study is to identify relevant studies consistent with the study's objectives (Donthu et al., 2021a). In this study, the systematic review was conducted and reported using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) method (Page et al., 2021). PRISMA encourages a transparent and comprehensive process for selecting and including research papers for further analysis (Rethlefsen et al., 2021). Due to its replicability and the possibility of reducing bias, this method has been applied in renewable energy consumption research (Jabeen et al., 2021; Oláh et al., 2020). Thus, this study would follow PRISMA method in four consecutive steps: identification, screening, eligibility and study inclusion (Page et al., 2021).

In order to collect literature data, this study select relevant topic from Web of Science (WoS) databases for bibliometric analysis. In recent years, WoS has become a key data source for bibliometric analysis because of its multidisciplinary nature, comprehensive coverage of data, and extensive citation networks (Pranckutė, 2021). It provides researchers with access to a huge database of bibliographic information from many reputable journals (De Moraes & Kafure, 2020).

In the first step (identification), with the help of the 'OR' notation, a series of keywords such as 'renewable energy technology', 'renewable energy project', 'renewable energy equipment', 'rooftop solar', 'photovoltaic', 'wind-based equipment', 'wind turbines', 'hydropower equipment', 'hydropower project', 'geothermal system', 'geothermal technology', 'tidal energy projects', 'bioenergy technologies' and 'bio-energy systems' have been searched in the WoS database with the term 'place community' and 'social acceptance (purchase intention or adoption intention or installation intention or attitudes) to defined this study's field boundary, i.e., Topic = "place attachment" AND Topic = "social acceptance". Data retrieval for the literature was performed on July 15, 2024, leading to an initial total of 9,394 research publications.

As a second step, papers were screened in accordance with the inclusion criteria. Including only journal articles is based on the highly rigorous peer review process to publish and disseminate novel insights of the highest quality. Subsequently, English-language articles were filtered by applying the inclusion criterion. After the screening step, 3,375 papers have been excluded, leaving 6,019 papers to be review. The third step of the process was to determine the eligibility of the papers. For a research study to be eligible for content analysis, its title, keywords, and abstract must be appropriate to the study's scope. Besides, for the purpose of ensuring objectivity, all authors reviewed inclusions and exclusions. In the proceeding, 343 papers were selected for inclusion and 5,676 papers were excluded. In the final stage, 68 papers were selected for consideration according to their relevance to understanding the effectiveness of place attachment that influence consumers' purchase intention on household renewable energy technologies by the PRISMA guidelines (see Figure 1.).

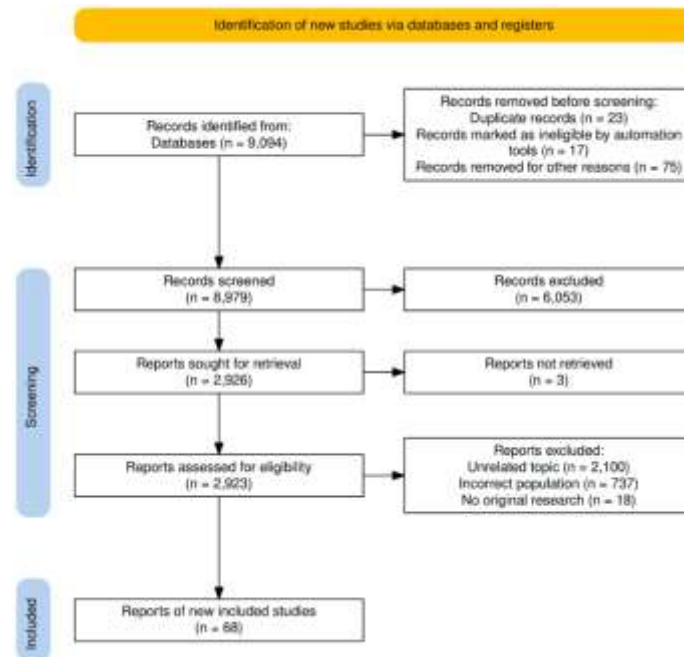


Figure 1. Flow diagram for search from PRISMA

RESULTS

3.1 Performance analysis

3.1.1 Public trend

According to Figure 2., the number of articles about effectiveness of place attachment that influence consumers' purchase intention on renewable energy technologies published in 38 journals in the fields of environment, sustainability and energies between 2010 and July 2024 is based on the final 68 journal articles produced by the PRISMA technique. Between 2019 and 2020, the number of articles increased and became a high-point, followed by a decrease after that. In this figure, the pioneering article published by in 2010 took offshore wind technology as an example investigated the role of place attachment in shaping consumer' s purchase intention of wind farm.

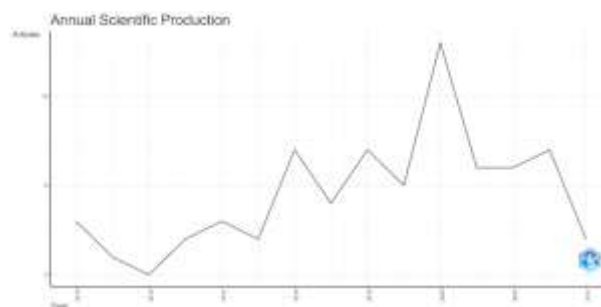


Figure 2. Publication trend

The average number of publications in the first 5 years (2010-2014) was 1.8 publications per year. It may be due to the limited global attention in these years to the relationship between place attachment and purchase intention of renewable energy technologies lead to a lack of early research in this domain. As global warming and climate change worsen, there is growing call for increased use of clean and renewable energy. In response to sustainability and improved quality of life, the researchers in investigate consumer purchase intentions have grown significantly, and more attention is being paid to the between the place attachment and purchase intention of renewable energy technologies. As a result, 25 publications were published between 2015 and 2019, accounting for 36.76% of all publications. Subsequently, it is expected that research into place attachment and renewable energy technologies will continue to see an upward publication trend due to government emphasis and the United Nations declared 2014-2024 the Decade of Sustainable Energy for All (United Nations, 2012). Then, there is a peaked in 2020 with the

highest number of 13 articles. The recent 5 years (2020-2024) contributing 34 publications which is the highest amount among the three period.

3.1.2 Three-field analysis

As shown in Figure 3., a three-field plot depicts the connections between sources (left field), keywords (middle field) and countries (right field) mapped with top 10. It provides a useful insight into the association between these top-ranking keywords and the journals they are associated with. Also indicated is the preference of highly ranked journals for studies related to certain specific contexts. The height of rectangle nodes within the collaboration network reflects the frequency of occurrence of a given country, keywords, or sources.

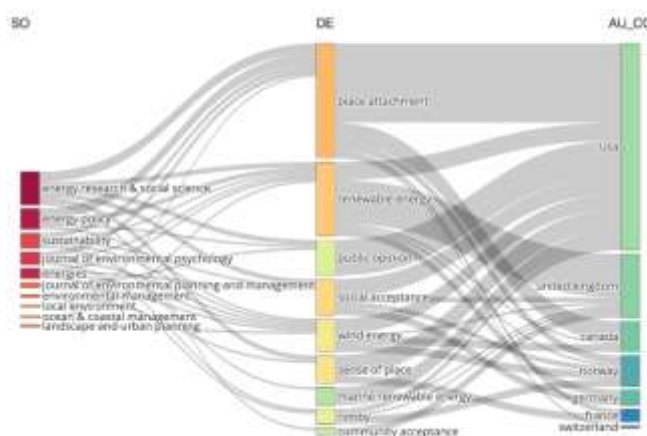


Figure 3. Three-Field Plot

According to the figure, ‘place attachment’ as a keyword was most frequent in the published articles expect ‘renewable energy’ while the keywords ‘public opinion’ and ‘social acceptance’ following in the top rank. The maximum number of publications featured in Energy Research & Social Science followed by Energy Policy and Sustainability. Regarding the sources on the right, the maximum publications were from the USA followed by United Kingdom and Canada.

3.1.3 Number of citations by journals

Journal citation index is a measure of the reputation of the journal and how important researchers consider its articles when conducting research. As for journal representations, Figure 4. shows the top 10 productive contributing of publications on this topic from 2021 to 2024 in selected journals. In Figure 4., the impact of the highly cited sources was visualized, showing that Energy Policy, Journal of Environmental Psychology, and Energy Research & Social Science were in the top three positions with 517, 234, and 179 citations, respectively. An overview of the details is given in Figure 4.

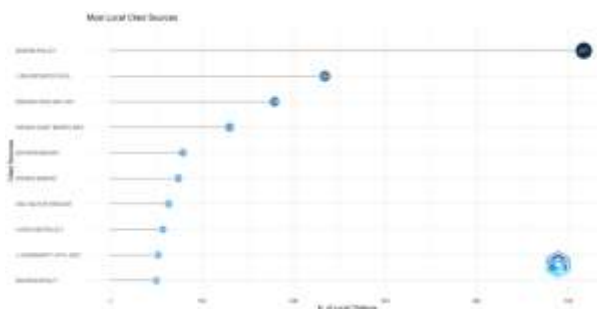


Figure 4. Top 10 Most Cited Source

3.1.4 Number of citations by authors

Like the journal citation index, the author impact index indicates the contribution of authors in developing the field conceptually. In addition, it indicates the extent to which researchers have incorporated the studies of the authors into the body of knowledge in this field. Another chart in Figure 5. shows the author impact in terms of citations, indicating that Devine-Wright P., Howes Y., and Batel S. had the greatest impact in this field with 81, 33, and 16 citations respectively. From the result, it is worth noting that most of the contributors' papers is not a single-authored one. In fact, the results of these studies strongly support the view that collaborations facilitate the generation of new insights (Kumar & Harichandan, 2022).

