UN environment programme | UN Climate Technology Centre & Network

United Nations Climate Change
Technology Executive Committee

UN environment programme | copenhagen climate centre

The feasibility assessment approach

Climate Technology Progress Report **2024**

SUGGESTED CITATION

United Nations Environment Programme Copenhagen Climate Centre (UNEP-CCC) and Climate Technology Centre and Network (CTCN). Appendix A: the feasibility assessment approach - Climate Technology Progress Report 2024., Copenhagen, Denmark.

Appendix A

APPENDIX A: THE FEASIBILITY ASSESSMENT APPROACH

The feasibility assessment approach adopted in this Report builds from SR1.5, AR6 WG2 and WG3 as well as the CTPR 2022 and CTPR 2023 (IPCC, 2022, 2023; UNEP-CCC & UNFCCC-TEC, 2022). Feasibility for the global-level analysis conducted by the IPCC was defined along six dimensions: economic, technological, environmental, geophysical, sociocultural, and institutional. Indicators are then developed for each dimension. Indicators of feasibility within the dimensions are contextual and differ slightly between adaptation and mitigation options, and for adaptation options, between regions. The indicators were selected based on a review of scholarship and expert consultation and had underlying questions to guide the assessment of feasibility, depicted in the third column of table 1 (adaptation) and the second column in table S.1.1 (mitigation). In the AR6 report, for adaptation, the assessment generally focused on whether or not a given indicator was a barrier, and whether or not there was a knowledge gaps. For mitigation, the assessment focused on whether indicators hindered or facilitated implementation. In defining some indicators as facilitators, the mitigation FA recognizes that some options are outperforming the options they aim to replace – e.g. solar PV being cheaper than fossil fuels. Similarly, mitigation options can also have co-benefits – e.g. electric vehicles and solar energy reduce local and regional air pollution – which also increases the potential for a mitigation option to be rapidly implemented and at a larger scale.

A clear line of sight to the underlying evidence and literature was developed for each decision throughout the assessment. This involved carefully tracking the evidence for each option and mapping them onto specific indicators. As per IPCC guidance, confidence language was applied to each assessment based on the amount of, and the level of agreement on, the evidence.

Combining indicators for an overall feasibility score

Options can also be assigned an overall assessment. In a departure from AR6, both adaptation and mitigation options were assessed in the same method. Each feasibility dimension, overall feasibility was assessed as the arithmetic mean score of the relevant underlying indicators. Based on this, dimensions were classified as having insignificant barriers (2.5–3), mixed or moderate barriers (1.5–2.5) or significant barriers (below 1.5) to feasibility. Indicators assessed as not applicable (NA), limited evidence (LE), or no evidence (NE) were not included in this overall assessment. This mapping process is important for transparency purposes. Moreover, the same combining approach was used to assess the score of indicators grouped together for presentations purposes. This is shown in **Figure S.A.1 and Table S.A.1** below.

Table S.A.1: The guidance table from SR1.5

<table>
<tr><th>Entry for Indicator-Option Combination</th><th colspan="2">Guidance for Conducting the Feasibility Assessment for Mitigation and Adaptation Options</th></tr>
<tr><td>NA (not applicable)</td><td colspan="2">The indicator is not relevant to the option</td></tr>
<tr><td>NE (no evidence)</td><td colspan="2">No peer-reviewed literature could be located supporting an assessment of whether this indicator would limit the option´s feasibility
The peer-reviewed literature that mentions the issue is not robust enough</td></tr>
<tr><td>LE (limited evidence)</td><td colspan="2">One or two papers make statements/ present research that could be the basis for the assessment, but this evidence is considered too limited
Two or more papers provide a basis for the assessment as a side issue in the paper, not as a core issue</td></tr>
<tr><td>A</td><td rowspan="3">A feasibility assessment can be made:
If there are one or two robust papers (or more) that contain references which also support the assessment
If literature is plentiful
If one or a number of meta-studies and reviews provide extensive treatment of the indicator-option combination</td><td>A = The indicator could block the feasibility of this option</td></tr>
<tr><td>B</td><td>B = The indicator does not have a positive nor a negative effect on the feasibility of the option</td></tr>
<tr><td>C</td><td>C = The indicator does not pose any barrier to the feasibility of this option</td></tr>
</table>

Figure S.A.1. Methodology

1. Define scope

Based on the scope of the study (global/national/local/ sectoral) identify system transitions and underlying adaptation and mitigation technologies

2. Develop indicators

Across feasibility dimensions, develop indicators through literature review and expert elicitation

3. Create database

Conduct literature review for each adaptation technology at the indicator level

4. Conduct assessment

Assess each option at indicator-level giving scores for feasibility (high, medium and low), identifying where there is limited evidence (low evidence, no evidence), and where an indicator is not applicable

5. Check robustness

Cross-check each indicator-level score by 2-3 expert reviewers and adjust based on additional literature, regional diversity

6. Combine indicators

Combine indicator-level assessment (arithmetic mean of the relevant underlying indicators) to develop dimension-level score. The methods for combining the score is shown below.

7. Assess synergies and trade-offs

For adaptation options, assess positive or negative implications for mitigation

For mitigation options, assess positive or negative implications for adaptation

8. Report and visualise

Report dimension-level assessment through spider charts, traffic light tables etc. Differentiation of an option's feasibility diascussed in tables/text accompanying visuals

Calculating a score for each dimensions

High feasibility is weighed with a score of 3, medium feasibility with a score of 2 and low feasibility with a score of 1. This formula indicates, based on this weighing, how the composite feasibility of a dimension is obtained. The composite feasibility of an option, across dimensions, is calculated using the same weighing.

STEP 1

How many indicators in one dimension are effective (applicable)?

effective indicators = #indicators - #not applicable

STEP 2

How many indicators have sufficient litterature?

effective indicators - #NE & LE[1]

STEP 3

Average of the effective indicators with sufficient evidence[2]

$$\frac{(1*A + 2*B + 3*C)}{\#\text{ effective indicators} - \#NE \;\&\; LE}$$

STEP 4

Assign category to dimension[3]

Legend of Feasibility Assessment Tables		Legend criteria for overall feasibility of each of the dimension-option combinations
Not applicable	(grey)	All indicators are NA
Insufficient evidence	(white)	#NE & LE > 0.5 * #effective indicators
Low feasibility	(light blue)	AVG ≤ 1.5
Medium feasibilty	(medium blue)	1.5 < AVG ≤ 2.5 #NE & LE ≤ 0.5 * #effective indicators
High feasibility	(dark blue)	AVG > 2.5 #NE & LE ≤ 0.5 * #effective indicators

[1] NA: Non-Applicable, NE: No Evidence, LE: Low Evidence
[2] Low = 1, medium = 2 and high =3 A, B and C represent three hypothetical indicators.
[3] This approach was followed for the adaptation assessment. A similar assessment was followed for mitigation on enablers and barriers, but the dimensions are continuous rather than discrete.

Source: modified from Singh et al. (2020)

Ensuring robustness and transparency

All assessments drew on two rounds of internal review to ensure coherence, coverage and balance. Reviews included adding literature and improving the coverage of studies – e.g. to include evidence from Asian countries, peer-reviewed and grey literature – and removing any perceived biases. Each option's indicator-level assessment was validated by at least three authors. If indicator-level assessment differed, it was reconciled between the team of authors based on the literature each individually reviewed. As indicated above, for regional or contextual differences in option-level feasibility, text was used to explain the differentiating factors. Ideally, a systematic review would be conducted to comprehensively document relevant literature. However, when resources or time are limited, semi-systematic assessment approaches could be followed, such as standard practices of literature review – searching databases to achieve reference saturation – followed by careful and iterative reference checking, expert suggestions and internal peer review. The latter was employed for the AR6 reports due to time constraints resulting in assessing several thousand unique references for SR1.5, AR6 Working Group 2 and AR6 Working Group 3. When the process is downscaled at national or subnational level, where references are limited to allow an extensive literature review, the assessment can rely on expert consultations and grey literature.

Notes on the methodology:

For each of the technologies identified in the chapter, reviews of the literature, government reports, and policy documents post-AR6 were conducted (with a few exceptions of literature prior to 2021 not included in AR6 and how included here) with the goal of identifying whether there were any major changes in the scoring beyond the comprehensive assessment completed in AR6. We did not conduct a full systematic review, but rather it is a scan of the peer-review literature, looking for any major updates and/or systematic reviews that are already available in the literature. As a result, a score that is the same as the one in AR6 may indicate that there was no major change in the literature, thus further emphasizing the results. If the assessment score had not changed with more robust evidence (e.g., a post-AR6 systematic review in the peer review literature), this is reflected in the scoring of robustness and strength of evidence.

It should also be noted that WG2 and WG3 took different approaches to the scoring of the technologies on the indicators. Namely WG2 adopted the SR1.5 approach which develops a single score for overall feasibility. By contrast, WG3 evaluated separately aspects of increasing and decreasing feasibility, arguing that a decision-maker should be able to evaluate the extent to which the environment was supportive and not supportive of a given option. However, the single score approach of WG2 can be easier to interpret for screening across technologies and hence, this approach is adopted here. The details of the scoring are retained in the text.

REFERENCES:

IPCC. (2022). Climate Change 2022 - Mitigation of Climate Change - Full Report. In *Cambridge University Press* (Issue 1).

IPCC. (2023a). *Climate Change 2022 – Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (D. C. R. M. T. E. S. P. K. M. A. A. M. C. S. L. S. L. V. M. A. O. B. R. (eds.)]. [H.-O. Pörtner, Ed.). Cambridge University Press. Cambridge University Press, Cambridge, UK and New York, NY, USA. https://doi.org/10.1017/9781009325844

UNEP-CCC, & UNFCCC-TEC. (2023). *Climate Technology Progress Report 2023*. https://unepccc.org/publications/the-climate-technology-progress-report-2023/

Appendix B

APPENDIX B: THE FEASIBILITY ASSESSMENT RESULTS

Table S.B.1: WGII regions

Regions Def. AR6	
S/N	**WGII**
1	Africa
2	Asia
3	Australasia
4	Central and South America
6	Europe
7	North America
8	Small islands

B.1.2 Hydropower:

Hydroelectric energy production, beyond pumped storage hydropower, continues to play a critical role in the global electric power system, as it has almost since the inception of centralized electric grids. The feasibility assessment focuses on conventional hydroelectric systems, or those that rely on conversion of potential energy into kinetic energy, rather than hydrokinetic or technologies that derive power from the movement of water. Other smaller hydroelectric systems with capacities <5kW (pico) are excluded from consideration due to substantial differences in scales of the technology (i.e., in-home or machine-level applications). We carried out a regional FA for Dams as can be seen below in **Figure S.B.1.**

B.1.3: Energy storage

Pumped storage hydropower (PSH) accounts for roughly 90% of total global electricity storage as of 2021 (IEA, 2023). From a global perspective, PSH has an overall medium feasibility. PSH has a medium geophysical feasibility, though the resources are largely limited to areas with moderate to high relief (elevation change) and require large amounts of land. Environmental-ecological feasibility is also medium as using concrete for reservoirs, could negatively affect air quality and the water systems can be prone to periodic eutrophication. PSH has a high technological feasibility, as it is a relatively simple, scalable, and mature technology and is widely deployed across different parts of the world. From the economic dimension, PSH has medium feasibility, owning to high upfront costs, but positive employment and economic growth effects. Socio-cultural feasibility is medium as public acceptance can hinder project development. Institutionally, PSH maintains generally positive political acceptance and few hurdles for coordination but does face legal and administrative challenges, owing to regulatory requirements that can stifle project development. Hydroelectric energy production, beyond pumped storage hydropower, continues to play a critical role in the global electric power system, as it has almost since the inception of centralized electric grids. The feasibility assessment focuses on conventional hydroelectric systems, or those that rely on conversion of potential energy into kinetic energy, rather than hydrokinetic or technologies that derive power from the movement of water. Other smaller hydroelectric systems with capacities <5kW (pico) are excluded from consideration due to substantial differences in scales of the technology (i.e., in-home or machine-level applications).

Regional differences in currently operation PSH and those being constructed or proposed reveal interesting insights. Reasons for regional differences include ease of institutional and regulatory approval, where East Asia has fewer challenges associated with getting projects approved and constructed. Other major differences could be related to financing and environmental impacts. Geophysical feasibility is influenced by the variety of scales and configuration. With few exceptions, the most physically suitable sites (i.e., elevation differences and available flow) for new large hydroelectricity installations have already been developed. Similar to geophysical feasibility, the environmental-ecological feasibility for large impoundment systems is low, while run-of-river, run-of-release (using flows at existing dams), and conduit systems score high feasibility in this category. It is important to note substantial regional variations in the barriers that exist to environmental-ecological feasibility, particularly considering GHGs. Methane and carbon dioxide are emitted from all aquatic systems, including rivers and reservoirs.

B.2: Feasibility Assessement tables

ADAPTATION

Dimensions	Adaptation Feasibility Analysis	RESILIENT POWER SYSTEMS		
		Evidence		
		Agreement		
		Dim. Avg	Indicator Score	References (update on AR6)
Geophysical	Physical feasibility	C	N/A	Same as AR6 (no update)
	Hazard risk reduction potential		N/A	Same as AR6 (no update)
	Land use change enhancement potential		C	(Osman et al., 2023)
Environmental-ecological	Ecological capacity	B	B	(Osman et al., 2023)
	Adaptive capacity/ resilience		C	
Technological	Technical resource availability	C	C	(Amini et al., 2023; Khaledi & Saifoddin, 2023; Mujjuni et al., 2023; Paul et al., 2024; Perera & Hong, 2023; L. Xu et al., 2024; Y. Xu et al., 2023)
	Risks mitigation potential		C	
Economic	Socioeconomic vulnerability reduction potential	C	C	Amini et al., 2023; Khaledi & Saifoddin, 2023; Mujjuni et al., 2023; Paul et al., 2024; Perera & Hong, 2023; L. Xu et al., 2024; Y. Xu et al., 2023)
	Employment and productivity enhancement potential		B	
	Microeconomic viability		C	
	Macroeconomic viability		C	
Socio-cultural	Socio-cultural acceptability	C	C	Same as AR6 (no update)
	Social co-benefits (health, education)		C	Same as AR6 (no update)
	Social and regional inclusiveness		C	Same as AR6 (no update)
	Gender equity		B	Same as AR6 (no update)
	Intergenerational equity		B	Same as AR6 (no update)
Institutional	Political acceptability	B	C	Same as AR6 (no update)
	Legal and regulatory acceptability		B	Same as AR6 (no update)
	Institutional capacity and administrative feasibility		B	Same as AR6 (no update)
	Transparency and accountability potential		B	Same as AR6 (no update)

Dimensions	Adaptation Feasibility Analysis	ENERGY RELIABILITY		
		Evidence		
		Agreement		
		Dim. Avg	Indicator Score	References (Update on AR6)
Geophysical	Physical feasibility	N/A	N/A	Same as AR6 (no update)
	Hazard risk reduction potential		N/A	Same as AR6 (no update)
	Land use change enhancement potential		N/A	Same as AR6 (no update)
Environmental-ecological	Ecological capacity	C	NE	Same as AR6 (no update)
	Adaptive capacity/ resilience		C	Same as AR6 (no update)
Technological	Technical resource availability	C	C	(Zhou, 2023)
	Risks mitigation potential		C	
Economic	Socioeconomic vulnerability reduction potential	B	C	(Zhou, 2023)
	Employment and productivity enhancement potential		B	
	Microeconomic viability		C	
	Macroeconomic viability		B	
Socio-cultural	Socio-cultural acceptability	2.75	B	Same as AR6 (no update)
	Social co-benefits (health, education)		C	Same as AR6 (no update)
	Social and regional inclusiveness		C	Same as AR6 (no update)
	Gender equity		NE	Same as AR6 (no update)
	Intergenerational equity		C	Same as AR6 (no update)
Institutional	Political acceptability	2.33	C	(Rickerson et al., 2019)
	Legal and regulatory acceptability		B	
	Institutional capacity and administrative feasibility		B	
	Transparency and accountability potential		NE	

Dimensions	Adaptation Feasibility Analysis	WATER USE EFFICIENCY		
		Evidence		
		Agreement		
		Dim. Avg	Indicator Score	References
Geophysical	Physical feasibility	C	B	Same as AR6 (no update)
	Hazard risk reduction potential		C	Same as AR6 (no update)
	Land use change enhancement potential		C	Same as AR6 (no update)
Environmental-ecological	Ecological capacity	C	C	Same as AR6 (no update)
	Adaptive capacity/ resilience		C	Same as AR6 (no update)
Technological	Technical resource availability	C	C	(Olsson, 2020; Reis et al., 2023)
	Risks mitigation potential		C	
Economic	Socioeconomic vulnerability reduction potential	C	C	(Olsson, 2020; Reis et al., 2023)
	Employment and productivity enhancement potential		NE	
	Microeconomic viability		C	
	Macroeconomic viability		C	
Socio-cultural	Socio-cultural acceptability	Insuf. Evidence	LE	Same as AR6 (no update)
	Social co-benefits (health, education)		LE	Same as AR6 (no update)
	Social and regional inclusiveness		NE	Same as AR6 (no update)
	Gender equity		NE	Same as AR6 (no update)
	Intergenerational equity		NE	Same as AR6 (no update)
Institutional	Political acceptability	B	B	Same as AR6 (no update)
	Legal and regulatory acceptability		LE	Same as AR6 (no update)
	Institutional capacity and administrative feasibility		B	Same as AR6 (no update)
	Transparency and accountability potential		NE	Same as AR6 (no update)

Dimensions	Adaptation Feasibility Analysis	SMART GRIDS (DIGITALIZATION)		
		Evidence		
		Agreement		
		Dim. Avg	Indicator Score	References
Geophysical	Physical feasibility	NA	NA	
	Hazard risk reduction potential		NA	
	Land use change enhancement potential		NA	
Environmental-ecological	Ecological capacity	Insuf.	LE	
	Adaptive capacity/ resilience		LE	
Technological	Technical resource availability	C	C	(Bazazzadeh et al., 2022; Cicilio et al., 2021; Z. Y. Dong & Zhang, 2021)
	Risks mitigation potential		B	(Aghahadi et al., 2024; Babazadeh et al., 2022; Jasiûnas et al., 2021)
Economic	Socioeconomic vulnerability reduction potential	Insuf.	NE	
	Employment and productivity enhancement potential		LE	(Mondejar et al., 2021)
	Microeconomic viability		LE	(S. Kumar et al., 2024)
	Macroeconomic viability		NE	

Socio-cultural	Socio-cultural acceptability	Insuf.	LE	(Jasiūnas et al., 2021)
	Social co-benefits (health, education)		LE	(S. Kumar et al., 2024)
	Social and regional inclusiveness		LE	(Jasiūnas et al., 2021)
	Gender equity		NE	
	Intergenerational equity		NE	
Institutional	Political acceptability	Insuf.	NE	
	Legal and regulatory acceptability		LE	(Z. Y. Dong & Zhang, 2021; S. Kumar et al., 2024)
	Institutional capacity and administrative feasibility		LE	(Babazadeh et al., 2022; S. Kumar et al., 2024)
	Transparency and accountability potential		NE	