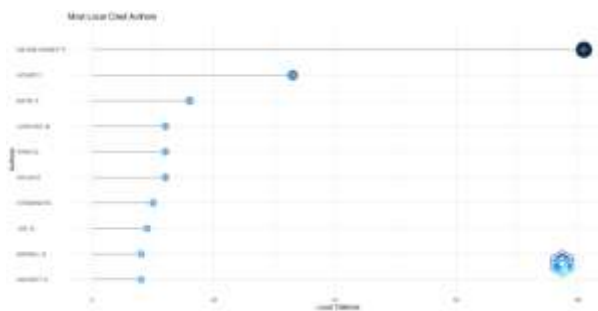


Figure 5. Top 10 Author Impact

3.1.4 Number of citations by countries

Globally, bibliometric evaluation of citations by country-level for research have been measuring the performance of researchers with quantitative indicators for several years (Baccini et al., 2019). The top cited countries are outlined in Figure 6. by countries in this topic. The United Kingdom is the highest citation ($n = 1250$, 46.33%), followed by USA ($n = 456$, 17.32%), Australia ($n = 244$, 9.27%), Canada ($n = 218$, 8.28%), and Germany ($n = 128$, 4.86%) (see Figure 6.).

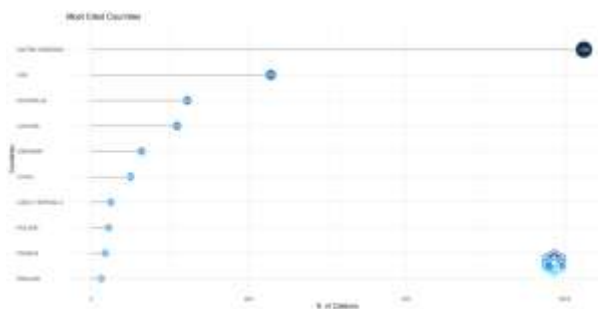


Figure 6. Top 10 Country-level Impact

3.2. Science mapping

In this study, co-citation analysis, keyword cooccurrence analysis, and co-authorship analysis were used to analyze the intellectual structure of this topic.

3.2.1 Co-authorship analysis

The act of co-authorship serves as a formal form of intellectual collaboration among scholars, so it is important to understand how they interact (Nayak et al., 2022). Analysis of co-authorship is crucial for the advancement of knowledge in a particular field because collaborations between authors often lead to new ideas and advances in knowledge (Donthu, et al., 2021a). Collaboration among scholars forms a network referred to as an “invisible collage”. Hence, this kind of research technique can assist in the development of a field of research (Donthu, et al., 2021b).

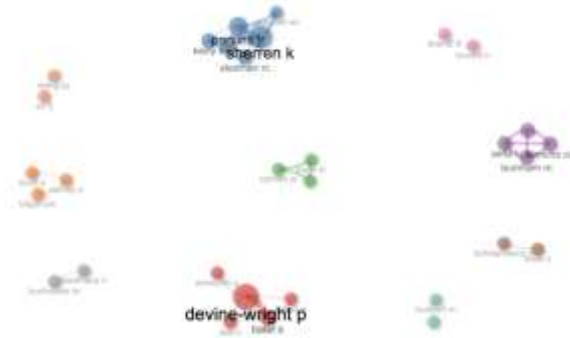


Figure 7. Co-authorship Network

Figure 7. shows collaborations across different time periods between 2010 and 2024. Accordingly, 31 authors out of 185 were included in the co-authorship network when there were at least two authors collaborating on each piece of work in the 68 articles. During the period of 2010 - 2023, Patrick Devine-Wright, Susana Batel, Etienne Bailey, Oystein Aas and Peta Ashworth made significant contributions by empirically investigating in this topic. Moreover, another large cluster of the co-authorship network shows a significant collaboration between Kate Sherren, John R. Parkins, Richard C. Stedman, Kristina Keilty and Ellen N. Chappell regarding this topic.

3.2.2 Co-citation analysis

3.2.2.1 Co-citation analysis by papers

An analysis of co-citations is a technique for science mapping that assumes publication themes are similar among publications cited frequently. In addition to revealing the underlying themes of a research field, this type of analysis can help reveal how it was structured intellectually (Donthu, et al., 2021a). Co-citation networks link publications when their references occur in another publication's reference list. Besides, co-citation analysis has the advantage of allowing business scholars to discover thematic clusters as well as discovering the most influential publications (Donthu, et al., 2021c). The co-citation network by papers built using bibliometrix can be seen in figure 8.

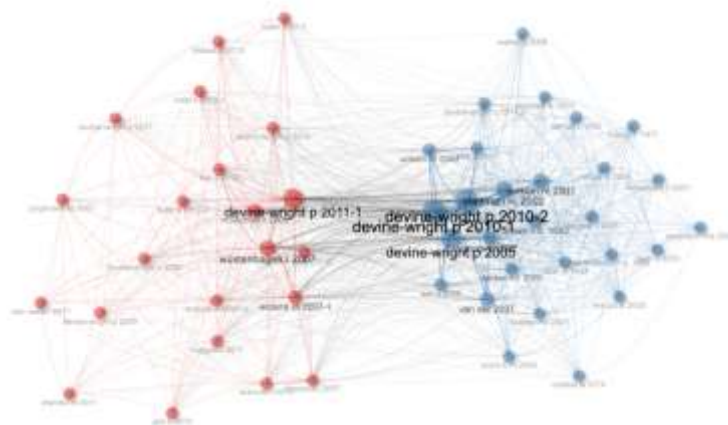


Figure 8. Co-citation Network by papers

From the figure 8., the co-citation can be divided into red cluster (cluster 1) and blue cluster (cluster 2). These clustered papers have been tabulated in Table 1. The cluster 1 consists of a variety of empirical investigations by attitudinal and behavioral aspects of place attachment. Devine-Wright (2011) was the central in this cluster and taking tidal energy as an example analyzed whether place attachment and place-related symbolic meanings play a role in explaining public reactions to the renewable energy technologies. The cluster 2 contains authors who provide the groundwork for understanding the relationship between place attachment and acceptance of renewable energy technologies by illustrating the environmental psychological, theoretical and phenomenological perspective of the place attachment. In the dataset, Devine-Wright (2010) and Devine-Wright & Howes (2010) were identified as key references due to their seminal roles in the development of place attachment and renewable energy technologies. In

the domain of high impact studies, these studies define the intellectual and contextual boundaries that have been explored.

Node	Cluster	Betweenness	Closeness	PageRank
devine-wright p 2011-1	1	237.686	0.014	0.037
wüstenhagen r 2007	1	94.727	0.013	0.028
wolsink m 2007-1	1	74.428	0.013	0.023
mcclachlan c 2009	1	69.218	0.013	0.023
swafford j 2010	1	26.006	0.012	0.018
bell d 2013	1	13.69	0.011	0.017
scannell i 2010	1	32.728	0.012	0.012
devine-wright p 2013	1	26.932	0.012	0.017
firestone j 2007	1	10.35	0.01	0.015
wolsink m 2007-2	1	18.572	0.011	0.014
bidwell d 2013	1	5.838	0.01	0.01
devine-wright p 2009	1	1.457	0.009	0.011
haggett c 2011	1	8.326	0.01	0.014
lewicka m 2011	1	0.834	0.009	0.009
batel s 2013	1	7.135	0.01	0.011
batel s 2015-1	1	7.92	0.01	0.013
devine-wright p 2017	1	2.858	0.009	0.013
devine-wright p 2020	1	5.79	0.01	0.012
van veelen 2017	1	0.191	0.008	0.011
batel s 2015-2	1	16.718	0.011	0.015
gee k 2010	1	1.368	0.009	0.012
jorgensen bs 2001	1	1.23	0.009	0.011
devine-wright p 2010-1	2	153.15	0.013	0.046
devine-wright p 2010-2	2	99.08	0.013	0.048
devine-wright p 2005	2	83.797	0.013	0.04
stedman rc 2002	2	28.378	0.012	0.035
gross c 2007	2	24.293	0.012	0.029
van der 2007	2	14.86	0.011	0.029
vorkinn m 2001	2	11.854	0.011	0.032
wolsink m 2000	2	12.539	0.011	0.024
bell d 2005	2	11.051	0.011	0.023
brown b.b. 1992	2	14.792	0.012	0.029
warren c.r. 2005	2	8.984	0.011	0.025
ellis g 2007	2	9.083	0.011	0.022
dear m 1992	2	3.033	0.01	0.024
devine-wright p 2011-2	2	3.741	0.01	0.018
hidalgo mc 2001	2	14.292	0.011	0.02
manzo ic 2006	2	1.635	0.009	0.018
stedman rc 2003	2	6.396	0.01	0.016
wolsink m 2006	2	3.643	0.01	0.016
carlsie je 2014	2	2.445	0.01	0.011
walker g 2008	2	0.473	0.009	0.011
altman i. 1992	2	3.05	0.01	0.017
haggett c 2008	2	1.787	0.01	0.019
proshansky hm. 1983	2	0.759	0.009	0.022
davenport ma 2005	2	0.207	0.009	0.013
fried m 2000	2	0.185	0.009	0.018
hernández b 2007	2	1.565	0.009	0.016
manzo ic 2005	2	0.327	0.009	0.021
tuan y.-f. 1977	2	1.6	0.009	0.015

Table 1 Cluster Wise Grouping of Co-cited Papers

3.2.2.2 Co-citation analysis by authors

Author co-citation network analysis facilitates the aggregation of authors whose work has been cited in conjunction. In the case of such aggregation, topic relatedness can be determined and inferences drawn about contexts that are studied together for the purpose of constructing research frameworks can be made (Donthu, et al., 2021a). Based on the co-citation network of authors depicted in Figure 9., two distinct clusters were identified by bibliometrix. According to Figure 9., Jeremy Firestone and Rolf Wüstenhagen were identified as central of the blue cluster. The red cluster is centered on Patrick Devine-Wright.

Additionally, the word cloud reinforces the output by determining the weights or dominances of certain keywords, along with keyword co-occurrence. According to the word clouds, the font size represents the frequency of using certain keywords or concepts in field studies (Donthu, et al., 2021a). As shown in Fig 11., keywords related to the topic have dominated research in recent years. Most commonly used keywords expect the topic “renewable energy” and “renewable energy”, including “public acceptance”, “identity”, “social acceptance”, “community”, “willingness-to-pay” and so on.

3.3 Evaluation of the effectiveness of the place attachment in the renewable energy technologies studies

Based on the method of Morrison et al., (2012) in evaluating the effectiveness of technologies in the final pool of studies, we developed a set of criteria to assess the results (Table 2). The criteria focused on important domains such as analysis, design, and conduct of research. Using the criteria and sample size from each study, this study scored the effectiveness of the technology on a scale from 1 (negative effective) to 3 (positive effective).

Effectiveness Score	Criteria
Positive effective 3	Place attachment was meant to positive improve the outcome measures.
Neutral effective 2	Place attachment was meant to influence the outcome measures but the effect was positive or negative effect not clear.
Negative effective 1	Place attachment was meant to negative improve the outcome measures.
No Effective 0	Place attachment was meant to a minority or no improvement in the outcome measures.

Table 2 Criteria to evaluate the effectiveness of place attachment in the studies

According to the criteria table, the resulted of 68 selected articulated have been classified by the effectiveness score.

Source	Kinds of Technologies	Participates	Results	Effectiveness score
Devine-Wright (2011)	Tidal energy converters	Two nearby villages in Northern Ireland (n = 271)	Strong place attachment increase positive and supportive responses to the project	3
Fast (2013)	Wind turbines	Western European	Complex social responses (increase supportive responses)	3
Gormally et al. (2014)	Community-based renewable energy	Three communities in Cumbria, UK	Place attachments appear to be positive influential in residents' willingness to participate in local renewable projects and in acceptance of certain renewable technologies	3
Brownlee et al. (2015)	Offshore wind energy	Marine recreationists (n = 483)	Place attachment influence marine recreationists' acceptability of offshore wind energy development positively	3
Frantal (2016)	Renewable energy technologies	Two towns in Czech Republic	Strong place attachment increase the acceptance of certain renewable technologies and anti-coal attitude	3

Carlisle et al. (2016)	Utility-scale solar	Six Southern Californian counties (n = 695)	Place attachment positively influence the public attitudes	3
Keilty et al. (2016)	Hydroelectricity	Mactaquac Dam and headpond, in New Brunswick, Canada (n = 20)	Place attachment positively influence resident' s preference for keeping the headpond intact	3
(Sherren et al., 2016)	Hydroelectric dam construction	New Brunswick, Canada (n = 25)	Individual with place attachment were more likely to appreciate the renewable energy infrastructures	3
Devine-Wright & Batel (2017)	low carbon energy infrastructure	UK adults (n = 1519)	' Global ' individuals held strong attachments at local, national and global levels and were characterized by higher willingness to take actions	3
Suesser (2018)	Community-based energy projects.	Reußenköge (n = 51)	Place attachment positive increase public engagement in renewable energy to cope with climate change	3
Firestone et al. (2018)	Wind power project	Coastal Rhode Island and Block Island (n = 420)	Place attachment positive improve support or lean toward supporting the project	3
Suchyta (2020)	Natural gas reservoirs	U.S. (n = 4000)	Place attachment, which was positively associated with renewable energy development	3
Mueller et al. (2020)	Wind turbines	Chignecto region (n = 1000)	Place attachment is significant and positive for wind turbines	3
Wang et al. (2020)	New nuclear power plant	China (n = 388)	Place attachment positively affects the new nuclear power plant	3
Corbett et al. (2022)	Rooftop solar	Los Angeles County (n = 4207)	Place attachment plays important part in real-world decisions regarding rooftop solar positively	3
Goudriaan et al. (2023)	Renewable energy technologies	South-east of Sweden (n = 21)	Place attachment positively support the renewable energy technologies	3
Medugorac & Schuitema (2023)	Renewable energy project	Irish Midlands (n = 1454)	High level of place attachment positive increase the community acceptance of renewable energy project	3
Weeks & Jenkins (2024)	Renewable energy technology	Kern County (n = 256)	Place attachment would positively drive the sustainability transitions	3

Table 2 List of positive effectiveness of place attachment in studies

Source	Kinds of Technologies	Participates	Results	Effectiveness score
Suesser et al. (2017)	Community renewable energy	Reußenköge (n = 332)	Have impact but not find negative impacts of a high place attachment on accepting on renewable energy technologies	2
Veelen & Haggett, (2017b)	Local community-led renewable energy installations	Scottish Highlands	Place attachment was an important motivator but different types of place attachment formed disagreement	2
Upham et al. (2018)	Renewable energy infrastructure	Commentary (literature)	Place attachment on public perceptions of new renewable energy infrastructure both positively and negatively	2
Boyd & Miller (2018)	Renewable energy technology	Two communities in Australia (n = 69)	place attachment is an important factor in participants' preferences for energy systems but consistent with their perception of the area and landscape	2
Liebe & Dobers (2019)	Renewable energy power plants	Germany (n = 3400)	Positive and significant effect on wind power; negative and significant effect on solar fields; Fail to find a significant and negative relationship between place attachment and acceptance of renewable energy developments	2
Roddiss et al. (2020)	Large-scale solar farms (Cleve Hill project)	UK (n = 816)	Place attachment have influence on large-scale solar farms, but it has multi-scalar character of community acceptance of renewable energy	2
Mjahed Hammami & Abdulrahman Al Moosa (2021)	Wind energy farm	Northeast Tunisia (n = 23)	Place attachment influence the renewable energy project positive or negative depend on whether the renewable energy project enhances or disrupts the different aspects of place experience	2
Vespa et al. (2022)	Renewable energy infrastructures	Instagram Post (n = 1500)	Place attachment led to different effects related to renewable energy infrastructures	2
Hahnel & Fell, (2022)	Prosumer-centred electricity	United Kingdom (n = 441) and Germany (n = 440)	Place attachment influence the prosumer-centred energy model trading decisions	2
Hurlbert et al. (2023)	Renewable energy technology	Saskatchewan (n = 48)	Place attachment influence resident's preference for power production sources in the future	2

Table 3 List of natural effectiveness of place attachment in studies

Source	Kinds of Technologies	Participates	Results	Effectiveness score
Devine-Wright (2010); Devine-Wright & Howes (2010)	Offshore wind farms	Two coastal towns in North Wales (n = 488)	Strong place attachment led to negative attitudes and oppositional behaviour	1
Fast (2013)	Wind turbines	Western European	Complex social responses (reduce supportive responses)	1
Hall et al. (2013)	Wind turbine hosts	Australia	Strong place attachment decreased societal acceptance degree	1
Jacquet & Stedman (2014)	Large development renewable energy projects	Review (literature)	Threat of disruption to place-based identities may spur oppositional behaviour in many cases	1
Brownlee et al. (2015)	Offshore wind energy	Marine recreationists (n = 483)	Place attachment influence marine recreationists' acceptability of offshore wind energy development negatively	1
Batel et al. (2015)	Large-scale renewable energy	UK and Norway of local residents	Place attachment negative influence resident' s attitude	1
(Groot & Bailey (2016)	Marine renewable energy development	Shetlands, Orkneys and Scillies (UK)	Attitudes were negative strongly shaped by place-related values	1
Keilty et al. (2016)	Hydroelectricity	Mactaquac Dam and headpond, in New Brunswick, Canada (n = 20)	Place attachment positively influence resident' s preference for keeping the headpond intact	1
Bailey et al. (2016)	Low-carbon energy infrastructure	North Somerse (Five focus groups)	Place attachment resulting in negative attitudes and place-protective actions toward such projects	1
Kermagoret et al. (2016)	offshore wind farms	Bay of Saint-Brieuc (n = 73)	Place attachment of communities have more negative opinion about the wind power	1
Devine-Wright & Batel (2017)	low carbon energy infrastructure	UK adults (n = 1519)	Individuals who held stronger local than national or global belonging (dubbed ' Locals ') were least likely to take action	1
Bidwell (2017)	Offshore wind energy	Block island (n = 600)	Holding greater levels of place attachment reduces support for the wind farm	1

Lapniewska (2019)	Bioenergy crop production	Northeast U.S. (n = 907)	Proved place attachment unsupportive of bioenergy crops in their community	1
Hooper et al. (2020)	Tidal energy technology	Southwest England (n = 963)	Strong place attachment negative influence the development of tidal energy technology	1
Magnani (2020)	Mini hydropower technology	Italy	Strong place attachment increase resident ' s anti attitude on mini-hydroelectric production	1
Brennan & Rensburg (2020)	Wind farms	Ireland (n = 253)	People with a strong sense of place attachment were less support wind farms	1
Bourdin et al. (2020)	Biogas plant construction	Western Area of France (14 territorial entities, ¹¹ local residents, 7 associations, 8 companies, 7 elected officials and 8 farmers)	People with high place attachment would led to abandon the biogas plant construction	1
Klaniecki et al. (2021)	Renewable energy technologies	Romania (n = 374)	Place attachment revealed negative links between renewable energy conservation attitudes and behavioral intentions	1
Buchmayr et al. (2021)	Onshore wind, offshore wind, waste-to-energy, and biomass power	Wind energy neighborhoods close to an onshore wind park (n = 200); one located close to an offshore wind park (n = 200); neighborhoods of a waste-to-energy facility (n = 161); a power plant using biomass fuel (n = 210)	People with high place attachment negative affect the renewable energy technologies	1
Prados et al. (2022)	Two large-scale renewable wind projects and a micro-grid solar photovoltaic project	Portugal, Greece and Israel	Place attachment increase the negative vision of renewable energy technology in regional context	1
Groh (2022)	Wind turbines electricity	Germany (n = 1800)	High place attachment (regional identity) has a lower willingness to pay for regionally produced electricity	1

Nilson & Stedman, (2023)	Utility-scale solar	New York (n = 421)	Place attachment have the strongest effect on opposition towards utility-scale solar	1
Gazzani (2024)	Wind power plant	Carloforte (n = 512)	Place attachment negatively influence fisherman accept wind energy	1