MITIGATION

Dimensions	Mitigation feasibility analysis	SOLAR PV		
		Evidence		
		Agreement		
		Dim. Avg	Indicator Score	References
Geophysical	Physical potential	B	C	(M. M. Islam et al., 2022a; X. Li et al., 2023; Solangi et al., 2021a)
	Geophysical resources		B	(Butterfield & Bullen, 2022; Calvo & Valero, 2022a; Carrara et al., 2020; Liang et al., 2022a; Teixeira et al., 2024)
	Land use		B	(Y. kuang Chen et al., 2022; Ferreras-Alonso et al., 2024; J. Kim et al., 2022a; Oudes & Stremke, 2021)
Environmental-ecological	Air pollution	C	C	(Anwar et al., 2021a; Chien et al., 2021a; Collado et al., 2022; Hamed Banirazi Motlagh et al., 2023a)
	Toxic waste, ecotoxicity, eutrophication		B	(Mahmud & Farjana, 2022; Rabaia et al., 2021; Sharma et al., 2021; Zhang et al., 2023)
	Water quantity and quality		C	(Gonzalez Sanchez et al., 2021; Hadipour et al., 2021a; Mahmud & Farjana, 2022; Pandey et al., 2021)
	Biodiversity		C	(Ascensão et al., 2023; Blaydes et al., 2021; Walston et al., 2024)
Technological	Simplicity	C	B	(Heidari et al., 2022; Hu et al., 2022; Rahmdel et al., 2023)
	Technological scalability		C	(Gómez-Navarro et al., 2021; Jiang et al., 2022; Khan et al., 2023)
	Maturity and technology readiness		C	(Dehghanimadvar et al., 2022; Kougias et al., 2021; Powell et al., 2021)
Economic	Costs in 2030 and long term	C	C	(Al-Shahri et al., 2021; Huda et al., 2024; Imam et al., 2024; Liikkanen et al., 2024; Sharshir et al., 2021)
	Employment effects and economic growth		C	(Hanto et al., 2021; Huda et al., 2024; Imam et al., 2024; Nasirov et al., 2021; Silveira et al., 2024)
Socio-cultural	Public acceptance	C	B	(Awuku et al., 2022; Cousse, 2021; Nilson & Stedman, 2022; San-Martín & Elizalde, 2024; L. Tong et al., 2024; D. Wu et al., 2024)
	Effects on health and well-being		C	(Ahmadpour et al., 2021; Beyene et al., 2024; Z. Chen & Sun, 2024; Jaiswal et al., 2022; Karaaslan & Çamkaya, 2022; L'Her et al., 2024; Obaideen et al., 2021; Rivera et al., 2024a; Suman, 2021)
	Distributional effect		C	(Apergi et al., 2024; El-Mekaoui et al., 2024; Hanke et al., 2021; Levenda et al., 2021; Min et al., 2023; Omeje et al., 2024; Sovacool et al., 2022)
Institutional	Political acceptance	B	B	(Cousse, 2021; Kadenic et al., 2024; Pascaris et al., 2021; Ponce Oliva et al., 2024; Rettig & Herman, 2024; Scovell et al., 2024; Stadelmann-Steffen & Dermont, 2021; Torul Yürek et al., 2023)
	Institutional capacity and governance, cross-sectoral coordination		B	(C. Chen et al., 2021; M. M. Islam et al., 2022b; Lerman et al., 2021)
	Legal and administrative feasibility		A	(Heffron et al., 2021; C. Kim, 2021; Nabil et al., 2024; Norouzi et al., 2021; Rodriguez et al., 2024; Santiago et al., 2024; Tahir et al., 2024)

Dimensions	Mitigation feasibility analysis	WIND ENERGY (OFF/ON SHORE)		
		Evidence		
		Agreement		
		Dim. Avg	Indicator Score	References
Geophysical	Physical potential	C	C	(Gualtieri, 2022; McKenna, Pfenninger, et al., 2022a; Neupane et al., 2022; Uwineza et al., 2021; Veers et al., 2022)
	Geophysical resources		C	(Calvo & Valero, 2022a; Z. Chen, 2021; C. Li, Mogollón, Tukker, Dong, et al., 2022; D. Tong et al., 2021; Verma et al., 2022)
	Land use		C	(Frantál et al., 2023; Kati et al., 2021; Lopez et al., 2021; Mathews et al., 2023; McKenna, Mulalic, et al., 2022; Schuster et al., 2015; Tumse et al., 2024)
Environmental-ecological	Air pollution	B	C	C (X. H. Chen et al., 2023; Galimova et al., 2022; Hamed & Alshare, 2022; Sayed et al., 2021; S. Wang et al., 2024)
	Toxic waste, ecotoxicity, eutrophication		B	(Galparsoro et al., 2022; C. Li, Mogollón, Tukker, & Steubing, 2022; Mahmud & Farjana, 2022; Nazir et al., 2020; Ozsahin et al., 2022; Tayebi et al., 2024; T. Wang et al., 2023)
	Water quantity and quality		C	(Hong et al., 2024; Rashidi et al., 2022; Sander et al., 2024; Saravanan et al., 2022)
	Biodiversity		B	(Balotari-Chiebao et al., 2023; Delina, 2022; Galparsoro et al., 2022; C. Li et al., 2023; Sebestyén, 2021; Teff-Seker et al., 2022)
Technological	Simplicity	C	C	(Bianchini et al., 2022; Crippa et al., 2021; Desalegn et al., 2022; Hannan et al., 2023; Rohrig et al., 2019)
	Technological scalability		C	(Alemzero et al., 2021; Desalegn et al., 2023; C. Dong et al., 2021; Ebrahimi et al., 2022; Gebreslassie, 2021; Mastoi et al., 2023; Veers et al., 2022)
	Maturity and technology readiness		B	(Bianchini et al., 2022; Z. Chen, 2021; Haces-Fernandez et al., 2022; Jansen et al., 2022; Veers et al., 2022)
Economic	Costs in 2030 and long term	C	C	(Almutairi et al., 2021; Amjith & Bavanish, 2022; Đukan & Kitzing, 2021; Jahannoosh et al., 2021; Maienza et al., 2022; Musial et al., 2023; Z. Zhang et al., 2023)
	Employment effects and economic growth		C	(Dorrell & Lee, 2020; Gatto & Drago, 2021; Hanna et al., 2024; Mostafa Nosratabadi et al., 2021; Potrc et al., 2021; Singh et al., 2022; Z. Zhang et al., 2023)
Socio-cultural	Public acceptance	B	B	Buchmayr et al., 2022; Iwata et al., 2023; Liu et al., 2021; Takeuchi, 2023; Zawadzki et al., 2022; Z. Zhang et al., 2023)
	Effects on health and well-being		C	(Buchmayr et al., 2022; Dumbrille et al., 2021; McKenna, Pfenninger, et al., 2022b; Sander et al., 2024; Shoeib et al., 2021; Z. Zhang et al., 2023)
	Distributional effect		B	(Glasson et al., 2022; Ruddat, 2022; Ruhnau et al., 2024; Takeuchi, 2023)
Institutional	Political acceptance	C	B	(Cohen et al., 2023; Fofack-Garcia et al., 2023; Knauf & le Maitre, 2023; Roux et al., 2022; Ruddat, 2022; Schmidt et al., 2022)
	Institutional capacity and governance, cross-sectoral coordination		C	(A. Kumar et al., 2022; Rasool et al., 2022; Sadorsky, 2021; Weber, 2023; L. Zhang et al., 2024)
	Legal and administrative feasibility		C	(Al Arif & Herrera Anchustegui, 2022; Chang et al., 2021; Herrera Anchustegui & Radovich, 2022; C. Kim, 2021; Nieuwenhout, 2023; Ramos et al., 2021; Susskind et al., 2022)

Dimensions	Mitigation feasibility analysis	HYDROELECTRIC (DAMS)		
		Evidence		
		Agreement		
		Dim. Avg	Indicator Score	References
Geophysical	Physical potential	B	B	(IHA, 2024; Opperman et al., 2022; A. Rahman et al., 2022; R. Xu et al., 2023)
	Geophysical resources		B	(Golfam & Ashofteh, 2022; IHA, 2024; Wasti et al., 2022)
	Land use		A	(Opperman et al., 2022; A. Rahman et al., 2022)
Environmental-ecological	Air pollution	A	B	(Gemechu & Kumar, 2022; Ubierna et al., 2022; Z. Wang et al., 2024)
	Toxic waste, ecotoxicity, eutrophication		A	(A. Rahman et al., 2022; Z. Wang et al., 2024)
	Water quantity and quality		A	(A. Rahman et al., 2022)
	Biodiversity		A	(Fan et al., 2022; Kuriqi et al., 2021; Opperman et al., 2022; A. Rahman et al., 2022; Trottier et al., 2022)
Technological	Simplicity	C	C	(Ang et al., 2022; A. Rahman et al., 2022)
	Technological scalability		C	(Ang et al., 2022; A. Rahman et al., 2022)
	Maturity and technology readiness		C	(A. Rahman et al., 2022)
Economic	Costs in 2030 and long term	C	B	(Ang et al., 2022; IHA, 2024)
	Employment effects and economic growth		C	(Venus et al., 2022)
Socio-cultural	Public acceptance	A	A	(A. Rahman et al., 2022; van de Grift & Cuppen, 2022; Venus et al., 2022)
	Effects on health and well-being		B	Fan et al., 2022; Schulz & Skinner, 2022; Venus et al., 2022)
	Distributional effect		A	(Fan et al., 2022; A. Rahman et al., 2022; Schulz & Skinner, 2022)
Institutional	Political acceptance	LE	LE	(IHA, 2024)
	Institutional capacity and governance, cross-sectoral coordination		B	(IHA, 2024; Schulz & Skinner, 2022)
	Legal and administrative feasibility		LE	(IHA, 2024)

Dimensions	Mitigation feasibility analysis	HYDROELECTRIC (RUN OF RIVER)		
		Evidence		
		Agreement		
		Dim. Avg	Indicator Score	References
Geophysical	Physical potential	C	B	(Kuriqi et al., 2021; Wasti et al., 2022; R. Xu et al., 2023)
	Geophysical resources		C	(Golfam & Ashofteh, 2022; Quaranta et al., 2022; Wasti et al., 2022)
	Land use		C	(Engen et al., 2023; R. Xu et al., 2023)
Environmental-ecological	Air pollution	A	C	(Gemechu & Kumar, 2022; Ubierna et al., 2022; Z. Wang et al., 2024)
	Toxic waste, ecotoxicity, eutrophication		A	(Kuriqi & Jurasz, 2022; Y. Wang et al., 2022)
	Water quantity and quality		A	(Kuriqi et al., 2021; Kuriqi & Jurasz, 2022; Y. Wang et al., 2022)
	Biodiversity		A	(Gu et al., 2022; Kuriqi et al., 2021; Kuriqi & Jurasz, 2022; Trottier et al., 2022)
Technological	Simplicity	C	C	(Ang et al., 2022; Sasthav & Oladosu, 2022)
	Technological scalability		C	(Ang et al., 2022; Quaranta et al., 2022; Sasthav & Oladosu, 2022)
	Maturity and technology readiness		C	(Ang et al., 2022; Sasthav & Oladosu, 2022)
Economic	Costs in 2030 and long term	B	B	(Ang et al., 2022; Kuriqi et al., 2021)
	Employment effects and economic growth		NE	
Socio-cultural	Public acceptance	LE	LE	(Schulz & Skinner, 2022)
	Effects on health and well-being		NE	
	Distributional effect		NE	
Institutional	Political acceptance	B	B	(IHA, 2024; R. Xu et al., 2023)
	Institutional capacity and governance, cross-sectoral coordination		B	(IHA, 2024; Sasthav & Oladosu, 2022; Schmitt & Rosa, 2024)
	Legal and administrative feasibility		B	(IHA, 2024; Uría-Martínez & Johnson, 2023)

Dimensions	Mitigation feasibility analysis	GEOTHERMAL		
		Evidence		
		Agreement		
		Dim. Avg	Indicator Score	References
Geophysical	Physical potential	B	A	(DOE, 2024; IRENA & IGA, 2023; Sharmin et al., 2023; Zdzisław Krasnodebski, 2023)
	Geophysical resources		C	(DOE, 2024; IRENA & IGA, 2023; Melikoglu, 2017; Sharmin et al., 2023; Vargas et al., 2022; Zdzisław Krasnodebski, 2023)
	Land use		B	(Greiner et al., 2023; Sharmin et al., 2023; Shortall et al., 2015; Soltani et al., 2021; Vargas et al., 2022; Zdzisław Krasnodebski, 2023)
Environmental-ecological	Air pollution	B	B	(Alsaleh et al., 2023; Bashir et al., 2022; Idroes et al., 2024; Sharmin et al., 2023; Soltani et al., 2021)
	Toxic waste, ecotoxicity, eutrophication		B	(Sharmin et al., 2023; Soltani et al., 2021)
	Water quantity and quality		B	(DOE, 2019; Sharmin et al., 2023; Soltani et al., 2021)
	Biodiversity		A	(M. T. Islam et al., 2022; Ng et al., 2021; Shortall et al., 2015; Soltani et al., 2021)
Technological	Simplicity	C	C	(DOE, 2019; IPCC, 2011; Sharmin et al., 2023; Zdzisław Krasno-debski, 2023)
	Technological scalability		C	(DOE, 2019; IRENA & IGA, 2023; Sharmin et al., 2023)
	Maturity and technology readiness		C	(DOE, 2019; IRENA & IGA, 2023; Sharmin et al., 2023; Zdzisław Krasnodebski, 2023)
Economic	Costs in 2030 and long term	B	B	(DOE, 2024; IRENA & IGA, 2023; R.V. et al., 2023; Sharmin et al., 2023; Soltani et al., 2021; Zdzisław , 2023)
	Employment effects and economic growth		B	(DOE, 2019, 2024; Greiner et al., 2023; Idroes et al., 2024; Shortall et al., 2015; Soltani et al., 2021; Zdzisław Krasnodebski, 2023)
Socio-cultural	Public acceptance	B	B	(Hazboun & Boudet, 2020; Pellizzone et al., 2015; Renoth et al., 2023; Soltani et al., 2021; Zdzisław Krasnodebski, 2023)
	Effects on health and well-being		LE	(Idroes et al., 2024; Shortall et al., 2015)
	Distributional effect		B	(DOE, 2024; Greiner et al., 2023; Shortall et al., 2015; Soltani et al., 2021; Zdzisław Krasnodebski, 2023)
Institutional	Political acceptance	B	C	(IRENA & IGA, 2021; Soltani et al., 2021; Zdzisław Krasnodebski, 2023)
	Institutional capacity and governance, cross-sectoral coordination		B	(DOE, 2024; IRENA & IGA, 2021, 2023; Soltani et al., 2021; Zdzisław Krasnodebski, 2023)
	Legal and administrative feasibility		B	

Dimensions	Mitigation feasibility analysis	ENERGY STORAGE (PSH)		
		Evidence		
		Agreement		
		Dim. Avg	Indicator Score	References
Geophysical	Physical potential	B	C	(Görtz et al., 2022; Hunt et al., 2020; Rosenlieb et al., 2022)
	Geophysical resources		B	(de Assis Brasil Weber et al., 2024; Gurung et al., 2016; Rosenlieb et al., 2022)
	Land use		B	(de Assis Brasil Weber et al., 2024; Hunt et al., 2018; Turley et al., 2022)
Environmental-ecological	Air pollution	B	B	(B. Ali, 2023; de Assis Brasil Weber et al., 2024; Simon et al., 2023)
	Toxic waste, ecotoxicity, eutrophication		B	(Altea & Yanagihara, 2024; M. Li & He, 2022; Z. Wang et al., 2024)
	Water quantity and quality		B	(Gurung et al., 2016; Hunt et al., 2020; Kobler et al., 2019)
	Biodiversity		B	(de Assis Brasil Weber et al., 2024; Gurung et al., 2016; Turley et al., 2022)
Technological	Simplicity	C	C	(X. Ma et al., 2022; Nikolaos et al., 2023; J. F. Zhao et al., 2022)
	Technological scalability		C	(X. Ma et al., 2022; Nikolaos et al., 2023; Pacot et al., 2022)
	Maturity and technology readiness		C	(Jacobson et al., 2023; Nikolaos et al., 2023; J. F. Zhao et al., 2022)

Economic	Costs in 2030 and long term	B	B	(Jacobson et al., 2023; Nasir et al., 2022; X. Wang et al., 2022)
	Employment effects and economic growth		B	(S. Ali et al., 2024; Gilfillan & Pittock, 2022; Gurung et al., 2016)
Socio-cultural	Public acceptance	B	B	(S. Ali et al., 2024; Cantor et al., 2023; Gurung et al., 2016)
	Effects on health and well-being		LE	(H. B. Wang & Zhang, 2024; Xue et al., 2022)
	Distributional effect		B	(Cantor et al., 2023; Majidi et al., 2022)
Institutional	Political acceptance	B	C	(S. Ali et al., 2024; Gilfillan & Pittock, 2022; Gurung et al., 2016)
	Institutional capacity and governance, cross-sectoral coordination		B	(Gilfillan & Pittock, 2022; Jacobson et al., 2023; X. Ma et al., 2022)
	Legal and administrative feasibility		B	(Gilfillan & Pittock, 2022; Nikolaos et al., 2023)

Dimensions	Mitigation feasibility analysis	ENERGY STORAGE (BES)		
		Evidence		
		Agreement		
		Dim. Avg	Indicator Score	References
Geophysical	Physical potential	C	C	(Chatzigeorgiou et al., 2024; McNamara et al., 2022; Nyamathulla & Dhanamjayulu, 2024)
	Geophysical resources		B	(Amir et al., 2023; Jafari et al., 2022; Nyamathulla & Dhanamjayulu, 2024)
	Land use		LE	
Environmental-ecological	Air pollution	B	B	(Arshad et al., 2022; McNamara et al., 2022; Mousavinezhad et al., 2024)
	Toxic waste, ecotoxicity, eutrophication		B	(Amir et al., 2023; Nyamathulla & Dhanamjayulu, 2024; M. A. Rahman et al., 2022)
	Water quantity and quality		B	(Amir et al., 2023; Arshad et al., 2022; Mousavinezhad et al., 2024)
	Biodiversity		LE	
Technological	Simplicity	C	C	(Chatzigeorgiou et al., 2024; Nyamathulla & Dhanamjayulu, 2024; M. A. Rahman et al., 2022)
	Technological scalability		C	(Chatzigeorgiou et al., 2024; M. A. Rahman et al., 2022; C. Zhao et al., 2023)
	Maturity and technology readiness		B	(Chatzigeorgiou et al., 2024; Jafari et al., 2022; M. A. Rahman et al., 2022)
Economic	Costs in 2030 and long term	C	C	(Chatzigeorgiou et al., 2024; Farghali et al., 2023; C. Zhao et al., 2023)
	Employment effects and economic growth		C	(Farghali et al., 2023; Jafari et al., 2022; C. Zhao et al., 2023)
Socio-cultural	Public acceptance	C	C	(Chatzigeorgiou et al., 2024; M. A. Rahman et al., 2022; C. Zhao et al., 2023)
	Effects on health and well-being		C	(Farghali et al., 2023; Kalair et al., 2021; Nyamathulla & Dhanamjayulu, 2024)
	Distributional effect		B	(Chatzigeorgiou et al., 2024; Farghali et al., 2023; C. Zhao et al., 2023)
Institutional	Political acceptance	B	B	(Masiello et al., 2022; McNamara et al., 2022; M. A. Rahman et al., 2022)
	Institutional capacity and governance, cross-sectoral coordination		A	(Chatzigeorgiou et al., 2024; Jafari et al., 2022; M. A. Rahman et al., 2022)
	Legal and administrative feasibility		B	(Chatzigeorgiou et al., 2024; McNamara et al., 2022; M. A. Rahman et al., 2022)