Table 4 List of negative effectiveness of place attachment in studies

Source	Kinds of Technologies	Participates	Results	Effectiveness score
Carlisle et al. (2014)	Photovoltaic systems	Six Southern Californian counties (n = 594)	Place attachment fail to produce significant effects	0
Eaton et al. (2018)	Perennial bioenergy crops	Pennsylvania and Ohio (n = 908)	The results showed no statistically significant relationship between place attachment and renewable energy development	0
Jenkins et al. (2018)	Tidal energy	Review (literature)	There is a knowledge gap about the utility of place attachment regarding larger, diverse, and more urban communities about the tidal energy	0
Dobers (2019)	Biogas plants	Germany (n = 942)	Place attachment does not show reliable effects.	0
Ernst & Shamon (2020)	German energy system	Germany (n = 2400)	The result showed that place attachment has no significant effect on whether someone participates in the energy transition.	0
Hurlbert et al. (2020)	Renewable power production technology	Saskatchewan Canada	The place attachment effect on renewable energy technologies differ between the communities and kinds of technologies	0
Chappell et al. (2021)	Wind turbines	Chignecto area (n = 335)	The influence of place attachment on wind turbines showed disappear or weaken	0
Gonyo et al. (2021)	Local offshore wind energy	North and South Carolina (n = 1292)	Place attachment would increase the odds of neutrality	0
Lundheim et al. (2022)	Wind energy	Review (literature)	Unclear role of place attachment concerning wind energy indicates that more research must be conducted	0
Stelmach et al. (2023)	Wave and tidal energy	North America (n = 2000)	Place attachment has risk and benefit effect on the wave energy technologies	0

Kaltenborn et al. (2023)	Wind power technology	Norway (n = 1220)	Place attachment has not significant support or opposition attitude towards wind power	0
---------------------------------	-----------------------	----------------------	--	---

Table 5 List of no effectiveness of place attachment in studies

DISCUSSION

Literature bibliometric analysis provided a conceptual map of studies in the effectiveness of place attachment on renewable energy technologies. Throughout the last two decades, the role of place attachment has evolved into more focused areas of community scale. It is interesting to note that place attachment related to renewable energy technologies remained a basic theme throughout all periods while showing an unusually low degree of development. Despite moving up the development axis, place attachment had a slower transition to a higher density quadrant.

According to Manzo and Devine-Wright (2020), place attachment refers to the sense of belonging, connection, and meaning associated with a particular place or environment. According to the findings, place attachment is one of important factors that influence community-based renewable energy transition and renewable energy technology adoption or rejection (Corbett et al., 2022; Prados (Maria-Jose) et al., 2022; Suesser et al., 2017). As noted in a study on the social acceptance of wind farms by the public, Devine-Wright (2010) first adopted the place attachment as the determinant in opposition to wind farms and proposed ‘NIMBY (Not in My Back Yard)’. NIMBY is an acronym for protectionist attitudes and oppositional tactics adopted by community groups facing unwelcome renewable energy technology development in their neighborhood. Although residents generally agree that these “noxious” facilities are necessary, they should not be constructed near their homes, hence the term “not in my back yard”. However, some research found the influence of place attachment on acceptance has been shown to be positive (Brownlee et al., 2015; Fast, 2013; Firestone et al., 2018; Mueller et al., 2020) or both positive and negative (Mjahed Hammami & Abdulrahman Al Moosa, 2021) in recent research reported in terms of wind energy.

Due to climate change, countries across the global have committed to increasing the percentage of energy that comes from renewable sources of energy (Cousse, 2021). Taking tidal energy as an example, Hooper et al. (2020) found strong place attachment negative influence the development of tidal energy technology. However, Devine-Wright (2011) found the place attachment increase positive and supportive responses to the tidal energy project in community. Considering the divergence in support levels between general public and contested local projects, this is a key issue affecting the development of renewable energy. Therefore, more studies done in this area due to the unclear role in place attachment.

The results of studies shown that depending on whether the renewable energy technology enhances or disrupts different aspects of place experience, residents may express positive or negative emotions and attitudes based on the evaluation of change, and they will act accordingly, either supporting or protesting the project. According to the literatures, researchers provide evidence proved that the opponents tended to refer to place-based factors as explanations for their opposition, such as disrupt local visual landscape (Frantal, 2016), the change of large land use (Jacquet & Stedman, 2014), perplexities from local environment, concerns about the increasing electricity production in a community (Gazzani, 2024), perceived potential problems and disadvantages, such as disturbing noise, smell, and increased traffic that may cause property values reduced (Lundheim et al., 2022), unwillingness to change lifestyle (Buchmayr et al., 2021), impact on wild life (Groh, 2022).

Aside from the negative impact of place attachment on public perception of renewable energy technology, place attachment can also motivate people to act in ways that improve local communities environmentally, such as volunteering for ecological conservation to purchase household renewable energy technology (Corbett et al., 2022) and anti-coal activities (Frantal, 2016). In particular, more recent literature investigate beyond the place attachment and discussed a variety of other explanations based on psychological environmental theory. In the study of people’s response to renewable energy technology, researchers found environmental attitudes and concerns are considered as crucial factors in forming attitudes towards renewable energy technology, leading to intensive studies on a variety of environmental attitudes (Corbett et al., 2022; Devine-Wright & Batel, 2017; Mjahed Hammami & Abdulrahman Al Moosa, 2021; Prados et al., 2022; Roddis et al., 2020). A place’s proximate - its locality - is essential to place-protective action (pro-environmental behavior), which is based on a sense of place attachment and identity (Upham et al., 2018). Another positive attitudes from the economic aspect, some of the renewable energy technology has a

positive effect on local jobs (Buchmayr et al., 2021) and strength regional economy (Groh, 2022). Besides that, previous studies shown that place attachment also have neutral or no effectiveness differ based on various reasons toward different renewable energy technology in different region scale that have been discovered.

Besides the reasons mentioned above, recent research indicated that stakeholder perception of renewable energy technology seems associated with individuals' choices to support or oppose attitudes and behavior under the local scale. Empirical evidence proved that place attachment may influence stakeholder perceptions of renewable energy technology in light of their particular uses and attachments (Vespa et al., 2022). Different stakeholders with specific attachments to those local places have different reactions to potential changes related to renewable energy technology, suggesting that each place level appeals to different emotions and cognitive processes. More specifically, whether residents are the beneficiaries of the renewable energy technology. Taking the solar rooftops as an example, differ from the large scale community-based renewable energy technology, solar rooftop have the advantage of not occupying public and productive land, thus avoiding place-based and visual resistance (Cousse, 2021). In addition, one of the biggest advantages of solar rooftop is that they can not only meet the residents' personal electricity needs, but also can sell the extra electricity to local power companies to make a profit that may increase acceptance attitudes (Wolske et al., 2018).

PRPSPECTS FOR FUTURE RESEARCH

The following are possible future directions for research based on the findings: First of all, the relationship between place placement and renewable energy technology is a valuable topic that could be explored further in future research. Recently, there have been an increasing number of articles published in this field, along with dynamic results from bibliometrics. It is therefore necessary to conduct tracing research on them in the future.

Secondly, in terms of geographical diversity, most of the exist studies conduct and concentrated in North America and Europe. For future research in this field, there should be more collaboration between authors from Asia, Africa and Latin America to better understand the differences in place attachment between regions. Besides, while these studies provide insight, they are limited by the "localist" focus on connections with a particular place such as community scope. In many studies to date, however, a focus on local attachments has been emphasized, ignoring the impact of national and global attachments and identities on energy beliefs and attitudes. As a result, multifaceted theoretical and empirical studies should be prioritized this aspect in future research agendas.

Thirdly, there are multiple types of renewable energy technology different from source, such as wind, solar, hydroelectric, tidal, bioenergy and geothermal energy. The forms and generation mechanisms vary greatly among the renewable energy technologies. Besides that, energy storage technology is divided into household energy storage and outdoor energy storage. There are some obvious differences between them in terms of application areas, scale, operation mode, etc. Most of the research in this field focuses on community-based energy storage systems for large-scale municipal or commercial purposes, so future research can focus more on small-scale renewable energy devices for household use. It is important to note that even in same technology the public perceptions of different technologies were different. The researcher could investigate whether major differences in form and function would influence the place attachment in the same type of technology in the future. It is also important to distinguish between large-scale centralized and smaller-scale decentralized pathways of renewable energy technology, as well as examine the full range of factors influencing support for the renewable energy.

Fourth, place attachment appears to be useful for understanding public attitudes and social acceptance towards energy projects form a wide range of existing contexts. However, as it should be noted, the stated public attitude and intention for renewable energy technology is not actually behavior. When consumers are asked to state something in field surveys, their consciousness pertains to their perception of the right answer among various options but does not represent an actual of willingness to purchase or adopt. It may be possible to conduct future studies focusing on determined the relationship between place attachment related to actual payment extra for green electricity, purchase behavior of the renewable energy technology, installation or adoption of the renewable energy technology or usage of renewable energy technology in a wide range of cultures, groups, and organizations.

Lastly, the review indicates that countries have been actively investigating the relationship between place attachment and renewable energy technology. Also, the renewable energy technology has been receiving a lot of research attention worldwide since it reduces environmental degradation. Thus, researchers have focused on identifying

whether place attachment influencing the acceptance of renewable energy technology. However, existing studies may ignore regional difference in place attachment. For example, how do different regions react to the same renewable energy technology? Are the reasons the same across regions? How do people in the same region differ in their acceptance of different renewable energy technology? Do the different reactions to renewable energy technology in different regions reflect regional differences? It is imperative that efforts are made to address these concerns, whether through the expansion of bibliometrics or the improvement of research methods. Moreover, these issues suggest possible research directions in the future.

CONCLUSION

In recent years, the global environment issue has garnered considerable attention regarding renewable energy has been viewed as promising approach (Adnan & Shahrina, 2021). However, community resistance led by place attachment is one of major obstacle in achieving renewable energy technology and is widely studied in social energy science (Dugstad et al., 2023). There has been a great deal of research on the effectiveness of place attachment in influencing attitudes toward proposed renewable energy developments. According to the result from bibliometric analysis for publications, these studies that focus on relationship with place attachment have resulted in the development of a coherent body of knowledge about renewable energy technology that lays the foundations for relevant theoretical development and knowledge development (e.g. Devine-Wright & Howes, 2010; Batel et al., 2015). By adopting a rigorous methodology based on bibliometric analysis, this study aimed to shed light on the intellectual structure of the relationship between place attachment and renewable energy technology and inspire future research on this subject which included 68 articles from journals.

The findings of the study identify influential authors, articles, and journals over 15 years (2010-2024), illustrate the intellectual structure of the literature, and better understanding the important of place attachment on renewable energy technology which provide an opportunity to improve energy promotion and transformation around the world to reduce carbon emissions.

LIMITATIONS

In this study, advanced bibliometric analysis and classic content review are integrated to reduce the bias associated with existing single methods. However, along with its contributions to basic features and significant processes in this field, this study also has some limitations.

First, only the WoS database was used in this work which include 68 publications. By combining a broader range of databases, further experiments might shed light on a global perspective. For example, other prestigious web bibliometric databases, Scopus or Goggle Scholar, can also be considered to generate more valuable data. Therefore, bibliometric reviews are further validated and important relevant studies are less likely to be omitted.

Second, bibliometric analysis depends on the reliability of the data, which is directly related to the definition of the search protocol. This paper using “place attachment” and “renewable energy technology” as domain boundaries ensures the high degree of relevance of the final data obtained from this study. In addition, search patterns under topics are based on a comprehensive analysis of title, abstract, and keyword. Since the data search focused largely on place attachment and renewable energy technology, few papers which didn't mention the keyword explicitly may have been excluded. However, there are so many types of renewable energy technology that it is impossible to fully cover them all in the search terms may led to omitted. Therefore, future studies can include all synonyms and more categories of renewable energy technology in their data search criteria. Simultaneously, a more relevant set of results may be obtained by combining different retrieval strings.

Third, although titles, abstracts and keywords covered the studies' main ideas and findings in this paper, it is recommended that future research use full-text papers to detect more information in this field. Finally, Bibliometrics analysis also has inherent flaws. However, bibliometric reviews only provide a broad and macroscopic picture of the current state of research from multiple dimensions, regardless of their impressive visual mapping. Databases that are dynamically updated are heavily used to cover this gap. Consequently, bibliometric results can vary greatly over time for one topic. Even with these limitations, this paper provides researchers with a comprehensive overview of the relationship between place attachment and renewable energy technology, helping them explore the relationship and effectiveness discussed throughout history. Further, possible research areas and future directions are highlighted.

REFERENCES

- [1] Adnan, N., & Shahrina, M. N. (2021). A comprehensive approach: Diffusion of environment-friendly energy technologies in residential photovoltaic markets. *Sustainable Energy Technologies and Assessments*, 46(February), 101289. <https://doi.org/10.1016/j.seta.2021.101289>
- [2] Ağbulut, Ü., & Sarıdemir, S. (2021). A general view to converting fossil fuels to cleaner energy source by adding nanoparticles. *International Journal of Ambient Energy*, 42(13), 1569–1574. <https://doi.org/10.1080/01430750.2018.1563822>
- [3] Al-abadi, N. J. A., & Al-qatrani, R. I. N. (2023). Prospects for Future Competition Between Renewable Energy Sources and Fossil Fuels in the Global Energy Markets Basra University of Oil and Gas. *Migration Letters*, 2, 679–699.
- [4] Al-Emran, M., & Griffy-Brown, C. (2023). The role of technology adoption in sustainable development: Overview, opportunities, challenges, and future research agendas. *Technology in Society*, 73(December 2022), 102240. <https://doi.org/10.1016/j.techsoc.2023.102240>
- [5] Almrafee, M., & Akaileh, M. (2023). Customers' purchase intention of renewable energy in Jordan: the case of solar panel systems using an extended theory of planned behavior (TPB). *International Journal of Energy Sector Management*. <https://doi.org/10.1108/IJESM-01-2023-0002>
- [6] Ashraf Fauzi, M., Hanis Zainal Abidin, N., Mohd Suki, N., & Mokhtar Albshir Budiea, A. (2023). Residential rooftop solar panel adoption behavior: Bibliometric analysis of the past and future trends. *Renewable Energy Focus*, 45, 1–9. <https://doi.org/10.1016/j.ref.2023.02.002>
- [7] Babic, A., Pijuk, A., Brázdilová, L., Georgieva, Y., Raposo Pereira, M. A., Poklepovic Pericic, T., & Puljak, L. (2019). The judgement of biases included in the category “other bias” in Cochrane systematic reviews of interventions: A systematic survey. *BMC Medical Research Methodology*, 19(1), 1–10. <https://doi.org/10.1186/s12874-019-0718-8>
- [8] Baccini, A., De Nicolao, G., & Petrovich, E. (2019). Citation gaming induced by bibliometric evaluation: A country-level comparative analysis. *PLoS ONE*, 14(9), 1–16. <https://doi.org/10.1371/journal.pone.0221212>
- [9] Bailey, E., Devine-Wright, P., & Batel, S. (2016). Understanding Responses To A UK High-Voltage Powerline Proposal: The Role Of Place And Project-Based Social Representations. *PAPERS ON SOCIAL REPRESENTATIONS*, 25(1).
- [10] Bashir, M. F., Bashir, M. A., Raza, S. A., Bilan, Y., & Vasa, L. (2024). Linking gold prices, fossil fuel costs and energy consumption to assess progress towards sustainable development goals in newly industrialized countries. *Geoscience Frontiers*, 15(3), 101755. <https://doi.org/10.1016/j.gsf.2023.101755>
- [11] Batel, S., Devine-Wright, P., Wold, L., Egeland, H., Jacobsen, G., & Aas, O. (2015). The role of (de-)essentialisation within siting conflicts: An interdisciplinary approach. *JOURNAL OF ENVIRONMENTAL PSYCHOLOGY*, 44, 149–159. <https://doi.org/10.1016/j.jenvp.2015.10.004>
- [12] Bauwens, T., & Devine-Wright, P. (2018). Positive energies? An empirical study of community energy participation and attitudes to renewable energy. *Energy Policy*, 118(April), 612–625. <https://doi.org/10.1016/j.enpol.2018.03.062>
- [13] Bidwell, D. (2017). Ocean beliefs and support for an offshore wind energy project. *OCEAN \& COASTAL MANAGEMENT*, 146, 99–108. <https://doi.org/10.1016/j.ocecoaman.2017.06.012>
- [14] Bourdin, S., Colas, M., & Raulin, F. (2020). Understanding the problems of biogas production deployment in different regions: territorial governance matters too. *JOURNAL OF ENVIRONMENTAL PLANNING AND MANAGEMENT*, 63(9), 1655–1673. <https://doi.org/10.1080/09640568.2019.1680158>
- [15] Boyd, A. D., & Miller, A. (2018). Climate Change, Energy Developments and Perceptions of Place. *HUMAN ECOLOGY REVIEW*, 24(1), 3–22.
- [16] Bp. (2021). Statistical Review of World Energy. Bp. <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html>.
- [17] Brennan, N., & van Rensburg, T. M. (2020). Public preferences for wind farms involving electricity trade and citizen engagement in Ireland. *ENERGY POLICY*, 147. <https://doi.org/10.1016/j.enpol.2020.111872>

- [18] Brownlee, M. T. J., Hallo, J. C., Jodice, L. W., Moore, D. D., Powell, R. B., & Wright, B. A. (2015). Place Attachment and Marine Recreationists' Attitudes toward Offshore Wind Energy Development. *JOURNAL OF LEISURE RESEARCH*, 47(2), 263–284. <https://doi.org/10.1080/00222216.2015.11950360>
- [19] Buchmayr, A., Van Ootegem, L., Dewulf, J., & Verhofstadt, E. (2021). Understanding attitudes towards renewable energy technologies and the effect of local experiences. *Energies*, 14(22). <https://doi.org/10.3390/en14227596>
- [20] Carlisle, J. E., Kane, S. L., Solan, D., & Joe, J. C. (2014). Support for solar energy: Examining sense of place and utility-scale development in California. *ENERGY RESEARCH \& SOCIAL SCIENCE*, 3, 113–119. <https://doi.org/10.1016/j.erss.2014.07.006>
- [21] Carlisle, J. E., Solan, D., Kane, S. L., & Joe, J. (2016). Utility-scale solar and public attitudes toward siting: A critical examination of proximity. *LAND USE POLICY*, 58, 491–501. <https://doi.org/10.1016/j.landusepol.2016.08.006>
- [22] Carrington, G., & Stephenson, J. (2018). The politics of energy scenarios: Are International Energy Agency and other conservative projections hampering the renewable energy transition? *Energy Research and Social Science*, 46(September 2017), 103–113. <https://doi.org/10.1016/j.erss.2018.07.011>
- [23] Casakin, H., Ruiz, C., & Hernández, B. (2021). Place Attachment and the Neighborhood: A Case Study of Israel. *Social Indicators Research*, 155(1), 315–333. <https://doi.org/10.1007/s11205-020-02603-5>
- [24] Chappell, E. N., Parkins, J. R., & Sherren, K. (2021). Those who support wind development in view of their home take responsibility for their energy use and that of others: evidence from a multi-scale analysis. *JOURNAL OF ENVIRONMENTAL POLICY \& PLANNING*, 23(4), 510–527. <https://doi.org/10.1080/1523908X.2021.1888699>
- [25] Corbett, C. J., Hershfield, H. E., Kim, H., Malloy, T. F., Nyblade, B., & Partie, A. (2022). The role of place attachment and environmental attitudes in adoption of rooftop solar. *Energy Policy*, 162(November 2021). <https://doi.org/10.1016/j.enpol.2021.112764>
- [26] Cousse, J. (2021). Still in love with solar energy? Installation size, affect, and the social acceptance of renewable energy technologies. *Renewable and Sustainable Energy Reviews*, 145(September 2020), 111107. <https://doi.org/10.1016/j.rser.2021.111107>
- [27] Daryanto, A., & Song, Z. (2021). A meta-analysis of the relationship between place attachment and pro-environmental behaviour. *Journal of Business Research*, 123(May 2020), 208–219. <https://doi.org/10.1016/j.jbusres.2020.09.045>
- [28] De Groot, J., & Bailey, I. (2016). What drives attitudes towards marine renewable energy development in island communities in the UK? *INTERNATIONAL JOURNAL OF MARINE ENERGY*, 13, 80–95. <https://doi.org/10.1016/j.ijome.2016.01.007>
- [29] De Moraes, L. L., & Kafure, I. (2020). Bibliometrics and data Science: An example search and analysis of scientific information from the Web of Science (WoS). *Revista Digital de Biblioteconomia e Ciencia Da Informacao*, 18(Ci). <https://doi.org/10.20396/RDBCI.V19I0.8658521>
- [30] Devine-Wright, P. (2010). PLACE ATTACHMENT AND THE SOCIAL ACCEPTANCE OF RENEWABLE ENERGY TECHNOLOGIES. In V. CorralVerdugo, C. H. GarciaCadena, & M. FriasArmenta (Eds.), *PSYCHOLOGICAL APPROACHES TO SUSTAINABILITY: CURRENT TRENDS IN THEORY, RESEARCH AND APPLICATIONS* (pp. 337–359). NOVA SCIENCE PUBLISHERS, INC.
- [31] Devine-Wright, P. (2011). Place attachment and public acceptance of renewable energy: A tidal energy case study. *JOURNAL OF ENVIRONMENTAL PSYCHOLOGY*, 31(4), 336–343. <https://doi.org/10.1016/j.jenvp.2011.07.001>
- [32] Devine-Wright, P., & Batel, S. (2017). My neighbourhood, my country or my planet? The influence of multiple place attachments and climate change concern on social acceptance of energy infrastructure. *GLOBAL ENVIRONMENTAL CHANGE-HUMAN AND POLICY DIMENSIONS*, 47, 110–120. <https://doi.org/10.1016/j.gloenvcha.2017.08.003>
- [33] Devine-Wright, P., & Howes, Y. (2010). Disruption to place attachment and the protection of restorative environments: A wind energy case study. *JOURNAL OF ENVIRONMENTAL PSYCHOLOGY*, 30(3, SI), 271–280. <https://doi.org/10.1016/j.jenvp.2010.01.008>