Dimensions	Mitigation feasibility analysis	DEMAND MITIGATION (BUILDINGS)		
		Evidence		
		Agreement		
		Dim. Avg	Indicator Score	References
Geophysical	Physical potential	C	C	(Felius et al., 2020; Okorafor et al., 2021; Seeley & Dhakal, 2022)
	Geophysical resources		NA	
	Land use		B	(Khairi et al., 2017; Kuittinen et al., 2023; Rivero-Camacho et al., 2023)
Environmental-ecological	Air pollution	B	C	(Fawcett & Killip, 2019; Tonn et al., 2024; Tuominen et al., 2013; Underhill et al., 2020)
	Toxic waste, ecotoxicity, eutrophication		NA	
	Water quantity and quality		NA	
	Biodiversity		B	(Mayrand & Clergeau, 2018; M. M. Rahman, 2020; Wooster et al., 2022)
Technological	Simplicity	B	B	(Ekambaram & Olsson, 2022; Sekak et al., 2016; Topouzi et al., 2019)
	Technological scalability		B	(Doukari et al., 2024; Heo et al., 2015; Morales-Inzunza et al., 2023)
	Maturity and technology readiness		C	(Cucuzza et al., 2022; D'Oca et al., 2018; Paiho et al., 2023; Ranganath et al., 2024)
Economic	Costs in 2030 and long term	C	C	(Belaïd et al., 2021; Dodoo et al., 2017; Gonzalez-Caceres et al., 2022)
	Employment effects and economic growth		C	(Füllemann et al., 2020; Hirvonen et al., 2022; Mikulic et al., 2020, 2021)
Socio-cultural	Public acceptance	B	B	(Bal et al., 2021; Jowkar et al., 2022; Klasic & Đokic, 2023; D. X. Zhao et al., 2015)
	Effects on health and well-being		C	(Qu et al., 2021; Tonn et al., 2024; Zaeh et al., 2021)
	Distributional effect		B	(Bouzarovski et al., 2018; Checker, 2011; Davis & Ryan, 2020; Femenias et al., 2022; Tonn et al., 2024; Xie et al., 2023)
Institutional	Political acceptance	B	B	(Hess & Renner, 2019; Karapin & Vogel, 2023)
	Institutional capacity and governance, cross-sectoral coordination		B	(Foo, 2015; Häkkinen et al., 2016)
	Legal and administrative feasibility		B	(Davis & Ryan, 2020; Evans et al., 2017; Vine et al., 2017; Xie et al., 2023)

Dimensions	Mitigation feasibility analysis	DEMAND MITIGATION (PUBLIC TRANSPORT)		
		Evidence		
		Agreement		
		Dim. Avg	Indicator Score	References
Geophysical	Physical potential	C	C	(Ceder, 2021; Das & Ram, 2024; Gutiérrez et al., 2021; Nieuwenhuijsen, 2020; Rith et al., 2019)
	Geophysical resources		C	No new evidence
	Land use		C	(Anastasiadou & Gavanas, 2023; Das & Ram, 2024; Gassner et al., 2018; Guo et al., 2024; Nieuwenhuijsen, 2020; Nigro et al., 2019; Rith et al., 2019)
Environmental-ecological	Air pollution	B	C	(Ambarwati & Indriastuti, 2019; Gohl & Schrauth, 2024; González et al., 2021; K. Li et al., 2022; L. Ma et al., 2021; Monteiro et al., 2024; Napitupulu et al., 2018; Nieuwenhuijsen, 2020; Quarmby et al., 2019; Sun et al., 2019; Triguero-Mas et al., 2020; Wong et al., 2022; Zhai et al., 2022)
	Toxic waste, ecotoxicity, eutrophication		LE	
	Water quantity and quality		LE	
	Biodiversity		C	(Alshammari, 2022)
Technological	Simplicity	B	B	(Hrelja et al., 2020)
	Technological scalability		B	(Kuo et al., 2023; Lukic Vujadinovic et al., 2024; Paiva et al., 2021)
	Maturity and technology readiness		C	(Kuo et al., 2023; Tsakalidis et al., 2020; Wołek et al., 2021)
Economic	Costs in 2030 and long term	C	C	(Godínez-Zamora et al., 2020; Goel & Chowdhary, 2022; Jarecki, 2023; Karltorp & Maltais, 2024; Pérez-Prada et al., 2019; Siddiqui et al., 2024; Sofia et al., 2020)
	Employment effects and economic growth		B	(P. N. Chen & Karimi, 2019; Hanyurwumutima & Gumede, 2021; K. Kim et al., 2021)

Socio-cultural	Public acceptance	C	B	(Fointiat & Feliot-Rippeault, 2019; Guno et al., 2021; Rodriguez-Valencia et al., 2023; S. Wang et al., 2020)
	Effects on health and well-being		C	(Anciaes & Alhassan, 2024; Brown et al., 2019; Kwan & Hashim, 2020; Rojas-Rueda et al., 2012, 2013)
	Distributional effect		C	(Fearnley & Aarhaug, 2019; Hoogerwerf et al., 2023; Pereira et al., 2019; Saif et al., 2019; van Zoest & Daamen, 2024; Vecchio et al., 2024)
Institutional	Political acceptance	C	B	(Hochachka & Mérida, 2023; Kogler et al., 2023; Thaller et al., 2021)
	Institutional capacity and governance, cross-sectoral coordination		C	(Hirschhorn et al., 2019; Rodriguez-Valencia et al., 2023; Sørensen et al., 2023; van Zoest & Daamen, 2024)
	Legal and administrative feasibility		B	No new evidence

REGIONAL FAs

Dimensions	Mitigation feasibility analysis	SOLAR PV (ASIA)		
		Evidence		
		Agreement		
		Dim. Avg	Indicator Score	References
Geophysical	Physical potential	C	C	(Abu Qadourah, 2022; Eslami et al., 2021; M. M. Islam et al., 2022b; Solangi et al., 2021b)
	Geophysical resources		C	(Calvo & Valero, 2022b; Liang et al., 2022b; Song et al., 2023)
	Land use		B	(J. Kim et al., 2022b; Yang et al., 2019; Yin et al., 2024)
Environmental-ecological	Air pollution	C	C	(Anwar et al., 2021b; Chien et al., 2021b; Hamed Banirazi Motlagh et al., 2023b)
	Toxic waste, ecotoxicity, eutrophication		B	(Sharma et al., 2021b; Song et al., 2023)
	Water quantity and quality		C	(Hadipour et al., 2021b; Ismail & Go, 2021)
	Biodiversity		B	(Pratiwi & Juerges, 2020; Xia et al., 2022)
Technological	Simplicity	C	B	(Al-Habaibeh et al., 2023; Shukla et al., 2018)
	Technological scalability		C	(Jiang et al., 2022; Khan et al., 2023)
	Maturity and technology readiness		C	(Abas et al., 2022; Shukla et al., 2018)
Economic	Costs in 2030 and long term	C	C	(Abu Qadourah, 2022; Eslami et al., 2021; Mah et al., 2018)
	Employment effects and economic growth		B	(Barki et al., 2020; S. Zhang et al., 2017)
Socio-cultural	Public acceptance	C	C	(Al-Habaibeh et al., 2023; Mah et al., 2018; J. Wu et al., 2023)
	Effects on health and well-being		C	(Albatayneh et al., 2021; Karthick et al., 2021; Noorollahi et al., 2021)
	Distributional effect		B	(Akter & Bagchi, 2021; Padmanathan et al., 2019; G. Zhao et al., 2022)
Institutional	Political acceptance	B	B	(Corwin & Johnson, 2019; Do et al., 2020)
	Institutional capacity and governance, cross-sectoral coordination		B	(Corwin & Johnson, 2019; Do et al., 2020; Oryani et al., 2021)
	Legal and administrative feasibility		A	(Corwin & Johnson, 2019; Do et al., 2020)

Dimensions	Mitigation feasibility analysis	SOLAR PV (LATIN AND CENTRAL AMERICA)		
		Evidence		
		Agreement		
		Dim. Avg	Indicator Score	References
Geophysical	Physical potential	B	C	(Arriet et al., 2022; Escamilla-García et al., 2023; Osorio-Aravena et al., 2021)
	Geophysical resources		B	(Arriet et al., 2022; Escamilla-García et al., 2023; Osorio-Aravena et al., 2021; Ramírez-Tovar et al., 2022)
	Land use		B	(Matamala et al., 2021; Raihan & Tuspekova, 2022; Ramírez-Tovar et al., 2022)
Environmental-ecological	Air pollution	Insuf.	LE	(Matamala et al., 2021; Raihan & Tuspekova, 2022; Ramírez-Tovar et al., 2022; Rivera et al., 2024b)
	Toxic waste, ecotoxicity, eutrophication		NA	
	Water quantity and quality		NA	
	Biodiversity		NA	
Technological	Simplicity	Insuf.	LE	(Osorio-Aravena et al., 2021; Rivera et al., 2024b)
	Technological scalability		C	(Icaza et al., 2022; Moreno et al., 2022; Rebolledo et al., 2022)
	Maturity and technology readiness		LE	(Osorio-Aravena et al., 2021)
Economic	Costs in 2030 and long term	B	A	(León-Ospina et al., 2023; Osorio-Aravena et al., 2021; Tapia et al., 2023)
	Employment effects and economic growth		C	(Maka & Alabid, 2022; Pourasl et al., 2023)
Socio-cultural	Public acceptance	C	C	(Canafoglia, 2023; Miravet-Sánchez et al., 2022)
	Effects on health and well-being		C	(Matamala et al., 2021; Miravet-Sánchez et al., 2022; Rivera et al., 2024b)
	Distributional effect		C	(Cabello-Vargas, 2022; Chueca et al., 2023; Delfín-Portela et al., 2023; Oyewo et al., 2024)
Institutional	Political acceptance	A	A	(Canafoglia, 2023; Icaza et al., 2022; Schaube et al., 2022)
	Institutional capacity and governance, cross-sectoral coordination		A	(Escamilla-García et al., 2023; Moraga-Contreras et al., 2022; Seminario-Córdova, 2023)
	Legal and administrative feasibility		A	(Escamilla-García et al., 2023; Fernández et al., 2022; Moraga-Contreras et al., 2022; Ottonelli et al., 2023; Seminario-Córdova, 2023)

REFERENCES

Abas, N., Rauf, S., Saleem, M. S., Irfan, M., & Hameed, S. A. (2022). Techno-Economic Feasibility Analysis of 100 MW Solar Photovoltaic Power Plant in Pakistan. *Technology and Economics of Smart Grids and Sustainable Energy*, *7*(1). https://doi.org/10.1007/s40866-022-00139-w

Abu Qadourah, J. (2022). Energy and economic potential for photovoltaic systems installed on the rooftop of apartment buildings in Jordan. *Results in Engineering*, *16*. https://doi.org/10.1016/j.rineng.2022.100642

Aghahadi, M., Bosisio, A., Merlo, M., Berizzi, A., Pegoiani, A., & Forciniti, S. (2024). Digitalization Processes in Distribution Grids: A Comprehensive Review of Strategies and Challenges. *Applied Sciences*, *14*(11), 4528. https://doi.org/10.3390/app14114528

Ahmadpour, A., Mokaramian, E., & Anderson, S. (2021). The effects of the renewable energies penetration on the surplus welfare under energy policy. *Renewable Energy*, *164*, 1171–1182. https://doi.org/10.1016/j.renene.2020.10.140

Akter, S., & Bagchi, K. (2021). Is off-grid residential solar power inclusive? Solar power adoption, energy poverty, and social inequality in India. *Energy Research and Social Science*, *82*. https://doi.org/10.1016/j.erss.2021.102314

Al Arif, A., & Herrera Anchustegui, I. (2022). Regulatory and Policy Frameworks for Offshore Wind Projects: Spatial and Temporal Considerations in Light of Fisheries Sustainability amid Climate Change. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4258322

Albatayneh, A., Jaradat, M., Al-Omary, M., & Zaquot, M. (2021). Evaluation of coupling pv and air conditioning vs. Solar cooling systems—case study from jordan. *Applied Sciences (Switzerland)*, *11*(2). https://doi.org/10.3390/app11020511

Alemzero, D., Acheampong, T., & Huaping, S. (2021). Prospects of wind energy deployment in Africa: Technical and economic analysis. *Renewable Energy*, *179*. https://doi.org/10.1016/j.renene.2021.07.021

Al-Habaibeh, A., Al-haj Moh'd, B., Massoud, H., Nweke, O. B., Al Takrouri, M., & Badr, B. E. A. (2023). Solar energy in Jordan: Investigating challenges and opportunities of using domestic solar energy systems. *World Development Sustainability*, *3*. https://doi.org/10.1016/j.wds.2023.100077

Ali, B. (2023). Comparative sustainability assessment of energy storage technologies in Qatar. *Journal of Energy Storage*, *67*. https://doi.org/10.1016/j.est.2023.107534

Ali, S., Stewart, R. A., Sahin, O., & Vieira, A. S. (2024). Spatial bayesian approach for socio-economic assessment of pumped hydro storage. *Renewable and Sustainable Energy Reviews*, *189*. https://doi.org/10.1016/j.rser.2023.114007

Almutairi, K., Hosseini Dehshiri, S. S., Hosseini Dehshiri, S. J., Mostafaeipour, A., Jahangiri, M., & Techato, K. (2021). Technical, economic, carbon footprint assessment, and prioritizing stations for hydrogen production using wind energy: A case study. *Energy Strategy Reviews*, *36*. https://doi.org/10.1016/j.esr.2021.100684

Alsaleh, M., Yang, Z., Chen, T., Wang, X., Abdul-Rahim, A. S., & Mahmood, H. (2023). Moving toward environmental sustainability: Assessing the influence of geothermal power on carbon dioxide emissions. *Renewable Energy*, *202*, 880–893. https://doi.org/10.1016/j.renene.2022.11.060

Al-Shahri, O. A., Ismail, F. B., Hannan, M. A., Lipu, M. S. H., Al-Shetwi, A. Q., Begum, R. A., Al-Muhsen, N. F. O., & Soujeri, E. (2021). Solar photovoltaic energy optimization methods, challenges and issues: A comprehensive review. In *Journal of Cleaner Production* (Vol. 284). Elsevier Ltd. https://doi.org/10.1016/j.jclepro.2020.125465

Alshammari, T. O. (2022). Smart City Public Transport Remodel Urban Biodiversity Management. *IOP Conference Series: Earth and Environmental Science*, *1026*(1). https://doi.org/10.1088/1755-1315/1026/1/012039

Altea, C. de M., & Yanagihara, J. I. (2024). Energy, exergy and environmental impacts analyses of Pumped Hydro Storage (PHS) and Hydrogen (H2) energy storage processes. *Journal of Energy Storage*, *76*. https://doi.org/10.1016/j.est.2023.109713

Ambarwati, L., & Indriastuti, A. K. (2019). IMPROVEMENT OF PUBLIC TRANSPORT TO MINIMIZE AIR POLLUTION IN URBAN SPRAWL. *International Journal of GEOMATE*, *17*(59). https://doi.org/10.21660/2019.59.4720

Amini, F., Ghassemzadeh, S., Rostami, N., & Tabar, V. S. (2023). Electrical energy systems resilience: A comprehensive review on definitions, challenges, enhancements and future proceedings. In *IET Renewable Power Generation* (Vol. 17, Issue 7). https://doi.org/10.1049/rpg2.12705

Amir, M., Deshmukh, R. G., Khalid, H. M., Said, Z., Raza, A., Muyeen, S. M., Nizami, A. S., Elavarasan, R. M., Saidur, R., & Sopian, K. (2023). Energy storage technologies: An integrated survey of developments, global economical/environmental effects, optimal scheduling model, and sustainable adaption policies. In *Journal of Energy Storage* (Vol. 72). https://doi.org/10.1016/j.est.2023.108694

Amjith, L. R., & Bavanish, B. (2022). A review on biomass and wind as renewable energy for sustainable environment. *Chemosphere*, *293*. https://doi.org/10.1016/j.chemosphere.2022.133579

Anastasiadou, K., & Gavanas, N. (2023). Enhancing urban public space through appropriate sustainable mobility policies. A multi-criteria analysis approach. *Land Use Policy*, *132*. https://doi.org/10.1016/j.landusepol.2023.106765

Anciaes, P., & Alhassan, J. A. K. (2024). Economic and social impacts of public transport investments: A scoping literature review. In *Advances in Transport Policy and Planning* (Vol. 13). https://doi.org/10.1016/bs.atpp.2023.12.002

Ang, T. Z., Salem, M., Kamarol, M., Das, H. S., Nazari, M. A., & Prabaharan, N. (2022). A comprehensive study of renewable energy sources: Classifications, challenges and suggestions. In *Energy Strategy Reviews* (Vol. 43). https://doi.org/10.1016/j.esr.2022.100939

Anwar, A., Siddique, M., Eyup Dogan, & Sharif, A. (2021a). The moderating role of renewable and non-renewable energy in environment-income nexus for ASEAN countries: Evidence from Method of Moments Quantile Regression. *Renewable Energy*, *164*. https://doi.org/10.1016/j.renene.2020.09.128

Anwar, A., Siddique, M., Eyup Dogan, & Sharif, A. (2021b). The moderating role of renewable and non-renewable energy in environment-income nexus for ASEAN countries: Evidence from Method of Moments Quantile Regression. *Renewable Energy*, *164*, 956–967. https://doi.org/10.1016/j.renene.2020.09.128

Apergi, M., Eicke, L., Goldthau, A., Hashem, M., Huneeus, S., Lima de Oliveira, R., Otieno, M., Schuch, E., & Veit, K. (2024). An energy justice index for the energy transition in the global South. *Renewable and Sustainable Energy Reviews*, *192*. https://doi.org/10.1016/j.rser.2023.114238