-
- [34] Dlamini, S., Tesfamichael, S. G., & Mokhele, T. (2021). Socio-demographic determinants of environmental attitudes, perceptions, place attachment, and environmentally responsible behaviour in Gauteng province, South Africa. *Scientific African*, 12, e00772. <https://doi.org/10.1016/j.sciaf.2021.e00772>
 - [35] Dobers, G. M. (2019). Acceptance of biogas plants taking into account space and place. *ENERGY POLICY*, 135. <https://doi.org/10.1016/j.enpol.2019.110987>
 - [36] Dong, X., Liu, S., Li, H., Yang, Z., Liang, S., & Deng, N. (2020). Love of nature as a mediator between connectedness to nature and sustainable consumption behavior. *Journal of Cleaner Production*, 242, 118451. <https://doi.org/10.1016/j.jclepro.2019.118451>
 - [37] Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133(March), 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
 - [38] Donthu, N., Kumar, S., & Pandey, N. (2021). A retrospective evaluation of Marketing Intelligence and Planning: 1983–2019. *Marketing Intelligence and Planning*, 39(1), 48–73. <https://doi.org/10.1108/MIP-02-2020-0066>
 - [39] Donthu, N., Kumar, S., Pandey, N., & Lim, W. M. (2021). Research Constituents, Intellectual Structure, and Collaboration Patterns in Journal of International Marketing: An Analytical Retrospective. *Journal of International Marketing*, 29(2), 1–25. <https://doi.org/10.1177/1069031X211004234>
 - [40] Dugstad, A., Grimsrud, K., Kipperberg, G., Lindhjem, H., & Navrud, S. (2023). Place attachment and preferences for wind energy – A value-based approach. *Energy Research and Social Science*, 100(May), 103094. <https://doi.org/10.1016/j.erss.2023.103094>
 - [41] Eaton, W. M., Burnham, M., Hinrichs, C. C., Selfa, T., & Yang, S. (2018). How do sociocultural factors shape rural landowner responses to the prospect of perennial bioenergy crops? *LANDSCAPE AND URBAN PLANNING*, 175, 195–204. <https://doi.org/10.1016/j.landurbplan.2018.02.013>
 - [42] Elahi, E., Khalid, Z., & Zhang, Z. (2022). Understanding farmers' intention and willingness to install renewable energy technology: A solution to reduce the environmental emissions of agriculture. *Applied Energy*, 309(December 2021), 118459. <https://doi.org/10.1016/j.apenergy.2021.118459>
 - [43] Ernst, A., & Shamon, H. (2020). Public participation in the German energy transformation: Examining empirically relevant factors of participation decisions. *ENERGY POLICY*, 145. <https://doi.org/10.1016/j.enpol.2020.111680>
 - [44] Fast, S. (2013). Social Acceptance of Renewable Energy: Trends, Concepts, and Geographies. *GEOGRAPHY COMPASS*, 7(12), 853–866. <https://doi.org/10.1111/gec3.12086>
 - [45] F.G. Reis, I., Gonçalves, I., A.R. Lopes, M., & Henggeler Antunes, C. (2021). Business models for energy communities: A review of key issues and trends. *Renewable and Sustainable Energy Reviews*, 144(October 2020). <https://doi.org/10.1016/j.rser.2021.111013>
 - [46] Firestone, J., Bidwell, D., Gardner, M., & Knapp, L. (2018). Wind in the sails or choppy seas?: People-place relations, aesthetics and public support for the United States' first offshore wind project. *ENERGY RESEARCH & SOCIAL SCIENCE*, 40, 232–243. <https://doi.org/10.1016/j.erss.2018.02.017>
 - [47] Forliano, C., De Bernardi, P., & Yahiaoui, D. (2021). Entrepreneurial universities: A bibliometric analysis within the business and management domains. *Technological Forecasting and Social Change*, 165, 120522. <https://doi.org/10.1016/j.techfore.2020.120522>
 - [48] Frantal, B. (2016). Living on coal: Mined-out identity, community displacement and forming of anti-coal resistance in the Most region, Czech Republic. *RESOURCES POLICY*, 49, 385–393. <https://doi.org/10.1016/j.resourpol.2016.07.011>
 - [49] Gazzani, F. (2024). Acceptance of offshore wind farm in Southwest Sardinia in Italy. Do regional energy policies matter? *INTERNATIONAL JOURNAL OF ENERGY SECTOR MANAGEMENT*. <https://doi.org/10.1108/IJESM-11-2023-0024>
 - [50] Gonyo, S. B., Fleming, C. S., Freitag, A., & Goedeke, T. L. (2021). Resident perceptions of local offshore wind energy development: Modeling efforts to improve participatory processes. *ENERGY POLICY*, 149. <https://doi.org/10.1016/j.enpol.2020.112068>

- [51] Gormally, A. M., Pooley, C. G., Whyatt, J. D., & Timmis, R. J. (2014). ``They made gunpowder ... yes down by the river there, that's your energy source{}``: attitudes towards community renewable energy in Cumbria. *LOCAL ENVIRONMENT*, 19(8), 915–932. <https://doi.org/10.1080/13549839.2013.810206>
- [52] Goudriaan, Y., Prince, S., & Strzelecka, M. (2023). A narrative approach to the formation of place attachments in landscapes of expanding renewable energy technology. *Landscape Research*, 48(4), 594–607. <https://doi.org/10.1080/01426397.2023.2166911>
- [53] Groh, E. D. (2022). Exposure to wind turbines, regional identity and the willingness to pay for regionally produced electricity. *RESOURCE AND ENERGY ECONOMICS*, 70. <https://doi.org/10.1016/j.reseneeco.2022.101332>
- [54] Hahnel, U. J. J., & Fell, M. J. (2022). Pricing decisions in peer-to-peer and prosumer-centred electricity markets: Experimental analysis in Germany and the United Kingdom. *RENEWABLE & SUSTAINABLE ENERGY REVIEWS*, 162. <https://doi.org/10.1016/j.rser.2022.112419>
- [55] Hall, N., Ashworth, P., & Devine-Wright, P. (2013). Societal acceptance of wind farms: Analysis of four common themes across Australian case studies. *ENERGY POLICY*, 58, 200–208. <https://doi.org/10.1016/j.enpol.2013.03.009>
- [56] Hesari, E., Moosavy, S. M., Rohani, A., Besharati Kivi, S., Ghafourian, M., & Saleh Sedgh Pour, B. (2020). Investigation the Relationship Between Place Attachment and Community Participation in Residential Areas: A Structural Equation Modelling Approach. *Social Indicators Research*, 151(3), 921–941. <https://doi.org/10.1007/s11205-020-02408-6>
- [57] Hooper, T., Hattam, C., Edwards-Jones, A., & Beaumont, N. (2020). Public perceptions of tidal energy: Can you predict social acceptability across coastal communities in England? *MARINE POLICY*, 119. <https://doi.org/10.1016/j.marpol.2020.104057>
- [58] Hua, Y., Dong, F., & Goodman, J. (2021). How to leverage the role of social capital in pro-environmental behavior: A case study of residents' express waste recycling behavior in China. *Journal of Cleaner Production*, 280, 124376. <https://doi.org/10.1016/j.jclepro.2020.124376>
- [59] Hurlbert, M., Das, T., & Vitto, C. (2023). Transformative power production futures: citizen jury deliberations in Saskatchewan, Canada. *ENERGY SUSTAINABILITY AND SOCIETY*, 13(1). <https://doi.org/10.1186/s13705-023-00424-1>
- [60] Hurlbert, M., Osazuwa-Peters, M., Rayner, J., Reiner, D., & Baranovskiy, P. (2020). Diverse community energy futures in Saskatchewan, Canada. *CLEAN TECHNOLOGIES AND ENVIRONMENTAL POLICY*, 22(5), 1157–1172. <https://doi.org/10.1007/s10098-020-01859-2>
- [61] Jabeen, S., Malik, S., Khan, S., Khan, N., Qureshi, M. I., & Saad, M. S. M. (2021). A comparative systematic literature review and bibliometric analysis on sustainability of renewable energy sources. *International Journal of Energy Economics and Policy*, 11(1), 270–280. <https://doi.org/10.32479/ijeep.10759>
- [62] Jacquet, J. B., & Stedman, R. C. (2014). The risk of social-psychological disruption as an impact of energy development and environmental change. *JOURNAL OF ENVIRONMENTAL PLANNING AND MANAGEMENT*, 57(9), 1285–1304. <https://doi.org/10.1080/09640568.2013.820174>
- [63] Jenkins, L. D., Dreyer, S. J., Polis, H. J., Beaver, E., Kowalski, A. A., Linder, H. L., McMillin, T. N., McTiernan, K. L., Rogier, T. T., & Wiesebron, L. E. (2018). Human dimensions of tidal energy: A review of theories and frameworks. *RENEWABLE & SUSTAINABLE ENERGY REVIEWS*, 97, 323–337. <https://doi.org/10.1016/j.rser.2018.08.036>
- [64] Kaltenborn, B. P., Keller, R., & Krange, O. (2023). Attitudes toward Wind Power in Norway-Solution or Problem in Renewable Energy Development? *ENVIRONMENTAL MANAGEMENT*, 72(5), 922–931. <https://doi.org/10.1007/s00267-023-01870-5>
- [65] Kasarda, J. D., & Janowitz, M. (1974). Community attachment in mass society. *American Sociological Review*, 39(3), 328–339.
- [66] Keilty, K., Beckley, T. M., & Sherren, K. (2016). Baselines of acceptability and generational change on the Mactaquac hydroelectric dam headpond (New Brunswick, Canada). *GEOFORUM*, 75, 234–248. <https://doi.org/10.1016/j.geoforum.2016.08.001>