Arriet, A., Flores, F., Matamala, Y., & Feijoo, F. (2022). Chilean pathways for mid-century carbon neutrality under high renewable potential. *Journal of Cleaner Production*, *379*. https://doi.org/10.1016/j.jclepro.2022.134483

Arshad, F., Lin, J., Manurkar, N., Fan, E., Ahmad, A., Tariq, M. un N., Wu, F., Chen, R., & Li, L. (2022). Life Cycle Assessment of Lithium-ion Batteries: A Critical Review. In *Resources, Conservation and Recycling* (Vol. 180). https://doi.org/10.1016/j.resconrec.2022.106164

Ascensão, F., Chozas, S., Serrano, H., & Branquinho, C. (2023). Mapping potential conflicts between photovoltaic installations and biodiversity conservation. *Biological Conservation*, *287*. https://doi.org/10.1016/j.biocon.2023.110331

Awuku, S. A., Bennadji, A., Muhammad-Sukki, F., & Sellami, N. (2022). Public-private partnership in Ghana's solar energy industry: The history, current state, challenges, prospects and theoretical perspective. In *Energy Nexus* (Vol. 6). Elsevier Ltd. https://doi.org/10.1016/j.nexus.2022.100058

Babazadeh, D., Teimourzadeh Baboli, P., Brand, M., Mayer, C., Becker, C., & Lehnhoff, S. (2022). Resilience of Smart Integrated Energy Systems. In *Handbook of Smart Energy Systems*. https://doi.org/10.1007/978-3-030-72322-4_109-1

Bal, M., Stok, F. M., Van Hemel, C., & De Wit, J. B. F. (2021). Including Social Housing Residents in the Energy Transition: A Mixed-Method Case Study on Residents' Beliefs, Attitudes, and Motivation Toward Sustainable Energy Use in a Zero-Energy Building Renovation in the Netherlands. *Frontiers in Sustainable Cities*, *3*. https://doi.org/10.3389/frsc.2021.656781

Balotari-Chiebao, F., Santangeli, A., Piirainen, S., & Byholm, P. (2023). Wind energy expansion and birds: Identifying priority areas for impact avoidance at a national level. *Biological Conservation*, *277*. https://doi.org/10.1016/j.biocon.2022.109851

Barki, D., Anjani Kumar, G., Satish Babu, V., & Vimal, D. (2020). Innovative Skill Development Techniques for Solar Power Plants and Solar PV Job Creation in India. *Conference Record of the IEEE Photovoltaic Specialists Conference*, *2020-June*. https://doi.org/10.1109/PVSC45281.2020.9300896

Bashir, M. A., Dengfeng, Z., Shahzadi, I., & Bashir, M. F. (2022). Does geothermal energy and natural resources affect environmental sustainability? Evidence in the lens of sustainable development. *Environmental Science and Pollution Research*, *30*(8), 21769–21780. https://doi.org/10.1007/s11356-022-23656-8

Bazazzadeh, H., Pourahmadi, B., Pilehchi ha, P., Safaei, S. S. H., & Berardi, U. (2022). Urban scale climate change adaptation through smart technologies. In *Urban Climate Adaptation and Mitigation*. https://doi.org/10.1016/B978-0-323-85552-5.00011-7

Belaïd, F., Ranjbar, Z., & Massié, C. (2021). Exploring the cost-effectiveness of energy efficiency implementation measures in the residential sector. *Energy Policy*, *150*. https://doi.org/10.1016/j.enpol.2020.112122

Beyene, A. D., Mekonnen, A., Jeuland, M., & Czakon, S. (2024). Socioeconomic impacts of solar home systems in rural Ethiopia. *Renewable and Sustainable Energy Reviews*, *192*. https://doi.org/10.1016/j.rser.2023.114197

Bianchini, A., Bangga, G., Baring-Gould, I., Croce, A., Cruz, J. I., Damiani, R., Erfort, G., Simao Ferreira, C., Infield, D., Nayeri, C. N., Pechlivanoglou, G., Runacres, M., Schepers, G., Summerville, B., Wood, D., & Orrell, A. (2022). Current status and grand challenges for small wind turbine technology. *Wind Energy Science*, *7*(5). https://doi.org/10.5194/wes-7-2003-2022

Blaydes, H., Potts, S. G., Whyatt, J. D., & Armstrong, A. (2021). Opportunities to enhance pollinator biodiversity in solar parks. In *Renewable and Sustainable Energy Reviews* (Vol. 145). https://doi.org/10.1016/j.rser.2021.111065

Bouzarovski, S., Frankowski, J., & Tirado Herrero, S. (2018). Low-Carbon Gentrification: When Climate Change Encounters Residential Displacement. *International Journal of Urban and Regional Research*, *42*(5). https://doi.org/10.1111/1468-2427.12634

Brown, V., Barr, A., Scheurer, J., Magnus, A., Zapata-Diomedi, B., & Bentley, R. (2019). Better transport accessibility, better health: A health economic impact assessment study for Melbourne, Australia. *International Journal of Behavioral Nutrition and Physical Activity*, *16*(1). https://doi.org/10.1186/s12966-019-0853-y

Buchmayr, A., Verhofstadt, E., Van Ootegem, L., Thomassen, G., Taelman, S. E., & Dewulf, J. (2022). Exploring the global and local social sustainability of wind energy technologies: An application of a social impact assessment framework. *Applied Energy*, *312*. https://doi.org/10.1016/j.apenergy.2022.118808

Butterfield, B. L., & Bullen, D. B. (2022). Questioning a Green New Deal–Bulk materials requirements for an all-renewable economy in the United States. In *Energy Research and Social Science* (Vol. 86). https://doi.org/10.1016/j.erss.2021.102424

Cabello-Vargas, J. E. (2022). Photovoltaic Energy Systems as an Alternative to Alleviate Rural Energy Poverty in Latin America. *International Journal of Environmental Sustainability*, *18*(1). https://doi.org/10.18848/2325-1077/CGP/v18i01/107-128

Calvo, G., & Valero, A. (2022a). Strategic mineral resources: Availability and future estimations for the renewable energy sector. *Environmental Development*, *41*. https://doi.org/10.1016/j.envdev.2021.100640

Calvo, G., & Valero, A. (2022b). Strategic mineral resources: Availability and future estimations for the renewable energy sector. *Environmental Development*, *41*. https://doi.org/10.1016/j.envdev.2021.100640

Canafoglia, E. C. (2023). Solar Energy and Social-Productive Configurations: Regional Features of the Energy Diversification Process in Argentina. In *Sustainable Development Goals Series: Vol. Part F2797*. https://doi.org/10.1007/978-3-031-37476-0_14

Cantor, A., Turley, B., & Maxfield, K. (2023). Energy Storage and Environmental Justice: A Critical Examination of a Proposed Pumped Hydropower Facility in Goldendale, Washington. *Antipode*. https://doi.org/10.1111/anti.12994

Carrara, S., Alves Dias, P., Plazzotta, B., & Pavel, C. (2020). Raw materials demand for wind and solar PV technologies in the transition towards a decarbonised energy system. In *JRC. Publications Office of the European Union*.

Ceder, A. (Avi). (2021). Urban mobility and public transport: future perspectives and review. In *International Journal of Urban Sciences* (Vol. 25, Issue 4). https://doi.org/10.1080/12265934.2020.1799846

Chang, V., Chen, Y., (Justin) Zhang, Z., Xu, Q. A., Baudier, P., & Liu, B. S. C. (2021). The market challenge of wind turbine industry-renewable energy in PR China and Germany. *Technological Forecasting and Social Change*, *166*. https://doi.org/10.1016/j.techfore.2021.120631

Chatzigeorgiou, N. G., Theocharides, S., Makrides, G., & Georghiou, G. E. (2024). A review on battery energy storage systems: Applications, developments, and research trends of hybrid installations in the end-user sector. In *Journal of Energy Storage* (Vol. 86). https://doi.org/10.1016/j.est.2024.111192

Checker, M. (2011). Wiped out by the "Greenwave": Environmental gentrification and the paradoxical politics of urban sustainability. *City and Society*, *23*(2). https://doi.org/10.1111/j.1548-744X.2011.01063.x

Chen, C., Pinar, M., & Stengos, T. (2021). Determinants of renewable energy consumption: Importance of democratic institutions. *Renewable Energy*, *179*, 75–83. https://doi.org/10.1016/j.renene.2021.07.030

Chen, P. N., & Karimi, K. (2019). Spatial impact of new public transport system on station neighbourhoods: The cases of jubilee line extension in London. *12th International Space Syntax Symposium, SSS 2019*.

Chen, X. H., Tee, K., Elnahass, M., & Ahmed, R. (2023). Assessing the environmental impacts of renewable energy sources: A case study on air pollution and carbon emissions in China. *Journal of Environmental Management*, *345*. https://doi.org/10.1016/j.jenvman.2023.118525

Chen, Y. kuang, Kirkerud, J. G., & Bolkesjø, T. F. (2022). Balancing GHG mitigation and land-use conflicts: Alternative Northern European energy system scenarios. *Applied Energy*, *310*. https://doi.org/10.1016/j.apenergy.2022.118557

Chen, Z. (2021). Wind Power: An Important Source in Energy Systems. *Wind*, *1*(1). https://doi.org/10.3390/wind1010006

Chen, Z., & Sun, P. (2024). Generic technology R&D strategies in dual competing photovoltaic supply chains: A social welfare maximization perspective. *Applied Energy*, *353*. https://doi.org/10.1016/j.apenergy.2023.122089

Chien, F., Sadiq, M., Nawaz, M. A., Hussain, M. S., Tran, T. D., & Le Thanh, T. (2021a). A step toward reducing air pollution in top Asian economies: The role of green energy, eco-innovation, and environmental taxes. *Journal of Environmental Management*, *297*. https://doi.org/10.1016/j.jenvman.2021.113420

Chien, F., Sadiq, M., Nawaz, M. A., Hussain, M. S., Tran, T. D., & Le Thanh, T. (2021b). A step toward reducing air pollution in top Asian economies: The role of green energy, eco-innovation, and environmental taxes. *Journal of Environmental Management*, *297*. https://doi.org/10.1016/j.jenvman.2021.113420

Chueca, E., Weiss, M., Celaya, R., Ravillard, P., Ortega, B., Tolmasquim, M. T., & Hallack, M. (2023). Early adopters of residential solar PV distributed generation: Evidence from Brazil, Chile and Mexico. *Energy for Sustainable Development*, *76*. https://doi.org/10.1016/j.esd.2023.101284

Cicilio, P., Glennon, D., Mate, A., Barnes, A., Chalishazar, V., Cotilla-Sanchez, E., Vaagensmith, B., Gentle, J., Rieger, C., Wies, R., & Kapourchali, M. H. (2021). Resilience in an evolving electrical grid. *Energies*, *14*(3). https://doi.org/10.3390/en14030694

Cohen, A., Fischhendler, I., & Katz, D. (2023). Institutional acceptance of wildlife mitigation technologies for wind energy: The case of Israel. *Energy Policy*, *173*. https://doi.org/10.1016/j.enpol.2022.113359

Collado, E., Harish, G., & Sáez, Y. (2022). Design of a solar-powered air pollution monitoring system under tropical climate environments. *Proceedings of the 2022 IEEE 40th Central America and Panama Convention, CONCAPAN 2022*. https://doi.org/10.1109/CONCAPAN48024.2022.9997667

Corwin, S., & Johnson, T. L. (2019). The role of local governments in the development of China's solar photovoltaic industry. *Energy Policy*, *130*. https://doi.org/10.1016/j.enpol.2019.04.009

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*. https://doi.org/10.1016/j.rser.2021.111107

Crippa, P., Alifa, M., Bolster, D., Genton, M. G., & Castruccio, S. (2021). A temporal model for vertical extrapolation of wind speed and wind energy assessment. *Applied Energy*, *301*. https://doi.org/10.1016/j.apenergy.2021.117378

Cucuzza, M., Di Stefano, A. G., Iannaccone, G., & Masera, G. (2022). A BIM-enabled Decision Support System to support large-scale energy retrofitting processes and off-site solutions for envelope insulation. *IOP Conference Series: Earth and Environmental Science*, *1101*(4). https://doi.org/10.1088/1755-1315/1101/4/042031

Das, J., & Ram, S. (2024). Exploring the relationship of transport network and land use patterns: an approach through weighted centrality assessment. *Urban, Planning and Transport Research*, *12*(1). https://doi.org/10.1080/21650020.2024.2323946

Davis, C., & Ryan, J. T. (2020). Building Codes: The Foundation for Resilient Communities. In *Optimizing Community Infrastructure: Resilience in the Face of Shocks and Stresses*. https://doi.org/10.1016/B978-0-12-816240-8.00012-4

de Assis Brasil Weber, N., Hunt, J. D., Zakeri, B., Smith Schneider, P., Asfor Parente, F. S., Delavald Marques, A., & Olímpio Pereira Junior, A. (2024). Seasonal pumped hydropower storage role in responding to climate change impacts on the Brazilian electrical sector. *Journal of Energy Storage*, *87*, 111249. https://doi.org/10.1016/j.est.2024.111249

Dehghanimadvar, M., Shirmohammadi, R., Ahmadi, F., Aslani, A., & Khalilpour, K. R. (2022). Mapping the development of various solar thermal technologies with hype cycle analysis. *Sustainable Energy Technologies and Assessments*, *53*. https://doi.org/10.1016/j.seta.2022.102615

Delfín-Portela, E., Sandoval-Herazo, L. C., Reyes-González, D., Mata-Alejandro, H., López-Méndez, M. C., Fernández-Lambert, G., & Betanzo-Torres, E. A. (2023). Grid-Connected Solar Photovoltaic System for Nile Tilapia Farms in Southern Mexico: Techno-Economic and Environmental Evaluation. *Applied Sciences (Switzerland)*, *13*(1). https://doi.org/10.3390/app13010570

Delina, L. L. (2022). Wind energy in the city: Hong Kong's offshore wind energy generation potential, deployment plans, and ecological pitfalls. *Electricity Journal*, *35*(6). https://doi.org/10.1016/j.tej.2022.107139

Desalegn, B., Gebeyehu, D., & Tamirat, B. (2022). Wind energy conversion technologies and engineering approaches to enhancing wind power generation: A review. In *Heliyon* (Vol. 8, Issue 11). https://doi.org/10.1016/j.heliyon.2022.e11263

Desalegn, B., Gebeyehu, D., Tamrat, B., & Tadiwose, T. (2023). Wind energy-harvesting technologies and recent research progresses in wind farm control models. In *Frontiers in Energy Research* (Vol. 11). https://doi.org/10.3389/fenrg.2023.1124203

Do, T. N., Burke, P. J., Baldwin, K. G. H., & Nguyen, C. T. (2020). Underlying drivers and barriers for solar photovoltaics diffusion: The case of Vietnam. *Energy Policy*, *144*, 111561. https://doi.org/10.1016/j.enpol.2020.111561

D'Oca, S., Ferrante, A., Ferrer, C., Pernetti, R., Gralka, A., Sebastian, R., & Veld, P. op t. (2018). Technical, financial, and social barriers and challenges in deep building renovation: Integration of lessons learned from the H2020 cluster projects. *Buildings*, *8*(12). https://doi.org/10.3390/buildings8120174

Dodoo, A., Gustavsson, L., & Tettey, U. Y. A. (2017). Final energy savings and cost-effectiveness of deep energy renovation of a multi-storey residential building. *Energy*, *135*. https://doi.org/10.1016/j.energy.2017.06.123

DOE. (2019). *Geo Vision Harnessing the Heat Beneath Our Feet*.

DOE. (2024). *Pathways to Commercial Liftoff: Next-Generation Geothermal Power*.

Dong, C., Huang, G. (Gordon), & Cheng, G. (2021). Offshore wind can power Canada. *Energy*, *236*. https://doi.org/10.1016/j.energy.2021.121422

Dong, Z. Y., & Zhang, Y. (2021). Interdisciplinary Vision of the Digitalized Future Energy Systems. *IEEE Open Access Journal of Power and Energy*, *8*. https://doi.org/10.1109/OAJPE.2021.3108937

Dorrell, J., & Lee, K. (2020). The cost of wind: Negative economic effects of global wind energy development. In *Energies* (Vol. 13, Issue 14). https://doi.org/10.3390/en13143667

Doukari, O., Kassem, M., Scoditti, E., Aguejdad, R., & Greenwood, D. (2024). A BIM based tool for evaluating building renovation strategies: the case of three demonstration sites in different European countries. *Construction Innovation*, *24*(1). https://doi.org/10.1108/CI-12-2022-0314

Đukan, M., & Kitzing, L. (2021). The impact of auctions on financing conditions and cost of capital for wind energy projects. *Energy Policy*, *152*. https://doi.org/10.1016/j.enpol.2021.112197

Ebrahimi, H., Yazdaninejadi, A., & Golshannavaz, S. (2022). Demand response programs in power systems with energy storage system-coordinated wind energy sources: A security-constrained problem. *Journal of Cleaner Production*, *335*. https://doi.org/10.1016/j.jclepro.2021.130342

Ekambaram, A., & Olsson, N. (2022). Developing a Training and Educational Programme for Learning Energy-efficient Building Renovation. *Proceedings of the European Conference on Knowledge Management, ECKM*, *1*. https://doi.org/10.34190/eckm.23.1.808

El-Mekaoui, A., Cetina-Quiñones, A. J., Casillas-Reyes, A., San-Pedro, L., Tapia, J., Canto-Esquivel, J.-C., & Bassam, A. (2024). Empowering indigenous groups: Unveiling a new approach to adaptive-participative sustainable energy in solar pumping projects via a Mayan community in Central America. *Energy Research & Social Science*, *114*, 103589. https://doi.org/10.1016/j.erss.2024.103589

Engen, S., Hausner, V. H., Fauchald, P., Ruud, A., & Broderstad, E. G. (2023). Small hydropower, large obstacle? Exploring land use conflict, Indigenous opposition and acceptance in the Norwegian Arctic. *Energy Research and Social Science*, *95*. https://doi.org/10.1016/j.erss.2022.102888

Escamilla-García, P. E., Fernández-Rodríguez, E., Jiménez-Castañeda, M. E., Jiménez-González, C. O., & Morales-Castro, J. A. (2023). A Review of the Progress and Potential of Energy Generation from Renewable Sources in Latin America. *Latin American Research Review*, *16*(12). https://doi.org/10.1017/lar.2023.15

Eslami, H., Najem, S., Ghanem, D. A., & Ahmad, A. (2021). The potential of urban distributed solar energy in transition economies: The case of Beirut city. *Journal of Environmental Management*, *285*. https://doi.org/10.1016/j.jenvman.2021.112121

Evans, M., Roshchanka, V., & Graham, P. (2017). An international survey of building energy codes and their implementation. *Journal of Cleaner Production*, *158*. https://doi.org/10.1016/j.jclepro.2017.01.007