-
- [67] Kermagoret, C., Levrel, H., Carlier, A., & Ponsero, A. (2016). Stakeholder Perceptions of Offshore Wind Power: A Fuzzy Cognitive Mapping Approach. *SOCIETY & NATURAL RESOURCES*, 29(8), 916–931. <https://doi.org/10.1080/08941920.2015.1122134>
 - [68] Kim, D. J., Salvacion, M., Salehan, M., & Kim, D. W. (2023). An empirical study of community cohesiveness, community attachment, and their roles in virtual community participation. *European Journal of Information Systems*, 32(3), 573–600. <https://doi.org/10.1080/0960085X.2021.2018364>
 - [69] Klamer, P., Bakker, C., & Gruis, V. (2017). Research bias in judgement bias studies—a systematic review of valuation judgement literature. *Journal of Property Research*, 34(4), 285–304. <https://doi.org/10.1080/09599916.2017.1379552>
 - [70] Klaniecki, K., Duse, I.-A., Engler, J.-O., Leventon, J., & Abson, D. J. (2021). Energy conservation attitudes and intentions: investigating place attachment in Eastern Transylvania, Romania (Actitudes e intenciones respecto al ahorro de energia: investigando el apego al lugar en Transilvania Oriental, Rumania). *PSYECOLOGY-REVISTA BILINGUE DE PSICOLOGIA AMBIENTAL*, 12(2), 177–201. <https://doi.org/10.1080/21711976.2021.1900641>
 - [71] Kumar, B., Sharma, A., Vatawala, S., & Kumar, P. (2020). Digital mediation in business-to-business marketing: A bibliometric analysis. *Industrial Marketing Management*, 85(September), 126–140. <https://doi.org/10.1016/j.indmarman.2019.10.002>
 - [72] Kumar Kar, S., & Harichandan, S. (2022). Green marketing innovation and sustainable consumption: A bibliometric analysis. *Journal of Cleaner Production*, 361(September 2021), 132290. <https://doi.org/10.1016/j.jclepro.2022.132290>
 - [73] Kuo, N. Te, Cheng, Y. S., Chang, K. C., & Hu, S. M. (2021). How social capital affects support intention: The mediating role of place identity. *Journal of Hospitality and Tourism Management*, 46(March 2020), 40–49. <https://doi.org/10.1016/j.jhtm.2020.11.005>
 - [74] Lapniewska, Z. (2019). Energy, equality and sustainability? European electricity cooperatives from a gender perspective. *ENERGY RESEARCH & SOCIAL SCIENCE*, 57. <https://doi.org/10.1016/j.erss.2019.101247>
 - [75] Le, C. C., Dao, A. T., & Doan, N. K. T. (2023). The role of social factors and community attachment in the intention to reduce plastic bag consumption and pro-environmental behaviors. *Journal of Human Behavior in the Social Environment*, 00(00), 1–16. <https://doi.org/10.1080/10911359.2023.2202695>
 - [76] Liebe, U., & Dobers, G. M. (2019). Decomposing public support for energy policy: What drives acceptance of and intentions to protest against renewable energy expansion in Germany? *ENERGY RESEARCH & SOCIAL SCIENCE*, 47, 247–260. <https://doi.org/10.1016/j.erss.2018.09.004>
 - [77] Liu, L., Cui, H., & Nie, Y. (2023). Cite Space-Based Bibliometric Analysis of Green Marketing. *Sustainability (Switzerland)*, 15(12), 1–13. <https://doi.org/10.3390/su15129840>
 - [78] Lundheim, S. H., Pellegrini-Masini, G., Klockner, C. A., & Geiss, S. (2022). Developing a Theoretical Framework to Explain the Social Acceptability of Wind Energy. *ENERGIES*, 15(14). <https://doi.org/10.3390/en15144934>
 - [79] Ma, G. (2021). Community attachment: perceptions of context matter. *Community Development*, 52(1), 77–94. <https://doi.org/10.1080/15575330.2020.1836009>
 - [80] Magnani, N. (2020). Beyond NIMBY: Mobilization Against Mini-hydroelectric Power in the Italian Alps. *MOUNTAIN RESEARCH AND DEVELOPMENT*, 40(3), R31–R36. <https://doi.org/10.1659/MRD-JOURNAL-D-20-00035.1>
 - [81] Manzo, L., & Devine-Wright, P. (2020). *Place attachment: Advances in theory, methods and applications* (2nd editio). Routledge.
 - [82] Masukujjaman, M., Alam, S. S., Siwar, C., & Halim, S. A. (2021). Purchase intention of renewable energy technology in rural areas in Bangladesh: Empirical evidence. *Renewable Energy*, 170, 639–651. <https://doi.org/10.1016/j.renene.2021.01.125>
 - [83] Medugorac, V., & Schuitema, G. (2023). Why is bottom-up more acceptable than top-down? A study on collective psychological ownership and place-technology fit in the Irish Midlands. *ENERGY RESEARCH & SOCIAL SCIENCE*, 96. <https://doi.org/10.1016/j.erss.2022.102924>

- [84] Mjahed Hammami, S., & Abdulrahman Al Moosa, H. (2021). Place attachment in land use changes: A phenomenological investigation in residents' lived experiences with a renewable energy project deployment. *Sustainability (Switzerland)*, 13(16). <https://doi.org/10.3390/su13168856>
- [85] Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Academia and Clinic Annals of Internal Medicine Preferred Reporting Items for Systematic Reviews and Meta-Analyses : *Annals of Internal Medicine*, 151(4), 264–269.
- [86] Morrison, L. G., Yardley, L., Powell, J., & Michie, S. (2012). What design features are used in effective e-health interventions? A review using techniques from critical interpretive synthesis. *Telemedicine and E-Health*, 18(2), 137–144. <https://doi.org/10.1089/tmj.2011.0062>
- [87] Mueller, S., Backhaus, N., & Buchecker, M. (2020). Mapping meaningful places: A tool for participatory siting of wind turbines in Switzerland? *ENERGY RESEARCH \& SOCIAL SCIENCE*, 69. <https://doi.org/10.1016/j.erss.2020.101573>
- [88] Nasr, E., Emeagwali, O. L., Aljuhmani, H. Y., & Al-Geitany, S. (2022). Destination Social Responsibility and Residents' Environmentally Responsible Behavior: Assessing the Mediating Role of Community Attachment and Involvement. *Sustainability (Switzerland)*, 14(21). <https://doi.org/10.3390/su142114153>
- [89] Nayak, B., Bhattacharyya, S. S., & Krishnamoorthy, B. (2022). Exploring the black box of competitive advantage – An integrated bibliometric and chronological literature review approach. *Journal of Business Research*, 139(March 2021), 964–982. <https://doi.org/10.1016/j.jbusres.2021.10.047>
- [90] Nilson, R. S., & Stedman, R. C. (2023). Reacting to the Rural Burden: Understanding Opposition to Utility-Scale Solar Development in Upstate New York[☆]. *RURAL SOCIOLOGY*, 88(2), 578–605. <https://doi.org/10.1111/ruso.12486>
- [91] Oláh, J., Krisán, E., Kiss, A., Lakner, Z., & Popp, J. (2020). PRISMA statement for reporting literature searches in systematic reviews of the bioethanol sector. *Energies*, 13(9), 1–35. <https://doi.org/10.3390/en13092323>
- [92] Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., & Moher, D. (2021). Updating guidance for reporting systematic reviews: development of the PRISMA 2020 statement. *Journal of Clinical Epidemiology*, 134, 103–112. <https://doi.org/10.1016/j.jclinepi.2021.02.003>
- [93] Parkins, J. R., Rollins, C., Anders, S., & Comeau, L. (2018). Predicting intention to adopt solar technology in Canada: The role of knowledge, public engagement, and visibility. *Energy Policy*, 114(December 2017), 114–122. <https://doi.org/10.1016/j.enpol.2017.11.050>
- [94] Pei, Z. (2019). Roles of neighborhood ties, community attachment and local identity in residents' household waste recycling intention. *Journal of Cleaner Production*, 241, 118217. <https://doi.org/10.1016/j.jclepro.2019.118217>
- [95] Pradhananga, A. K., Green, E. K., Shepard, J., & Davenport, M. A. (2021). The influence of community attachment and environmental concern on climate-related civic engagement in Lake Superior's north shore region. *Journal of Coastal Conservation*, 25(1). <https://doi.org/10.1007/s11852-021-00816-5>
- [96] Prados (Maria-Jose), M.-J., Iglesias-Pascual (Ricardo), R., & Barral (Maria Angeles), A. (2022). Energy transition and community participation in Portugal, Greece and Israel: Regional differences from a multi-level perspective. *ENERGY RESEARCH \& SOCIAL SCIENCE*, 87. <https://doi.org/10.1016/j.erss.2021.102467>
- [97] Prancutė, R. (2021). Scopus and Web of Science stands out for systematic reviews, offering comprehensive coverage across disciplines, including journals, conferences, and patents. *Publications*, 9(1).
- [98] Qin, Y., Xu, Z., Wang, X., & Škare, M. (2022). Green energy adoption and its determinants: A bibliometric analysis. *Renewable and Sustainable Energy Reviews*, 153(September 2021). <https://doi.org/10.1016/j.rser.2021.111780>
- [99] Radtke, J., Yildiz, Ö., & Roth, L. (2022). Does Energy Community Membership Change Sustainable Attitudes and Behavioral Patterns? Empirical Evidence from Community Wind Energy in Germany. *Energies*, 15(3). <https://doi.org/10.3390/en15030822>