Fan, P., Cho, M. S., Lin, Z., Ouyang, Z., Qi, J., Chen, J., & Moran, E. F. (2022). Recently constructed hydropower dams were associated with reduced economic production, population, and greenness in nearby areas. *Proceedings of the National Academy of Sciences of the United States of America*, *119*(8). https://doi.org/10.1073/pnas.2108038119

Farghali, M., Osman, A. I., Chen, Z., Abdelhaleem, A., Ihara, I., Mohamed, I. M. A., Yap, P. S., & Rooney, D. W. (2023). Social, environmental, and economic consequences of integrating renewable energies in the electricity sector: a review. In *Environmental Chemistry Letters* (Vol. 21, Issue 3). https://doi.org/10.1007/s10311-023-01587-1

Fawcett, T., & Killip, G. (2019). Re-thinking energy efficiency in European policy: Practitioners' use of 'multiple benefits' arguments. *Journal of Cleaner Production*, *210*. https://doi.org/10.1016/j.jclepro.2018.11.026

Fearnley, N., & Aarhaug, J. (2019). Subsidising urban and sub-urban transport – distributional impacts. *European Transport Research Review*, *11*(1). https://doi.org/10.1186/s12544-019-0386-0

Felius, L. C., Dessen, F., & Hrynyszyn, B. D. (2020). Retrofitting towards energy-efficient homes in European cold climates: a review. In *Energy Efficiency* (Vol. 13, Issue 1). https://doi.org/10.1007/s12053-019-09834-7

Femenias, P., Punzi, E., & Granath, K. (2022). The voices of vulnerable tenants in renovation. *IOP Conference Series: Earth and Environmental Science*, *1078*(1). https://doi.org/10.1088/1755-1315/1078/1/012083

Fernández, M. E., Gentili, J. O., & Campo, A. M. (2022). Solar access: Review of the effective legal framework for an average argentine city. *Renewable and Sustainable Energy Reviews*, *156*. https://doi.org/10.1016/j.rser.2021.112008

Ferreras-Alonso, N., Capellán-Pérez, I., Adam, A., de Blas, I., & Mediavilla, M. (2024). Mitigation of land-related impacts of solar deployment in the European Union through land planning policies. *Energy*, *302*, 131617. https://doi.org/10.1016/j.energy.2024.131617

Fofack-Garcia, R., Mazé, C., Safi, G., Lejart, M., Chauvac, N., Thermes, M., Ragueneau, O., Le Loc'h, F., & Niquil, N. (2023). Socio-political acceptability of floating offshore wind farms in France: challenges and perspectives for marine governance towards sustainability. In *Ocean and Coastal Management* (Vol. 236). https://doi.org/10.1016/j.ocecoaman.2023.106513

Fointiat, V., & Feliot-Rippeault, M. (2019). What could make islanders use a new public transport system? Identifying the determinants of the intention to use a new Reserved Public Transport Lane in the urban area of Fort-de-France, Martinique What could make islanders use a new public transport system? Identifying the determinants of the intention to use a new Reserved Public Transport Lane in the urban area of Fort-de-France, Martinique. *Island Studies Journal*, *14*(2). https://doi.org/10.24043/isj.102

Foo, R. (2015). Barriers to building institutional capacity in the Malaysian housing development sector. *International Journal of Housing Policy*, *15*(4). https://doi.org/10.1080/14616718.2015.1057428

Frantál, B., Frolova, M., & Liñán-Chacón, J. (2023). Conceptualizing the patterns of land use conflicts in wind energy development: Towards a typology and implications for practice. *Energy Research and Social Science*, *95*. https://doi.org/10.1016/j.erss.2022.102907

Füllemann, Y., Moreau, V., Vielle, M., & Vuille, F. (2020). Hire fast, fire slow: the employment benefits of energy transitions. *Economic Systems Research*, *32*(2). https://doi.org/10.1080/09535314.2019.1695584

Galimova, T., Ram, M., & Breyer, C. (2022). Mitigation of air pollution and corresponding impacts during a global energy transition towards 100% renewable energy system by 2050. *Energy Reports*, *8*. https://doi.org/10.1016/j.egyr.2022.10.343

Galparsoro, I., Menchaca, I., Garmendia, J. M., Borja, Á., Maldonado, A. D., Iglesias, G., & Bald, J. (2022). Reviewing the ecological impacts of offshore wind farms. *Npj Ocean Sustainability*, *1*(1). https://doi.org/10.1038/s44183-022-00003-5

Gassner, A., Lederer, J., Kanitschar, G., Ossberger, M., & Fellner, J. (2018). Extended ecological footprint for different modes of urban public transport: The case of Vienna, Austria. *Land Use Policy*, *72*. https://doi.org/10.1016/j.landusepol.2017.12.012

Gatto, A., & Drago, C. (2021). When renewable energy, empowerment, and entrepreneurship connect: Measuring energy policy effectiveness in 230 countries. *Energy Research and Social Science*, *78*. https://doi.org/10.1016/j.erss.2021.101977

Gebreslassie, M. G. (2021). Development and manufacturing of solar and wind energy technologies in Ethiopia: Challenges and policy implications. *Renewable Energy*, *168*. https://doi.org/10.1016/j.renene.2020.11.042

Gemechu, E., & Kumar, A. (2022). A review of how life cycle assessment has been used to assess the environmental impacts of hydropower energy. *Renewable and Sustainable Energy Reviews*, *167*, 112684. https://doi.org/10.1016/j.rser.2022.112684

Gilfillan, D., & Pittock, J. (2022). Pumped Storage Hydropower for Sustainable and Low-Carbon Electricity Grids in Pacific Rim Economies. *Energies*, *15*(9). https://doi.org/10.3390/en15093139

Glasson, J., Durning, B., Welch, K., & Olorundami, T. (2022). The local socio-economic impacts of offshore wind farms. *Environmental Impact Assessment Review*, *95*. https://doi.org/10.1016/j.eiar.2022.106783

Godínez-Zamora, G., Victor-Gallardo, L., Angulo-Paniagua, J., Ramos, E., Howells, M., Usher, W., De León, F., Meza, A., & Quirós-Tortós, J. (2020). Decarbonising the transport and energy sectors: Technical feasibility and socioeconomic impacts in Costa Rica. *Energy Strategy Reviews*, *32*. https://doi.org/10.1016/j.esr.2020.100573

Goel, V., & Chowdhary, A. (2022). Efficient Bus Transport System, Case Study of Dehradun. *Lecture Notes in Civil Engineering*, *199*. https://doi.org/10.1007/978-981-16-6647-6_9

Gohl, N., & Schrauth, P. (2024). JUE insight: Ticket to paradise? The effect of a public transport subsidy on air quality. *Journal of Urban Economics*, *142*. https://doi.org/10.1016/j.jue.2024.103643

Golfam, P., & Ashofteh, P. S. (2022). Performance Indexes Analysis of the Reservoir-Hydropower Plant System Affected by Climate Change. *Water Resources Management*, *36*(13). https://doi.org/10.1007/s11269-022-03295-x

Gómez-Navarro, T., Brazzini, T., Alfonso-Solar, D., & Vargas-Salgado, C. (2021). Analysis of the potential for PV rooftop prosumer production: Technical, economic and environmental assessment for the city of Valencia (Spain). *Renewable Energy*, *174*, 372–381. https://doi.org/10.1016/j.renene.2021.04.049

González, L., Perdiguero, J., & Sanz, À. (2021). Impact of public transport strikes on traffic and pollution in the city of Barcelona. *Transportation Research Part D: Transport and Environment*, *98*. https://doi.org/10.1016/j.trd.2021.102952

Gonzalez Sanchez, R., Kougias, I., Moner-Girona, M., Fahl, F., & Jäger-Waldau, A. (2021). Assessment of floating solar photovoltaics potential in existing hydropower reservoirs in Africa. *Renewable Energy*, *169*. https://doi.org/10.1016/j.renene.2021.01.041

Gonzalez-Caceres, A., Karlshøj, J., Arvid Vik, T., Hempel, E., & Rammer Nielsen, T. (2022). Evaluation of cost-effective measures for the renovation of existing dwellings in the framework of the energy certification system: A case study in Norway. *Energy and Buildings*, *264*. https://doi.org/10.1016/j.enbuild.2022.112071

Görtz, J., Aouad, M., Wieprecht, S., & Terheiden, K. (2022). Assessment of pumped hydropower energy storage potential along rivers and shorelines. *Renewable and Sustainable Energy Reviews*, *165*. https://doi.org/10.1016/j.rser.2021.112027

Greiner, C., Klagge, B., & Owino, E. A. (2023). The political ecology of geothermal development: Green sacrifice zones or energy landscapes of value? *Energy Research & Social Science*, *99*, 103063. https://doi.org/10.1016/j.erss.2023.103063

Gu, P., Zhang, Z., Liu, J., Wang, T., Xiao, Y., Yu, Y. J., Miao, H., Zhang, Y., Liao, F., Yang, K., & Li, Q. (2022). Effects of Small Hydropower Stations Along Rivers on the Distribution of Aquatic Biodiversity. *Frontiers in Ecology and Evolution*, *10*. https://doi.org/10.3389/fevo.2022.940606

Gualtieri, G. (2022). Analysing the uncertainties of reanalysis data used for wind resource assessment: A critical review. In *Renewable and Sustainable Energy Reviews* (Vol. 167). https://doi.org/10.1016/j.rser.2022.112741

Guno, C. S., Collera, A. A., & Agaton, C. B. (2021). Barriers and drivers of transition to sustainable public transport in the Philippines. *World Electric Vehicle Journal*, *12*(1). https://doi.org/10.3390/wevj12010046

Guo, J., Liang, Q., & Zhao, J. (2024). F-Deepwalk: A Community Detection Model for Transport Networks. *Entropy*, *26*(8), 715. https://doi.org/10.3390/e26080715

Gurung, A. B., Borsdorf, A., Füreder, L., Kienast, F., Matt, P., Scheidegger, C., Schmocker, L., Zappa, M., & Volkart, K. (2016). Rethinking Pumped Storage Hydropower in the European Alps. *Mountain Research and Development*, *36*(2). https://doi.org/10.1659/MRD-JOURNAL-D-15-00069.1

Gutiérrez, A., Miravet, D., & Domènech, A. (2021). COVID-19 and urban public transport services: emerging challenges and research agenda. *Cities and Health*, *5*(sup1). https://doi.org/10.1080/23748834.2020.1804291

Haces-Fernandez, F., Cruz-Mendoza, M., & Li, H. (2022). Onshore Wind Farm Development: Technologies and Layouts. In *Energies* (Vol. 15, Issue 7). https://doi.org/10.3390/en15072381

Hadipour, A., Rajabi Zargarabadi, M., & Rashidi, S. (2021a). An efficient pulsed- spray water cooling system for photovoltaic panels: Experimental study and cost analysis. *Renewable Energy*, *164*. https://doi.org/10.1016/j.renene.2020.09.021

Hadipour, A., Rajabi Zargarabadi, M., & Rashidi, S. (2021b). An efficient pulsed- spray water cooling system for photovoltaic panels: Experimental study and cost analysis. *Renewable Energy*, *164*, 867–875. https://doi.org/10.1016/j.renene.2020.09.021

Häkkinen, T., Rekola, M., Ala-Juusela, M., & Ruuska, A. (2016). Role of Municipal Steering in Sustainable Building and Refurbishment. *Energy Procedia*, *96*. https://doi.org/10.1016/j.egypro.2016.09.123

Hamed Banirazi Motlagh, S., Hosseini, S. M. A., & Pons-Valladares, O. (2023a). Integrated value model for sustainability assessment of residential solar energy systems towards minimizing urban air pollution in Tehran. *Solar Energy*, *249*. https://doi.org/10.1016/j.solener.2022.10.047

Hamed Banirazi Motlagh, S., Hosseini, S. M. A., & Pons-Valladares, O. (2023b). Integrated value model for sustainability assessment of residential solar energy systems towards minimizing urban air pollution in Tehran. *Solar Energy*, *249*. https://doi.org/10.1016/j.solener.2022.10.047

Hamed, T. A., & Alshare, A. (2022). Environmental Impact of Solar and Wind energy-A Review. *Journal of Sustainable Development of Energy, Water and Environment Systems*, *10*(2). https://doi.org/10.13044/j.sdewes.d9.0387

Hanke, F., Guyet, R., & Feenstra, M. (2021). Do renewable energy communities deliver energy justice? Exploring insights from 71 European cases. *Energy Research and Social Science*, *80*. https://doi.org/10.1016/j.erss.2021.102244

Hanna, R., Heptonstall, P., & Gross, R. (2024). Job creation in a low carbon transition to renewables and energy efficiency: a review of international evidence. In *Sustainability Science* (Vol. 19, Issue 1). https://doi.org/10.1007/s11625-023-01440-y

Hannan, M. A., Al-Shetwi, A. Q., Mollik, M. S., Ker, P. J., Mannan, M., Mansor, M., Al-Masri, H. M. K., & Mahlia, T. M. I. (2023). Wind Energy Conversions, Controls, and Applications: A Review for Sustainable Technologies and Directions. In *Sustainability (Switzerland)* (Vol. 15, Issue 5). https://doi.org/10.3390/su15053986

Hanto, J., Krawielicki, L., Krumm, A., Moskalenko, N., Löffler, K., Hauenstein, C., & Oei, P. Y. (2021). Effects of decarbonization on the energy system and related employment effects in South Africa. *Environmental Science and Policy*, *124*, 73–84. https://doi.org/10.1016/j.envsci.2021.06.001

Hanyurwumutima, L. K., & Gumede, S. (2021). An analysis of the impact of investment in public transport on economic growth of metropolitan cities in South Africa. *Journal of Transport and Supply Chain Management*, *15*. https://doi.org/10.4102/jtscm.v15i0.536

Hazboun, S. O., & Boudet, H. S. (2020). Public Preferences in a Shifting Energy Future: Comparing Public Views of Eight Energy Sources in North America's Pacific Northwest. *Energies*, *13*(8), 1940. https://doi.org/10.3390/en13081940

Heffron, R., Halbrügge, S., Körner, M. F., Obeng-Darko, N. A., Sumarno, T., Wagner, J., & Weibelzahl, M. (2021). Justice in solar energy development. *Solar Energy*, *218*, 68–75. https://doi.org/10.1016/j.solener.2021.01.072

Heidari, A., Maréchal, F., & Khovalyg, D. (2022). Reinforcement Learning for proactive operation of residential energy systems by learning stochastic occupant behavior and fluctuating solar energy: Balancing comfort, hygiene and energy use. *Applied Energy*, *318*. https://doi.org/10.1016/j.apenergy.2022.119206

Heo, Y., Augenbroe, G., Graziano, D., Muehleisen, R. T., & Guzowski, L. (2015). Scalable methodology for large scale building energy improvement: Relevance of calibration in model-based retrofit analysis. *Building and Environment*, *87*. https://doi.org/10.1016/j.buildenv.2014.12.016

Herrera Anchustegui, I., & Radovich, V. S. (2022). Wind Energy on the High Seas: Regulatory Challenges for a Science Fiction Future. *Energies*, *15*(23). https://doi.org/10.3390/en15239157

Hess, D. J., & Renner, M. (2019). Conservative political parties and energy transitions in Europe: Opposition to climate mitigation policies. In *Renewable and Sustainable Energy Reviews* (Vol. 104). https://doi.org/10.1016/j.rser.2019.01.019

Hirschhorn, F., Paulsson, A., Sørensen, C. H., & Veeneman, W. (2019). Public transport regimes and mobility as a service: Governance approaches in Amsterdam, Birmingham, and Helsinki. *Transportation Research Part A: Policy and Practice*, *130*. https://doi.org/10.1016/j.tra.2019.09.016

Hirvonen, J., Saari, A., Jokisalo, J., & Kosonen, R. (2022). Socio-economic impacts of large-scale deep energy retrofits in Finnish apartment buildings. *Journal of Cleaner Production*, *368*. https://doi.org/10.1016/j.jclepro.2022.133187

Hochachka, G., & Mérida, W. (2023). Navigating the razor's edge: Public acceptance of climate policies and the case of transport pricing. *Energy Policy*, *178*. https://doi.org/10.1016/j.enpol.2023.113616

Hong, Y., Liu, Z., Li, S., Long, Y., Gao, J., Hu, R., & Ye, J. (2024). Benign water quality and phytoplankton status during the operation of Guishan offshore wind farm in the Pearl River Estuary, China. *Regional Studies in Marine Science*, *77*, 103637. https://doi.org/10.1016/j.rsma.2024.103637

Hoogerwerf, E. J., Magni, R., Andrushevich, A., & Banes, D. (2023). Towards a Model for the Transfer of Technology-Driven Innovation in Accessible and Inclusive Public Transport. *Studies in Health Technology and Informatics*, *306*. https://doi.org/10.3233/SHTI230653

Hrelja, R., Khan, J., & Pettersson, F. (2020). How to create efficient public transport systems? A systematic review of critical problems and approaches for addressing the problems. *Transport Policy*, *98*. https://doi.org/10.1016/j.tranpol.2019.10.012

Hu, M., Zhao, B., Suhendri, Ao, X., Cao, J., Wang, Q., Riffat, S., Su, Y., & Pei, G. (2022). Applications of radiative sky cooling in solar energy systems: Progress, challenges, and prospects. In *Renewable and Sustainable Energy Reviews* (Vol. 160). Elsevier Ltd. https://doi.org/10.1016/j.rser.2022.112304

Huda, A., Kurniawan, I., Purba, K. F., Ichwani, R., Aryansyah, & Fionasari, R. (2024). Techno-economic assessment of residential and farm-based photovoltaic systems. *Renewable Energy*, *222*. https://doi.org/10.1016/j.renene.2023.119886

Hunt, J. D., Byers, E., Riahi, K., & Langan, S. (2018). Comparison between seasonal pumped-storage and conventional reservoir dams from the water, energy and land nexus perspective. *Energy Conversion and Management*, *166*. https://doi.org/10.1016/j.enconman.2018.04.044

Hunt, J. D., Byers, E., Wada, Y., Parkinson, S., Gernaat, D. E. H. J., Langan, S., van Vuuren, D. P., & Riahi, K. (2020). Global resource potential of seasonal pumped hydropower storage for energy and water storage. *Nature Communications*, *11*(1), 947. https://doi.org/10.1038/s41467-020-14555-y

Icaza, D., Borge-Diez, D., & Galindo, S. P. (2022). Analysis and proposal of energy planning and renewable energy plans in South America: Case study of Ecuador. *Renewable Energy*, *182*. https://doi.org/10.1016/j.renene.2021.09.126

Idroes, G. M., Hardi, I., Hilal, I. S., Utami, R. T., Noviandy, T. R., & Idroes, R. (2024). Economic growth and environmental impact: Assessing the role of geothermal energy in developing and developed countries. *Innovation and Green Development*, *3*(3), 100144. https://doi.org/10.1016/j.igd.2024.100144

IEA. (2023). *Grid scale storage*. https://www.iea.org/energy-system/electricity/grid-scale-storage

IHA. (2024). *World Hydropower Outlook: Opportunities to advance net zero 2024*. https://www.hydropower.org/publications/2024-world-hydropower-outlook

Imam, A. A., Abusorrah, A., & Marzband, M. (2024). Potentials and opportunities of solar PV and wind energy sources in Saudi Arabia: Land suitability, techno-socio-economic feasibility, and future variability. *Results in Engineering*, *21*. https://doi.org/10.1016/j.rineng.2024.101785

IPCC. (2011). IPCC Special Report on Renewable Energy Sources and Climate Change Mitigation. In O. Edenhofer, R. Pichs-Madruga, Y. Sokona, K. Seyboth, P. Eickemeier, & P. H. G. K. S. S. S. Z. T. S. C. Von Matschoss (Eds.), *Cambridge University Press*.

IRENA, & IGA. (2021). *United Nations Framework Classification for Geothermal Energy: Pilot applications in the Caribbean, Ethiopia and Indonesia*. International Renewable Energy and International Geothermal Association.

IRENA, & IGA. (2023). *Global Geothermal Market and Technology Assessment*. International Renewable Energy Agency and International Geothermal Association.

Islam, M. M., Irfan, M., Shahbaz, M., & Vo, X. V. (2022a). Renewable and non-renewable energy consumption in Bangladesh: The relative influencing profiles of economic factors, urbanization, physical infrastructure and institutional quality. *Renewable Energy*, *184*. https://doi.org/10.1016/j.renene.2021.12.020

Islam, M. M., Irfan, M., Shahbaz, M., & Vo, X. V. (2022b). Renewable and non-renewable energy consumption in Bangladesh: The relative influencing profiles of economic factors, urbanization, physical infrastructure and institutional quality. *Renewable Energy*, *184*, 1130–1149. https://doi.org/10.1016/j.renene.2021.12.020

Islam, M. T., Nabi, M. N., Arefin, M. A., Mostakim, K., Rashid, F., Hassan, N. M. S., Rahman, S. M. A., McIntosh, S., Mullins, B. J., & Muyeen, S. M. (2022). Trends and prospects of geothermal energy as an alternative source of power: A comprehensive review. *Heliyon*, *8*(12), e11836. https://doi.org/10.1016/j.heliyon.2022.e11836

Ismail, Z., & Go, Y. I. (2021). Fog-to-Water for Water Scarcity in Climate-Change Hazards Hotspots: Pilot Study in Southeast Asia. In *Global Challenges* (Vol. 5, Issue 5). https://doi.org/10.1002/gch2.202000036

Iwata, K., Kyoi, S., & Ushifusa, Y. (2023). Public attitudes of offshore wind energy in Japan: An empirical study using choice experiments. *Cleaner Energy Systems*, *4*. https://doi.org/10.1016/j.cles.2023.100052

Jacobson, M., Tan, J., Muljadi, E., Corbus, D., Dong, Z., Jinho, K., Bailey, E., Pevarnik, M., Racine, M., St. Hilaire, A., & Hodge, C. (2023). *An Assessment of Deploying Advanced Pumped Storage Hydropower Technology in U.S. Electricity Markets*. https://doi.org/10.2172/1993806

Jafari, M., Botterud, A., & Sakti, A. (2022). Decarbonizing power systems: A critical review of the role of energy storage. In *Renewable and Sustainable Energy Reviews* (Vol. 158). https://doi.org/10.1016/j.rser.2022.112077

Jahannoosh, M., Nowdeh, S. A., Naderipour, A., Kamyab, H., Davoudkhani, I. F., & Klemeš, J. J. (2021). New hybrid meta-heuristic algorithm for reliable and cost-effective designing of photovoltaic/wind/fuel cell energy system considering load interruption probability. *Journal of Cleaner Production*, *278*. https://doi.org/10.1016/j.jclepro.2020.123406

Jaiswal, K. K., Chowdhury, C. R., Yadav, D., Verma, R., Dutta, S., Jaiswal, K. S., SangmeshB, & Karuppasamy, K. S. K. (2022). Renewable and sustainable clean energy development and impact on social, economic, and environmental health. In *Energy Nexus* (Vol. 7). Elsevier Ltd. https://doi.org/10.1016/j.nexus.2022.100118

Jansen, M., Beiter, P., Riepin, I., Müsgens, F., Guajardo-Fajardo, V. J., Staffell, I., Bulder, B., & Kitzing, L. (2022). Policy choices and outcomes for offshore wind auctions globally. *Energy Policy*, *167*. https://doi.org/10.1016/j.enpol.2022.113000

Jarecki, S. A. (2023). Modern Collective Transport. The impact of Public Policyon the Implementation of the EU Legislative Objectives on the Example of Poland. *Studia Ecologiae et Bioethicae*, *21*(2). https://doi.org/10.21697/seb.2023.13

Jasiūnas, J., Lund, P. D., & Mikkola, J. (2021). Energy system resilience – A review. In *Renewable and Sustainable Energy Reviews* (Vol. 150). https://doi.org/10.1016/j.rser.2021.111476

Jiang, H., Yao, L., Lu, N., Qin, J., Liu, T., Liu, Y., & Zhou, C. (2022). Geospatial assessment of rooftop solar photovoltaic potential using multi-source remote sensing data. *Energy and AI*, *10*. https://doi.org/10.1016/j.egyai.2022.100185

Jowkar, M., Temeljotov-Salaj, A., Lindkvist, C. M., & Støre-Valen, M. (2022). Sustainable building renovation in residential buildings: barriers and potential motivations in Norwegian culture. *Construction Management and Economics*, *40*(3). https://doi.org/10.1080/01446193.2022.2027485

Kadenic, M. D., Ballantyne, A. G., Olsen, T. B., Enevoldsen, P., & Gross, A. (2024). Proactive understanding of the multi-level stakeholder acceptance of a novel renewable energy technology: Chemical storage of solar energy. In *Energy Research and Social Science* (Vol. 108). https://doi.org/10.1016/j.erss.2023.103370

Kalair, A., Abas, N., Saleem, M. S., Kalair, A. R., & Khan, N. (2021). Role of energy storage systems in energy transition from fossil fuels to renewables. *Energy Storage*, *3*(1). https://doi.org/10.1002/est2.135

Karaaslan, A., & Çamkaya, S. (2022). The relationship between CO2 emissions, economic growth, health expenditure, and renewable and non-renewable energy consumption: Empirical evidence from Turkey. *Renewable Energy*, *190*, 457–466. https://doi.org/10.1016/j.renene.2022.03.139

Karapin, R., & Vogel, D. (2023). Federal Climate Policy Successes: Co-benefits, Business Acceptance, and Partisan Politics. *Business and Politics*. https://doi.org/10.1017/bap.2023.21

Karltorp, K., & Maltais, A. (2024). Financing green industrial transitions: A Swedish case study. *Energy and Climate Change*, *5*, 100138. https://doi.org/10.1016/j.egycc.2024.100138

Karthick, A., Chinnaiyan, V. K., Karpagam, J., Chandrika, V. S., & Ravi Kumar, P. (2021). Optimization of PV-Wind Hybrid Renewable Energy System for Health Care Buildings in Smart City. In *Hybrid Renewable Energy Systems*. https://doi.org/10.1002/9781119555667.ch8

Kati, V., Kassara, C., Vrontisi, Z., & Moustakas, A. (2021). The biodiversity-wind energy-land use nexus in a global biodiversity hotspot. *Science of the Total Environment*, *768*. https://doi.org/10.1016/j.scitotenv.2020.144471

Khairi, M., Jaapar, A., & Yahya, Z. (2017). The application, benefits and challenges of retrofitting the existing buildings. *IOP Conference Series: Materials Science and Engineering*, *271*(1). https://doi.org/10.1088/1757-899X/271/1/012030

Khaledi, A., & Saifoddin, A. (2023). Three-stage resilience-oriented active distribution systems operation after natural disasters. *Energy*, *282*. https://doi.org/10.1016/j.energy.2023.128360

Khan, F., Karimi, M. N., & Khan, O. (2023). Exploring the scalability and commercial viability of biosynthesized nanoparticles for cooling panels with the help of Artificial Intelligence and solar energy systems. *Green Technologies and Sustainability*, *1*(3), 100036. https://doi.org/10.1016/j.grets.2023.100036

Kim, C. (2021). A review of the deployment programs, impact, and barriers of renewable energy policies in Korea. In *Renewable and Sustainable Energy Reviews* (Vol. 144). Elsevier Ltd. https://doi.org/10.1016/j.rser.2021.110870

Kim, J., Park, E., Song, C., Hong, M., Jo, H. W., & Lee, W. K. (2022a). How to manage land use conflict between ecosystem and sustainable energy for low carbon transition?: Net present value analysis for ecosystem service and energy supply. *Frontiers in Environmental Science*, *10*. https://doi.org/10.3389/fenvs.2022.1044928

Kim, J., Park, E., Song, C., Hong, M., Jo, H. W., & Lee, W. K. (2022b). How to manage land use conflict between ecosystem and sustainable energy for low carbon transition?: Net present value analysis for ecosystem service and energy supply. *Frontiers in Environmental Science*, *10*. https://doi.org/10.3389/fenvs.2022.1044928

Kim, K., Park, K., & Nelson, A. C. (2021). Impacts of light rail transit on labor participation and housing affordability in the u.S.: Longitudinal analysis using propensity score matching. In *Transportation Research Record* (Vol. 2675, Issue 12). https://doi.org/10.1177/03611981211029650

Klasić, A., & Đokić, R. (2023). The Role of Neighbourly Relations and Cooperation in Residents' Willingness to Renovate Multi-Family Buildings in Croatia. *Critical Housing Analysis*, *10*(2). https://doi.org/10.13060/23362839.2023.10.2.555

Knauf, J., & le Maitre, J. (2023). A matter of acceptability? Understanding citizen investment schemes in the context of onshore wind farm development. In *Renewable and Sustainable Energy Reviews* (Vol. 175). https://doi.org/10.1016/j.rser.2023.113158

Kobler, U. G., Wüest, A., & Schmid, M. (2019). Combined effects of pumped-storage operation and climate change on thermal structure and water quality. *Climatic Change*, *152*(3–4). https://doi.org/10.1007/s10584-018-2340-x

Kogler, M. L., Thaller, A., & Reisinger, D. (2023). Public Acceptance of Green Mobility Policies: An Agent-Based Model. *Springer Proceedings in Complexity*. https://doi.org/10.1007/978-3-031-34920-1_41

Kougias, I., Taylor, N., Kakoulaki, G., & Jäger-Waldau, A. (2021). The role of photovoltaics for the European Green Deal and the recovery plan. *Renewable and Sustainable Energy Reviews*, *144*. https://doi.org/10.1016/j.rser.2021.111017

Kuittinen, M., Ruuska, K., Viriyaroj, B., & Zubillaga, L. (2023). Are 'tiny homes' good for the environment? Focus on materials, land-use, energy and carbon footprint. *Journal of Architecture*, *28*(5). https://doi.org/10.1080/13602365.2023.2280849

Kumar, A., Pal, D., Kar, S. K., Mishra, S. K., & Bansal, R. (2022). An overview of wind energy development and policy initiatives in India. In *Clean Technologies and Environmental Policy* (Vol. 24, Issue 5). https://doi.org/10.1007/s10098-021-02248-z

Kumar, S., Garg, V., Singh, P. K., & Mishra, A. (2024). Unlocking the Societal Potential of Smart Grid Technologies: A Multi-Dimensional Analysis. *Digital Society*, *3*(2), 26. https://doi.org/10.1007/s44206-024-00116-z

Kuo, Y. H., Leung, J. M. Y., & Yan, Y. (2023). Public transport for smart cities: Recent innovations and future challenges. *European Journal of Operational Research*, *306*(3). https://doi.org/10.1016/j.ejor.2022.06.057

Kuriqi, A., & Jurasz, J. (2022). Small hydropower plants proliferation and fluvial ecosystem conservation nexus. In *Complementarity of Variable Renewable Energy Sources*. https://doi.org/10.1016/B978-0-323-85527-3.00027-3

Kuriqi, A., Pinheiro, A. N., Sordo-Ward, A., Bejarano, M. D., & Garrote, L. (2021). Ecological impacts of run-of-river hydropower plants—Current status and future prospects on the brink of energy transition. In *Renewable and Sustainable Energy Reviews* (Vol. 142). https://doi.org/10.1016/j.rser.2021.110833

Kwan, S. C., & Hashim, J. H. (2020). Public transport and health. In *Advances in Transportation and Health: Tools, Technologies, Policies, and Developments*. https://doi.org/10.1016/B978-0-12-819136-1.00006-1

León-Ospina, C., Arias-Zarate, H., & Hernandez, C. (2023). Performance Evaluation of Photovoltaic Projects in Latin America. *International Journal of Advanced Computer Science and Applications*, *14*(1). https://doi.org/10.14569/IJACSA.2023.0140123

Lerman, L. V., Gerstlberger, W., Ferreira Lima, M., & Frank, A. G. (2021). How governments, universities, and companies contribute to renewable energy development? A municipal innovation policy perspective of the triple helix. *Energy Research and Social Science*, *71*. https://doi.org/10.1016/j.erss.2020.101854

Levenda, A. M., Behrsin, I., & Disano, F. (2021). Renewable energy for whom? A global systematic review of the environmental justice implications of renewable energy technologies. In *Energy Research and Social Science* (Vol. 71). Elsevier Ltd. https://doi.org/10.1016/j.erss.2020.101837

L'Her, G. F., Osborne, A. G., Flanagan, R. R., & Deinert, M. R. (2024). Localized economic and environmental benefits of residential solar in the United States. *Renewable Energy*, *226*, 120433. https://doi.org/10.1016/j.renene.2024.120433

Li, C., Coolen, J. W. P., Scherer, L., Mogollón, J. M., Braeckman, U., Vanaverbeke, J., Tukker, A., & Steubing, B. (2023). Offshore Wind Energy and Marine Biodiversity in the North Sea: Life Cycle Impact Assessment for Benthic Communities. *Environmental Science and Technology*, *57*(16). https://doi.org/10.1021/acs.est.2c07797

Li, C., Mogollón, J. M., Tukker, A., Dong, J., von Terzi, D., Zhang, C., & Steubing, B. (2022). Future material requirements for global sustainable offshore wind energy development. *Renewable and Sustainable Energy Reviews*, *164*. https://doi.org/10.1016/j.rser.2022.112603

Li, C., Mogollón, J. M., Tukker, A., & Steubing, B. (2022). Environmental Impacts of Global Offshore Wind Energy Development until 2040. *Environmental Science and Technology*. https://doi.org/10.1021/acs.est.2c02183

Li, K., Yuan, W., & Li, J. (2022). Causal association between metro transits and air quality: China's evidence. *Environmental Science and Pollution Research*, *29*(46). https://doi.org/10.1007/s11356-022-20724-x

Li, M., & He, N. (2022). Carbon intensity of global existing and future hydropower reservoirs. *Renewable and Sustainable Energy Reviews*, *162*. https://doi.org/10.1016/j.rser.2022.112433

Li, X., Chang, R., Zuo, J., & Zhang, Y. (2023). How does residential solar PV system diffusion occur in Australia?-A logistic growth curve modelling approach. *Sustainable Energy Technologies and Assessments*, *56*. https://doi.org/10.1016/j.seta.2023.103060

Liang, J., Irfan, M., Ikram, M., & Zimon, D. (2022a). Evaluating natural resources volatility in an emerging economy: The influence of solar energy development barriers. *Resources Policy*, *78*. https://doi.org/10.1016/j.resourpol.2022.102858

Liang, J., Irfan, M., Ikram, M., & Zimon, D. (2022b). Evaluating natural resources volatility in an emerging economy: The influence of solar energy development barriers. *Resources Policy*, *78*. https://doi.org/10.1016/j.resourpol.2022.102858

Liikkanen, J., Moilanen, S., Kosonen, A., Ruuskanen, V., & Ahola, J. (2024). Cost-effective optimization for electric vehicle charging in a prosumer household. *Solar Energy*, *267*. https://doi.org/10.1016/j.solener.2023.112122

Liu, L., Bouman, T., Perlaviciute, G., & Steg, L. (2021). The more public influence, the better? The effects of full versus shared influence on public acceptability of energy projects in the Netherlands and China. *Energy Research and Social Science*, *81*. https://doi.org/10.1016/j.erss.2021.102286

Lopez, A., Mai, T., Lantz, E., Harrison-Atlas, D., Williams, T., & Maclaurin, G. (2021). Land use and turbine technology influences on wind potential in the United States. *Energy*, *223*. https://doi.org/10.1016/j.energy.2021.120044

Lukic Vujadinovic, V., Damnjanovic, A., Cakic, A., Petkovic, D. R., Prelevic, M., Pantovic, V., Stojanovic, M., Vidojevic, D., Vranjes, D., & Bodolo, I. (2024). AI-Driven Approach for Enhancing Sustainability in Urban Public Transportation. *Sustainability*, *16*(17), 7763. https://doi.org/10.3390/su16177763

Ma, L., Graham, D. J., & Stettler, M. E. J. (2021). Air quality impacts of new public transport provision: A causal analysis of the Jubilee Line Extension in London. *Atmospheric Environment*, *245*. https://doi.org/10.1016/j.atmosenv.2020.118025

Ma, X., Wu, D., Wang, D., Huang, B., Desomber, K., Fu, T., & Weimar, M. (2022). Optimizing pumped storage hydropower for multiple grid services. *Journal of Energy Storage*, *51*. https://doi.org/10.1016/j.est.2022.104440

Mah, D. N.-Y., Wang, G., Lo, K., Leung, M. K. H., Hills, P., & Lo, A. Y. (2018). Barriers and policy enablers for solar photovoltaics (PV) in cities: Perspectives of potential adopters in Hong Kong. *Renewable and Sustainable Energy Reviews*, *92*, 921–936. https://doi.org/10.1016/j.rser.2018.04.041

Mahmud, M. A. P., & Farjana, S. H. (2022). Comparative life cycle environmental impact assessment of renewable electricity generation systems: A practical approach towards Europe, North America and Oceania. *Renewable Energy*, *193*. https://doi.org/10.1016/j.renene.2022.05.031

Maienza, C., Avossa, A. M., Picozzi, V., & Ricciardelli, F. (2022). Feasibility analysis for floating offshore wind energy. *International Journal of Life Cycle Assessment*, *27*(6). https://doi.org/10.1007/s11367-022-02055-8

Majidi, M., Rodriguez-Garcia, L., Mosier, T. M., & Parvania, M. (2022). Coordinated operation of pumped-storage hydropower with power and water distribution systems. *International Journal of Electrical Power & Energy Systems*, *142*, 108297. https://doi.org/10.1016/j.ijepes.2022.108297