-
- [100] Rahman, A., Farrok, O., & Haque, M. M. (2022). Environmental impact of renewable energy source based electrical power plants: Solar, wind, hydroelectric, biomass, geothermal, tidal, ocean, and osmotic. *Renewable and Sustainable Energy Reviews*, 161(February), 112279. <https://doi.org/10.1016/j.rser.2022.112279>
 - [101] Rethlefsen, M. L., Kirtley, S., Waffenschmidt, S., Ayala, A. P., Moher, D., Page, M. J., & Koffel, J. B. (2021). PRISMA-S: an extension to the PRISMA statement for reporting literature searches in systematic reviews. *Systematic Reviews*, 10(1–19).
 - [102] Rilling, B., Kurz, P., & Herbes, C. (2024). Renewable gases in the heating market: Identifying consumer preferences through a Discrete Choice Experiment. *Energy Policy*, 184(July 2023), 113857. <https://doi.org/10.1016/j.enpol.2023.113857>
 - [103] Roddis, P., Roelich, K., Tran, K., Carver, S., Dallimer, M., & Ziv, G. (2020). What shapes community acceptance of large-scale solar farms? A case study of the UK's first 'nationally significant' solar farm. *SOLAR ENERGY*, 209, 235–244. <https://doi.org/10.1016/j.solener.2020.08.065>
 - [104] Saleem, F., Khattak, A., Ur Rehman, S., & Ashiq, M. (2021). Bibliometric analysis of green marketing research from 1977 to 2020. *Publications*, 9(1), 1–19. <https://doi.org/10.3390/publications9010001>
 - [105] Segreto, M., Principe, L., Desormeaux, A., Torre, M., Tomassetti, L., Tratz, P., Paolini, V., & Petracchini, F. (2020). Trends in social acceptance of renewable energy across europe—a literature review. *International Journal of Environmental Research and Public Health*, 17(24), 1–19. <https://doi.org/10.3390/ijerph17249161>
 - [106] Sherren, K., Beckley, T. M., Parkins, J. R., Stedman, R. C., Keilty, K., & Morin, I. (2016). Learning (or living) to love the landscapes of hydroelectricity in Canada: Eliciting local perspectives on the Mactaquac Dam via headpond boat tours. *ENERGY RESEARCH & SOCIAL SCIENCE*, 14, 102–110. <https://doi.org/10.1016/j.erss.2016.02.003>
 - [107] Soopramanien, D., Daryanto, A., & Song, Z. (2023). Urban residents' environmental citizenship behaviour: The roles of place attachment, social norms and perceived environmental responsibility. *Cities*, 132(October 2022), 104097. <https://doi.org/10.1016/j.cities.2022.104097>
 - [108] Stelmach, G., Hazboun, S., Brandt, D., & Boudet, H. (2023). Public perceptions of wave energy development on the west coast of North America: Risks, benefits, and coastal attachment. *OCEAN & COASTAL MANAGEMENT*, 241. <https://doi.org/10.1016/j.ocecoaman.2023.106666>
 - [109] Suchyta, M. (2020). Sense of place as a predictor of beliefs about energy development: A study in Pennsylvania's Marcellus Shale. *ENERGY RESEARCH & SOCIAL SCIENCE*, 70. <https://doi.org/10.1016/j.erss.2020.101635>
 - [110] Suesser, D. (2018). Coastal dwellers-power against climate change: a place-based perspective on individual and collective engagement in North Frisia. *JOURNAL OF COASTAL CONSERVATION*, 22(1, SI), 169–182. <https://doi.org/10.1007/s11852-016-0467-3>
 - [111] Suesser, D., Doering, M., & Ratter, B. M. W. (2017). Harvesting energy: Place and local entrepreneurship in community-based renewable energy transition. *ENERGY POLICY*, 101, 332–341. <https://doi.org/10.1016/j.enpol.2016.10.018>
 - [112] United Nations. (2012). United Nations General Assembly Declares 2014-2024 Decade of Sustainable Energy for All. United Nations. <https://press.un.org/en/2012/ga11333.doc.htm>
 - [113] Upham, P., Johansen, K., Boegel, P. M., Axon, S., Garard, J., & Carney, S. (2018). Harnessing place attachment for local climate mitigation? Hypothesising connections between broadening representations of place and readiness for change. *LOCAL ENVIRONMENT*, 23(9), 912–919. <https://doi.org/10.1080/13549839.2018.1488824>
 - [114] Van Veelen, B., & Haggett, C. (2017). Uncommon Ground: The Role of Different Place Attachments in Explaining Community Renewable Energy Projects. *Sociologia Ruralis*, 57(November 2017), 533–554. <https://doi.org/10.1111/soru.12128>
 - [115] Vergura, D. T., Zerbini, C., Luceri, B., & Palladino, R. (2023). Investigating sustainable consumption behaviors: a bibliometric analysis. *British Food Journal*, 125(13), 253–276. <https://doi.org/10.1108/BFJ-06-2022-0491>

-
- [116] Vespa, M., Kortsch, T., Hildebrand, J., Schweizer-Ries, P., & Volkmer, S. A. (2022). Not All Places Are Equal: Using Instagram to Understand Cognitions and Affect towards Renewable Energy Infrastructures. *SUSTAINABILITY*, 14(7). <https://doi.org/10.3390/su14074071>
 - [117] Wang, J., & Azam, W. (2024). Natural resource scarcity, fossil fuel energy consumption, and total greenhouse gas emissions in top emitting countries. *Geoscience Frontiers*, 15(2), 101757. <https://doi.org/10.1016/j.gsf.2023.101757>
 - [118] Wang, Q. C., Liu, X., Jian, I. Y., Zhang, E. J., Hou, Y. T., Siu, K. W. M., & Li, Y. Bin. (2023). Community resilience in city emergency: Exploring the roles of environmental perception, social justice and community attachment in subjective well-being of vulnerable residents. *Sustainable Cities and Society*, 97(March), 104745. <https://doi.org/10.1016/j.scs.2023.104745>
 - [119] Wang, Y., Gu, J., & Wu, J. (2020). Explaining local residents' acceptance of rebuilding nuclear power plants: The roles of perceived general benefit and perceived local benefit. *ENERGY POLICY*, 140. <https://doi.org/10.1016/j.enpol.2020.111410>
 - [120] Wang, Z., Li, S., Jin, Z., Li, Z., Liu, Q., & Zhang, K. (2023). Oil and gas pathway to net-zero: Review and outlook. *Energy Strategy Reviews*, 45(September 2022), 101048. <https://doi.org/10.1016/j.esr.2022.101048>
 - [121] Weeks, D., & Jenkins, J. (2024). Sense of Place and Perceived Impacts in the Rural Industrialized Nexus: Insights for Sustainability Pathways. *ENVIRONMENTAL MANAGEMENT*, 73(6), 1215–1229. <https://doi.org/10.1007/s00267-024-01969-3>
 - [122] Wijekoon, R., & Sabri, M. F. (2021). Determinants that influence green product purchase intention and behavior: A literature review and guiding framework. *Sustainability (Switzerland)*, 13(11), 1–40. <https://doi.org/10.3390/su13116219>
 - [123] Wolske, K. S., Todd, A., Rossol, M., McCall, J., & Sigrin, B. (2018). Accelerating demand for residential solar photovoltaics: Can simple framing strategies increase consumer interest? *Global Environmental Change*, 53(February), 68–77. <https://doi.org/10.1016/j.gloenvcha.2018.08.005>
 - [124] Ye, N., Kueh, T. B., Hou, L., Liu, Y., & Yu, H. (2020). A bibliometric analysis of corporate social responsibility in sustainable development. *Journal of Cleaner Production*, 272, 122679. <https://doi.org/10.1016/j.jclepro.2020.122679>
 - [125] Zhang, X., & Dong, F. (2020). Why do consumers make green purchase decisions? Insights from a systematic review. *International Journal of Environmental Research and Public Health*, 17(18), 1–25. <https://doi.org/10.3390/ijerph17186607>
 - [126] Zhang, X., & Li, J. R. (2023). Recovery of greenhouse gas as cleaner fossil fuel contributes to carbon neutrality. *Green Energy and Environment*, 8(2), 351–353. <https://doi.org/10.1016/j.gee.2022.06.002>
 - [127] Zhang, Y., Xiao, X., Cao, R., Zheng, C., Guo, Y., Gong, W., & Wei, Z. (2020). How important is community participation to eco-environmental conservation in protected areas? From the perspective of predicting locals' pro-environmental behaviours. *Science of the Total Environment*, 739(155), 139889. <https://doi.org/10.1016/j.scitotenv.2020.139889>