Maka, A. O. M., & Alabid, J. M. (2022). Solar energy technology and its roles in sustainable development. *Clean Energy*, *6*(3). https://doi.org/10.1093/ce/zkac023

Masiello, R., Fioravanti, R., Chalamala, B., & Passell, H. (2022). Electrification, Decarbonization, and the Future Carbon-Free Grid: The Role of Energy Storage in the Electric Grid Infrastructure. *Proceedings of the IEEE*, *110*(3). https://doi.org/10.1109/JPROC.2022.3146843

Mastoi, M. S., Zhuang, S., Haris, M., Hassan, M., & Ali, A. (2023). Large-scale wind power grid integration challenges and their solution: a detailed review. In *Environmental Science and Pollution Research* (Vol. 30, Issue 47). https://doi.org/10.1007/s11356-023-29653-9

Matamala, C., Moreno, R., Sauma, E., Calabrese, J., & Osses, P. (2021). Why reducing socio-environmental externalities of electricity system expansions can boost the development of solar power generation: The case of Chile. *Solar Energy*, *217*. https://doi.org/10.1016/j.solener.2021.01.034

Mathews, J., Thurbon, E., Kim, S. Y., & Tan, H. (2023). Gone with the wind: how state power and industrial policy in the offshore wind power sector are blowing away the obstacles to East Asia's green energy transition. *Review of Evolutionary Political Economy*, *4*(1). https://doi.org/10.1007/s43253-022-00082-7

Mayrand, F., & Clergeau, P. (2018). Green roofs and greenwalls for biodiversity conservation: A contribution to urban connectivity? In *Sustainability (Switzerland)* (Vol. 10, Issue 4). https://doi.org/10.3390/su10040985

McKenna, R., Mulalic, I., Soutar, I., Weinand, J. M., Price, J., Petrović, S., & Mainzer, K. (2022). Exploring trade-offs between landscape impact, land use and resource quality for onshore variable renewable energy: an application to Great Britain. *Energy*, *250*. https://doi.org/10.1016/j.energy.2022.123754

McKenna, R., Pfenninger, S., Heinrichs, H., Schmidt, J., Staffell, I., Bauer, C., Gruber, K., Hahmann, A. N., Jansen, M., Klingler, M., Landwehr, N., Larsén, X. G., Lilliestam, J., Pickering, B., Robinius, M., Tröndle, T., Turkovska, O., Wehrle, S., Weinand, J. M., & Wohland, J. (2022a). High-resolution large-scale onshore wind energy assessments: A review of potential definitions, methodologies and future research needs. In *Renewable Energy* (Vol. 182). https://doi.org/10.1016/j.renene.2021.10.027

McKenna, R., Pfenninger, S., Heinrichs, H., Schmidt, J., Staffell, I., Bauer, C., Gruber, K., Hahmann, A. N., Jansen, M., Klingler, M., Landwehr, N., Larsén, X. G., Lilliestam, J., Pickering, B., Robinius, M., Tröndle, T., Turkovska, O., Wehrle, S., Weinand, J. M., & Wohland, J. (2022b). High-resolution large-scale onshore wind energy assessments: A review of potential definitions, methodologies and future research needs. In *Renewable Energy* (Vol. 182). https://doi.org/10.1016/j.renene.2021.10.027

McNamara, W., Passell, H., Montes, M., Jeffers, R., & Gyuk, I. (2022). Seeking energy equity through energy storage. *Electricity Journal*, *35*(1). https://doi.org/10.1016/j.tej.2021.107063

Melikoglu, M. (2017). Geothermal energy in Turkey and around the World: A review of the literature and an analysis based on Turkey's Vision 2023 energy targets. *Renewable and Sustainable Energy Reviews*, *76*, 485–492. https://doi.org/10.1016/j.rser.2017.03.082

Mikulić, D., Lovrinčević, Ž., & Keček, D. (2021). Valorization of economic effects from the programme of energy renovation of public buildings in Croatia. *Building Research & Information*, *49*(5), 561–573. https://doi.org/10.1080/09613218.2020.1832433

Mikulić, D., Slijepčević, S., & Buturac, G. (2020). Energy renovation of multi apartment buildings: Contributions to economy and climate changes. *Energy and Buildings*, *224*. https://doi.org/10.1016/j.enbuild.2020.110247

Min, Y., Lee, H. W., & Hurvitz, P. M. (2023). Clean energy justice: Different adoption characteristics of underserved communities in rooftop solar and electric vehicle chargers in Seattle. *Energy Research & Social Science*, *96*, 102931. https://doi.org/10.1016/j.erss.2022.102931

Miravet-Sánchez, B. L., García-Rivero, A. E., Yuli-Posadas, R. A., Inostroza-Ruiz, L. A., Fernández-Guzmán, V., Chávez-Juanito, Y. A., Rutti-Marin, J. M., & Apesteguia-Infantes, J. A. (2022). Solar photovoltaic technology in isolated rural communities in Latin America and the Caribbean. *Energy Reports*, *8*. https://doi.org/10.1016/j.egyr.2021.12.052

Mondejar, M. E., Avtar, R., Diaz, H. L. B., Dubey, R. K., Esteban, J., Gómez-Morales, A., Hallam, B., Mbungu, N. T., Okolo, C. C., Prasad, K. A., She, Q., & Garcia-Segura, S. (2021). Digitalization to achieve sustainable development goals: Steps towards a Smart Green Planet. In *Science of the Total Environment* (Vol. 794). https://doi.org/10.1016/j.scitotenv.2021.148539

Monteiro, J., Sousa, N., Coutinho-Rodrigues, J., & Natividade-Jesus, E. (2024). Challenges Ahead for Sustainable Cities: An Urban Form and Transport System Review. In *Energies* (Vol. 17, Issue 2). https://doi.org/10.3390/en17020409

Moraga-Contreras, C., Cornejo-Ponce, L., Vilca-Salinas, P., Estupiñan, E., Zuñiga, A., Palma-Behnke, R., & Tapia-Caroca, H. (2022). Evolution of Solar Energy in Chile: Residential Opportunities in Arica and Parinacota. *Energies*, *15*(2). https://doi.org/10.3390/en15020551

Morales-Inzunza, S., González-Trevizo, M. E., Martínez-Torres, K. E., Luna-León, A., Tamayo-Pérez, U. J., Fernández-Melchor, F., & Santamouris, M. (2023). On the potential of cool materials in the urban heat island context: Scalability challenges and technological setbacks towards building decarbonization. *Energy and Buildings*, *296*. https://doi.org/10.1016/j.enbuild.2023.113330

Moreno, C., Milanes, C. B., Arguello, W., Fontalvo, A., & Alvarez, R. N. (2022). Challenges and perspectives of the use of photovoltaic solar energy in Colombia. *International Journal of Electrical and Computer Engineering*, *12*(5). https://doi.org/10.11591/ijece.v12i5.pp4521-4528

Mostafa Nosratabadi, S., Hemmati, R., Bornapour, M., & Abdollahpour, M. (2021). Economic evaluation and energy/exergy analysis of PV/Wind/PEMFC energy resources employment based on capacity, type of source and government incentive policies: Case study in Iran. *Sustainable Energy Technologies and Assessments*, *43*. https://doi.org/10.1016/j.seta.2020.100963

Mousavinezhad, S., Nili, S., Fahimi, A., & Vahidi, E. (2024). Environmental impact assessment of direct lithium extraction from brine resources: Global warming potential, land use, water consumption, and charting sustainable scenarios. *Resources, Conservation and Recycling*, *205*, 107583. https://doi.org/10.1016/j.resconrec.2024.107583

Mujjuni, F., Betts, T. R., & Blanchard, R. E. (2023). Evaluation of Power Systems Resilience to Extreme Weather Events: A Review of Methods and Assumptions. In *IEEE Access* (Vol. 11). https://doi.org/10.1109/ACCESS.2023.3304643

Musial, W., Spitsen, P., Duffy, P., Beiter, P., Shields, M., Mulas Hernando, D., Hammond, R., Marquis, M., King, J., & Sathish, S. (2023). *Offshore Wind Market Report: 2023 Edition*. https://doi.org/10.2172/2001112

Nabil, M. H., Barua, J., Eiva, U. R. J., Ullah, Md. A., Chowdhury, T. A., Siddiquee, S. M. S., Alam, Md. E., & Das, R. (2024). Techno-economic analysis of commercial-scale 15 MW on-grid ground solar PV systems in Bakalia: A feasibility study proposed for BPDB. *Energy Nexus*, *14*, 100286. https://doi.org/10.1016/j.nexus.2024.100286

Napitupulu, B., Ismiyati, I., & Handajani, M. (2018). Analysis of air pollution caused by mass transportation design changes. *MATEC Web of Conferences*, *195*. https://doi.org/10.1051/matecconf/201819504021

Nasir, J., Javed, A., Ali, M., Ullah, K., & Kazmi, S. A. A. (2022). Capacity optimization of pumped storage hydropower and its impact on an integrated conventional hydropower plant operation. *Applied Energy*, *323*. https://doi.org/10.1016/j.apenergy.2022.119561

Nasirov, S., Girard, A., Peña, C., Salazar, F., & Simon, F. (2021). Expansion of renewable energy in Chile: Analysis of the effects on employment. *Energy*, *226*. https://doi.org/10.1016/j.energy.2021.120410

Nazir, M. S., Ali, N., Bilal, M., & Iqbal, H. M. N. (2020). Potential environmental impacts of wind energy development: A global perspective. In *Current Opinion in Environmental Science and Health* (Vol. 13). https://doi.org/10.1016/j.coesh.2020.01.002

Neupane, D., Kafle, S., Karki, K. R., Kim, D. H., & Pradhan, P. (2022). Solar and wind energy potential assessment at provincial level in Nepal: Geospatial and economic analysis. *Renewable Energy*, *181*. https://doi.org/10.1016/j.renene.2021.09.027

Ng, C., White, T., Katariya, V., & Pollard, E. (2021). Geothermal power generation and biodiversity : the business case for managing risk and creating opportunity. *Proceedings World Geothermal Congress 2020+1*, *April*.

Nieuwenhout, C. (2023). Developing Offshore Wind Farms - A Comparison and Analysis of the Legal and Governance Frameworks of the North Sea Coastal States. *European Journal of Comparative Law and Governance*, *10*(3–4). https://doi.org/10.1163/22134514-bja10064

Nieuwenhuijsen, M. J. (2020). Urban and transport planning pathways to carbon neutral, liveable and healthy cities; A review of the current evidence. In *Environment International* (Vol. 140). https://doi.org/10.1016/j.envint.2020.105661

Nigro, A., Bertolini, L., & Moccia, F. D. (2019). Land use and public transport integration in small cities and towns: Assessment methodology and application. *Journal of Transport Geography*, *74*. https://doi.org/10.1016/j.jtrangeo.2018.11.004

Nikolaos, P. C., Marios, F., & Dimitris, K. (2023). A Review of Pumped Hydro Storage Systems. In *Energies* (Vol. 16, Issue 11). https://doi.org/10.3390/en16114516

Nilson, R. S., & Stedman, R. C. (2022). Are big and small solar separate things?: The importance of scale in public support for solar energy development in upstate New York. *Energy Research and Social Science*, *86*. https://doi.org/10.1016/j.erss.2021.102449

Noorollahi, Y., Golshanfard, A., Ansaripour, S., Khaledi, A., & Shadi, M. (2021). Solar energy for sustainable heating and cooling energy system planning in arid climates. *Energy*, *218*. https://doi.org/10.1016/j.energy.2020.119421

Norouzi, M., Yeganeh, M., & Yusaf, T. (2021). Landscape framework for the exploitation of renewable energy resources and potentials in urban scale (case study: Iran). *Renewable Energy*, *163*. https://doi.org/10.1016/j.renene.2020.08.051

Nyamathulla, S., & Dhanamjayulu, C. (2024). A review of battery energy storage systems and advanced battery management system for different applications: Challenges and recommendations. In *Journal of Energy Storage* (Vol. 86). https://doi.org/10.1016/j.est.2024.111179

Obaideen, K., Nooman AlMallahi, M., Alami, A. H., Ramadan, M., Abdelkareem, M. A., Shehata, N., & Olabi, A. G. (2021). On the contribution of solar energy to sustainable developments goals: Case study on Mohammed bin Rashid Al Maktoum Solar Park. *International Journal of Thermofluids*, *12*. https://doi.org/10.1016/j.ijft.2021.100123

Okorafor, C., Chetty, R., & Haupt, T. (2021). A framework for Implementing Energy Retrofit Projects in Existing Building in South Africa. *IOP Conference Series: Materials Science and Engineering*, *1107*(1). https://doi.org/10.1088/1757-899x/1107/1/012001

Olsson, G. (2020). Water and Energy Nexus. In *Encyclopedia of Sustainability Science and Technology* (pp. 1–18). Springer New York. https://doi.org/10.1007/978-1-4939-2493-6_331-3

Omeje, E. E., Enete, A. A., Mukaila, R., Onah, O. G., Ukwuaba, I. C., & Onyekwe, C. N. (2024). Operationalisation of low-carbon energy for sustainable agricultural production among smallholder women farmers in Nigeria. *Energy and Climate Change*, *5*, 100159. https://doi.org/10.1016/j.egycc.2024.100159

Opperman, J. J., Camargo, R. R., Laporte-Bisquit, A., Zarfl, C., & Morgan, A. J. (2022). Using the WWF Water Risk Filter to Screen Existing and Projected Hydropower Projects for Climate and Biodiversity Risks. *Water (Switzerland)*, *14*(5). https://doi.org/10.3390/w14050721

Oryani, B., Koo, Y., Rezania, S., & Shafiee, A. (2021). Barriers to renewable energy technologies penetration: Perspective in Iran. *Renewable Energy*, *174*. https://doi.org/10.1016/j.renene.2021.04.052

Osman, A. I., Chen, L., Yang, M., Msigwa, G., Farghali, M., Fawzy, S., Rooney, D. W., & Yap, P. S. (2023). Cost, environmental impact, and resilience of renewable energy under a changing climate: a review. *Environmental Chemistry Letters*, *21*(2). https://doi.org/10.1007/s10311-022-01532-8

Osorio-Aravena, J. C., Aghahosseini, A., Bogdanov, D., Caldera, U., Ghorbani, N., Mensah, T. N. O., Khalili, S., Muñoz-Cerón, E., & Breyer, C. (2021). The impact of renewable energy and sector coupling on the pathway towards a sustainable energy system in Chile. *Renewable and Sustainable Energy Reviews*, *151*. https://doi.org/10.1016/j.rser.2021.111557

Ottonelli, J., Lazaro, L. L. B., Andrade, J. C. S., & Abram, S. (2023). Do solar photovoltaic clean development mechanism projects contribute to sustainable development in Latin America? Prospects for the Paris Agreement. *Energy Policy*, *174*. https://doi.org/10.1016/j.enpol.2023.113428

Oudes, D., & Stremke, S. (2021). Next generation solar power plants? A comparative analysis of frontrunner solar landscapes in Europe. *Renewable and Sustainable Energy Reviews*, *145*. https://doi.org/10.1016/j.rser.2021.111101

Oyewo, A. S., Aghahosseini, A., Movsessian, M. M., & Breyer, C. (2024). A novel geothermal-PV led energy system analysis on the case of the central American countries Guatemala, Honduras, and Costa Rica. *Renewable Energy*, *221*. https://doi.org/10.1016/j.renene.2023.119859

Ozsahin, B., Elginoz, N., & Germirli Babuna, F. (2022). Life cycle assessment of a wind farm in Turkey. *Environmental Science and Pollution Research*, *29*(47). https://doi.org/10.1007/s11356-022-20783-0

Pacot, O., Martignoni, S., Smati, L., Denis, V., & Münch-Alligné, C. (2022). Case studies of small pumped storage. *LHB: Hydroscience Journal*, *108*(1). https://doi.org/10.1080/27678490.2022.2101392

Padmanathan, K., Govindarajan, U., Ramachandaramurthy, V. K., Rajagopalan, A., Pachaivannan, N., Sowmmiya, U., Padmanaban, S., Holm-Nielsen, J. B., Xavier, S., & Periasamy, S. K. (2019). A sociocultural study on solar photovoltaic energy system in India: Stratification and policy implication. *Journal of Cleaner Production*, *216*. https://doi.org/10.1016/j.jclepro.2018.12.225

Paiho, S., Wessberg, N., Dubovik, M., Lavikka, R., & Naumer, S. (2023). Twin transition in the built environment – Policy mechanisms, technologies and market views from a cold climate perspective. *Sustainable Cities and Society*, *98*, 104870. https://doi.org/10.1016/j.scs.2023.104870

Paiva, S., Ahad, M. A., Tripathi, G., Feroz, N., & Casalino, G. (2021). Enabling technologies for urban smart mobility: Recent trends, opportunities and challenges. In *Sensors* (Vol. 21, Issue 6). https://doi.org/10.3390/s21062143

Pandey, A. K., Reji Kumar, R., B, K., Laghari, I. A., Samykano, M., Kothari, R., Abusorrah, A. M., Sharma, K., & Tyagi, V. V. (2021). Utilization of solar energy for wastewater treatment: Challenges and progressive research trends. In *Journal of Environmental Management* (Vol. 297). https://doi.org/10.1016/j.jenvman.2021.113300

Pascaris, A. S., Schelly, C., Burnham, L., & Pearce, J. M. (2021). Integrating solar energy with agriculture: Industry perspectives on the market, community, and socio-political dimensions of agrivoltaics. *Energy Research and Social Science*, *75*. https://doi.org/10.1016/j.erss.2021.102023

Paul, S., Poudyal, A., Poudel, S., Dubey, A., & Wang, Z. (2024). Resilience assessment and planning in power distribution systems: Past and future considerations. In *Renewable and Sustainable Energy Reviews* (Vol. 189). https://doi.org/10.1016/j.rser.2023.113991

Pellizzone, A., Allansdottir, A., De Franco, R., Muttoni, G., & Manzella, A. (2015). Exploring public engagement with geothermal energy in southern Italy: A case study. *Energy Policy*, *85*, 1–11. https://doi.org/10.1016/j.enpol.2015.05.002

Pereira, R. H. M., Banister, D., Schwanen, T., & Wessel, N. (2019). Distributional effects of transport policies on inequalities in access to opportunities in Rio de Janeiro. *Journal of Transport and Land Use*, *12*(1). https://doi.org/10.5198/jtlu.2019.1523

Perera, A. T. D., & Hong, T. (2023). Vulnerability and resilience of urban energy ecosystems to extreme climate events: A systematic review and perspectives. In *Renewable and Sustainable Energy Reviews* (Vol. 173). https://doi.org/10.1016/j.rser.2022.113038

Pérez-Prada, F., Alves, B. B., Sethi, K., Barrés, D. P., & Qiu, Y. (2019). Clean Bus Technologies and the Cost-Effectiveness of Emissions Reductions in Latin America. *Transportation Research Record*, *2673*(8). https://doi.org/10.1177/0361198119828684

Ponce Oliva, R. D., Estay, M., Barrientos, M., Estevez, R. A., Gelcich, S., & Vásquez-Lavín, F. (2024). Emerging energy sources' social acceptability: Evidence from marine-based energy projects. *Renewable and Sustainable Energy Reviews*, *198*, 114429. https://doi.org/10.1016/j.rser.2024.114429

Potrč, S., Čuček, L., Martin, M., & Kravanja, Z. (2021). Sustainable renewable energy supply networks optimization – The gradual transition to a renewable energy system within the European Union by 2050. *Renewable and Sustainable Energy Reviews*, *146*. https://doi.org/10.1016/j.rser.2021.111186

Pourasl, H. H., Barenji, R. V., & Khojastehnezhad, V. M. (2023). Solar energy status in the world: A comprehensive review. In *Energy Reports* (Vol. 10). https://doi.org/10.1016/j.egyr.2023.10.022

Powell, J. W., Welsh, J. M., Pannell, D., & Kingwell, R. (2021). Factors influencing Australian sugarcane irrigators' adoption of solar photovoltaic systems for water pumping. *Cleaner Engineering and Technology*, *4*. https://doi.org/10.1016/j.clet.2021.100248

Pratiwi, S., & Juerges, N. (2020). Review of the impact of renewable energy development on the environment and nature conservation in Southeast Asia. In *Energy, Ecology and Environment* (Vol. 5, Issue 4). https://doi.org/10.1007/s40974-020-00166-2

Qu, K., Chen, X., Wang, Y., Calautit, J., Riffat, S., & Cui, X. (2021). Comprehensive energy, economic and thermal comfort assessments for the passive energy retrofit of historical buildings - A case study of a late nineteenth-century Victorian house renovation in the UK. *Energy*, *220*. https://doi.org/10.1016/j.energy.2020.119646

Quaranta, E., Bahreini, A., Riasi, A., & Revelli, R. (2022). The Very Low Head Turbine for hydropower generation in existing hydraulic infrastructures: State of the art and future challenges. In *Sustainable Energy Technologies and Assessments* (Vol. 51). https://doi.org/10.1016/j.seta.2021.101924

Quarmby, S., Santos, G., & Mathias, M. (2019). Air quality strategies and technologies: A rapid review of the international evidence. In *Sustainability (Switzerland)* (Vol. 11, Issue 10). https://doi.org/10.3390/su11102757

Rabaia, M. K. H., Abdelkareem, M. A., Sayed, E. T., Elsaid, K., Chae, K. J., Wilberforce, T., & Olabi, A. G. (2021). Environmental impacts of solar energy systems: A review. *Science of the Total Environment*, *754*. https://doi.org/10.1016/j.scitotenv.2020.141989

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. In *Renewable and Sustainable Energy Reviews* (Vol. 161). https://doi.org/10.1016/j.rser.2022.112279

Rahman, M. A., Kim, J. H., & Hossain, S. (2022). Recent advances of energy storage technologies for grid: A comprehensive review. In *Energy Storage* (Vol. 4, Issue 6). https://doi.org/10.1002/est2.322

Rahman, M. M. (2020). Environmental degradation: The role of electricity consumption, economic growth and globalisation. *Journal of Environmental Management*, *253*. https://doi.org/10.1016/j.jenvman.2019.109742

Rahmdel, M., Behzadmehr, A., Sadeghi, J., Farzaneh, H., & Sarhaddi, F. (2023). Conceptual design of an innovative flexible and controllable Solar ORC cogeneration system for operating in remote areas. *Solar Energy*, *262*. https://doi.org/10.1016/j.solener.2023.111899

Raihan, A., & Tuspekova, A. (2022). The nexus between economic growth, renewable energy use, agricultural land expansion, and carbon emissions: New insights from Peru. *Energy Nexus*, *6*. https://doi.org/10.1016/j.nexus.2022.100067

Ramírez-Tovar, A. M., Moreno-Chuquen, R., & Moreno-Quintero, R. (2022). Land-use in the Electric Colombian System: Hidden Impacts and Risks of Large-scale Renewable Projects. *International Journal of Energy Economics and Policy*, *12*(2). https://doi.org/10.32479/ijeep.11631

Ramos, V., Giannini, G., Calheiros-Cabral, T., Rosa-Santos, P., & Taveira-Pinto, F. (2021). Legal framework of marine renewable energy: A review for the Atlantic region of Europe. In *Renewable and Sustainable Energy Reviews* (Vol. 137). https://doi.org/10.1016/j.rser.2020.110608

Ranganath, S., McCord, S., & Sick, V. (2024). Assessing the maturity of alternative construction materials and their potential impact on embodied carbon for single-family homes in the American Midwest. *Frontiers in Built Environment*, *10*. https://doi.org/10.3389/fbuil.2024.1384191

Rashidi, M. M., Mahariq, I., Murshid, N., Wongwises, S., Mahian, O., & Alhuyi Nazari, M. (2022). Applying wind energy as a clean source for reverse osmosis desalination: A comprehensive review. In *Alexandria Engineering Journal* (Vol. 61, Issue 12). https://doi.org/10.1016/j.aej.2022.06.056

Rasool, S. F., Chin, T., Wang, M., Asghar, A., Khan, A., & Zhou, L. (2022). Exploring the role of organizational support, and critical success factors on renewable energy projects of Pakistan. *Energy*, *243*. https://doi.org/10.1016/j.energy.2021.122765

Rebolledo, F., Mendoza-Araya, P., Carvajal, G., & Ramírez, G. (2022). Performance evaluation of different solar modules and mounting structures on an on-grid photovoltaic system in south-central Chile. *Energy for Sustainable Development*, *68*. https://doi.org/10.1016/j.esd.2022.02.003

Reis, A. L., Lopes, M. A. R., Andrade-Campos, A., & Henggeler Antunes, C. (2023). A review of operational control strategies in water supply systems for energy and cost efficiency. In *Renewable and Sustainable Energy Reviews* (Vol. 175). https://doi.org/10.1016/j.rser.2022.113140

Renoth, R., Buchner, E., Schmieder, M., Keim, M., Plechaty, M., & Drews, M. (2023). Social acceptance of geothermal technology on a global view: a systematic review. *Energy, Sustainability and Society*, *13*(1), 49. https://doi.org/10.1186/s13705-023-00432-1

Rettig, E., & Herman, L. (2024). The paradox of permission: Why governments allow foreign actors to promote solar energy projects in disputed cities. *Energy Research & Social Science*, *116*, 103707. https://doi.org/10.1016/j.erss.2024.103707

Rickerson, W., Gillis, J., & Bulkeley, M. (2019). *The Value of Resilience for Distributed Energy Resources: An Overview of Current Analytical Practices*. https://doi.org/10.2172/2394652

Rith, M., Fillone, A., & Biona, J. B. M. (2019). The impact of socioeconomic characteristics and land use patterns on household vehicle ownership and energy consumption in an urban area with insufficient public transport service – A case study of metro Manila. *Journal of Transport Geography*, *79*. https://doi.org/10.1016/j.jtrangeo.2019.102484

Rivera, N. M., Ruiz-Tagle, J. C., & Spiller, E. (2024a). The health benefits of solar power generation: Evidence from Chile. *Journal of Environmental Economics and Management*, *126*, 102999. https://doi.org/10.1016/j.jeem.2024.102999

Rivera, N. M., Ruiz-Tagle, J. C., & Spiller, E. (2024b). The health benefits of solar power generation: Evidence from Chile. *Journal of Environmental Economics and Management*, *126*, 102999. https://doi.org/10.1016/j.jeem.2024.102999

Rivero-Camacho, C., Martín-del-Río, J. J., & Marrero-Meléndez, M. (2023). Evolution of the life cycle of residential buildings in Andalusia: Economic and environmental evaluation of their direct and indirect impacts. *Sustainable Cities and Society*, *93*. https://doi.org/10.1016/j.scs.2023.104507

Rodriguez, P. L., Amigo, L., Gatica, G., Aguila, G., Vidal-Pacheco, L., & Coronado-Hernández, J. R. (2024). Design and feasibility study for the evaluation of an Agrovoltaics generation system: Case of Temuco in Chile. *Procedia Computer Science*, *231*. https://doi.org/10.1016/j.procs.2023.12.170

Rodriguez-Valencia, A., Rosas-Satizábal, D., & Hidalgo, D. (2023). Big effort, little gain for users: lessons from the public transport system reform in Bogotá. *Public Transport*, *15*(2). https://doi.org/10.1007/s12469-022-00308-1

Rohrig, K., Berkhout, V., Callies, D., Durstewitz, M., Faulstich, S., Hahn, B., Jung, M., Pauscher, L., Seibel, A., Shan, M., Siefert, M., Steffen, J., Collmann, M., Czichon, S., Dörenkämper, M., Gottschall, J., Lange, B., Ruhle, A., Sayer, F., … Wenske, J. (2019). Powering the 21st century by wind energy - Options, facts, figures. *Applied Physics Reviews*, *6*(3). https://doi.org/10.1063/1.5089877

Rojas-Rueda, D., de Nazelle, A., Teixidó, O., & Nieuwenhuijsen, M. J. (2012). Replacing car trips by increasing bike and public transport in the greater Barcelona metropolitan area: A health impact assessment study. *Environment International*, *49*. https://doi.org/10.1016/j.envint.2012.08.009

Rojas-Rueda, D., de Nazelle, A., Teixidó, O., & Nieuwenhuijsen, M. J. (2013). Health impact assessment of increasing public transport and cycling use in Barcelona: A morbidity and burden of disease approach. *Preventive Medicine*, *57*(5). https://doi.org/10.1016/j.ypmed.2013.07.021

Rosenlieb, E., Heimiller, D., & Cohen, S. (2022). *Closed-Loop Pumped Storage Hydropower Resource Assessment for the United States. Final Report on HydroWIRES Project D1: Improving Hydropower and PSH Representations in Capacity Expansion Models*. https://doi.org/10.2172/1870821

Roux, J. P., Fitch-Roy, O., Devine-Wright, P., & Ellis, G. (2022). "We could have been leaders": The rise and fall of offshore wind energy on the political agenda in Ireland. *Energy Research and Social Science*, *92*. https://doi.org/10.1016/j.erss.2022.102762

Ruddat, M. (2022). Public acceptance of wind energy - concepts, empirical drivers and some open questions. In *Wind Energy Science* (Vol. 7, Issue 4). https://doi.org/10.5194/wes-7-1679-2022

Ruhnau, O., Eicke, A., Sgarlato, R., Tröndle, T., & Hirth, L. (2024). Cost-Potential Curves of Onshore Wind Energy: the Role of Disamenity Costs. *Environmental and Resource Economics*, *87*(2). https://doi.org/10.1007/s10640-022-00746-2

R.V., R., R., V. R., Kiplangat, D. C., R., V., Jose, R., Pradeepkumar, A. P., & Kumar, K. S. (2023). Tracing the evolution and charting the future of geothermal energy research and development. *Renewable and Sustainable Energy Reviews*, *184*, 113531. https://doi.org/10.1016/j.rser.2023.113531

Sadorsky, P. (2021). Wind energy for sustainable development: Driving factors and future outlook. *Journal of Cleaner Production*, *289*. https://doi.org/10.1016/j.jclepro.2020.125779

Saif, M. A., Zefreh, M. M., & Torok, A. (2019). Public transport accessibility: A literature review. In *Periodica Polytechnica Transportation Engineering* (Vol. 47, Issue 1). https://doi.org/10.3311/PPtr.12072

Sander, L., Jung, C., & Schindler, D. (2024). Global Review on Environmental Impacts of Onshore Wind Energy in the Field of Tension between Human Societies and Natural Systems. *Energies*, *17*(13), 3098. https://doi.org/10.3390/en17133098

San-Martín, E., & Elizalde, P. (2024). Determinants of rooftop solar uptake: A comparative analysis of the residential and non-residential sectors in the Basque Country (Spain). *Renewable and Sustainable Energy Reviews*, *203*, 114711. https://doi.org/10.1016/j.rser.2024.114711

Santiago, I., Palacios-Garcia, E. J., Gonzalez-Redondo, M., Arenas-Ramos, V., Simon, B., Hayes, B. P., & Moreno-Munoz, A. (2024). Assessment of generation capacity and economic viability of photovoltaic systems on urban buildings in southern Spain: A socio-economic, technological, and regulatory analysis. *Renewable and Sustainable Energy Reviews*, *203*, 114741. https://doi.org/10.1016/j.rser.2024.114741

Saravanan, A. M., Patil, G. N., Mohammed, Z. H., Walke, S. M., & Achuthan, M. (2022). EXPERIMENTAL STUDIES AND ANALYSIS ON THE TREATMENT OF GROUNDWATER USING SOLAR AND WIND ENERGY. *Rasayan Journal of Chemistry*, *15*(3). https://doi.org/10.31788/RJC.2022.1536955

Sasthav, C., & Oladosu, G. (2022). Environmental design of low-head run-of-river hydropower in the United States: A review of facility design models. In *Renewable and Sustainable Energy Reviews* (Vol. 160). https://doi.org/10.1016/j.rser.2022.112312

Sayed, E. T., Wilberforce, T., Elsaid, K., Rabaia, M. K. H., Abdelkareem, M. A., Chae, K. J., & Olabi, A. G. (2021). A critical review on environmental impacts of renewable energy systems and mitigation strategies: Wind, hydro, biomass and geothermal. *Science of the Total Environment*, *766*. https://doi.org/10.1016/j.scitotenv.2020.144505

Schaube, P., Ise, A., & Clementi, L. (2022). Distributed photovoltaic generation in Argentina: An analysis based on the technical innovation system framework. *Technology in Society*, *68*. https://doi.org/10.1016/j.techsoc.2021.101839

Schmidt, H., de Vries, G., Renes, R. J., & Schmehl, R. (2022). The Social Acceptance of Airborne Wind Energy: A Literature Review. In *Energies* (Vol. 15, Issue 4). https://doi.org/10.3390/en15041384

Schmitt, R. J. P., & Rosa, L. (2024). Dams for hydropower and irrigation: Trends, challenges, and alternatives. *Renewable and Sustainable Energy Reviews*, *199*, 114439. https://doi.org/10.1016/j.rser.2024.114439

Schulz, C., & Skinner, J. (2022). Hydropower benefit-sharing and resettlement: A conceptual review. In *Energy Research and Social Science* (Vol. 83). https://doi.org/10.1016/j.erss.2021.102342

Schuster, E., Bulling, L., & Köppel, J. (2015). Consolidating the State of Knowledge: A Synoptical Review of Wind Energy's Wildlife Effects. *Environmental Management*, *56*(2). https://doi.org/10.1007/s00267-015-0501-5

Scovell, M., McCrea, R., Walton, A., & Poruschi, L. (2024). Local acceptance of solar farms: The impact of energy narratives. *Renewable and Sustainable Energy Reviews*, *189*. https://doi.org/10.1016/j.rser.2023.114029

Sebestyén, V. (2021). Renewable and Sustainable Energy Reviews: Environmental impact networks of renewable energy power plants. *Renewable and Sustainable Energy Reviews*, *151*. https://doi.org/10.1016/j.rser.2021.111626

Seeley, C. C., & Dhakal, S. (2022). Energy and CO2 emission reduction potential from investment in energy efficiency building retrofits in Bangkok, Thailand. *International Journal of Sustainable Energy*, *41*(2). https://doi.org/10.1080/14786451.2021.1906244

Sekak, S. N. A. A., Rahmat, I., Ahmad, N., & Junus, Y. M. (2016). The study of energy efficiency performance in refurbishment projects. *Advanced Science Letters*, *22*(5–6). https://doi.org/10.1166/asl.2016.6710

Seminario-Córdova, R. (2023). Latin America towards Sustainability through Renewable Energies: A Systematic Review. In *Energies* (Vol. 16, Issue 21). https://doi.org/10.3390/en16217422

Sharma, R., Sinha, A., & Kautish, P. (2021a). Does renewable energy consumption reduce ecological footprint? Evidence from eight developing countries of Asia. *Journal of Cleaner Production*, *285*. https://doi.org/10.1016/j.jclepro.2020.124867

Sharma, R., Sinha, A., & Kautish, P. (2021b). Does renewable energy consumption reduce ecological footprint? Evidence from eight developing countries of Asia. *Journal of Cleaner Production*, *285*. https://doi.org/10.1016/j.jclepro.2020.124867

Sharmin, T., Khan, N. R., Akram, M. S., & Ehsan, M. M. (2023). A State-of-the-Art Review on Geothermal Energy Extraction, Utilization, and Improvement Strategies: Conventional, Hybridized, and Enhanced Geothermal Systems. *International Journal of Thermofluids*, *18*, 100323. https://doi.org/10.1016/j.ijft.2023.100323

Sharshir, S. W., Hamada, M. A., Kandeal, A. W., El-Said, E. M. S., Mimi Elsaid, A., Rashad, M., & Abdelaziz, G. B. (2021). Augmented performance of tubular solar still integrated with cost-effective nano-based mushrooms. *Solar Energy*, *228*, 27–37. https://doi.org/10.1016/j.solener.2021.09.034

Shoeib, E. A. H., Hamin Infield, E., & Renski, H. C. (2021). Measuring the impacts of wind energy projects on U.S. rural counties' community services and cost of living. *Energy Policy*, *153*. https://doi.org/10.1016/j.enpol.2021.112279

Shortall, R., Davidsdottir, B., & Axelsson, G. (2015). Geothermal energy for sustainable development: A review of sustainability impacts and assessment frameworks. *Renewable and Sustainable Energy Reviews*, *44*, 391–406. https://doi.org/10.1016/j.rser.2014.12.020

Shukla, A. K., Sudhakar, K., Baredar, P., & Mamat, R. (2018). Solar PV and BIPV system: Barrier, challenges and policy recommendation in India. In *Renewable and Sustainable Energy Reviews* (Vol. 82). https://doi.org/10.1016/j.rser.2017.10.013

Siddiqui, O., Ishaq, H., Khan, D. A., & Fazel, H. (2024). Social cost-benefit analysis of different types of buses for sustainable public transportation. *Journal of Cleaner Production*, *438*. https://doi.org/10.1016/j.jclepro.2024.140656

Silveira, B., Melo dos Santos, M. E., MAIA, F. J. F., Basso, A. P., Singh, J. N., & Costa, H. K. de M. (2024). Incentives for photovoltaic energy generation: A comparative analysis of policies in Spain, Germany, and Brazil. *Energy Strategy Reviews*, *54*, 101415. https://doi.org/10.1016/j.esr.2024.101415

Simon, T. R., Inman, D., Hanes, R., Avery, G., Hettinger, D., & Heath, G. (2023). Life Cycle Assessment of Closed-Loop Pumped Storage Hydropower in the United States. *Environmental Science and Technology*, *57*(33). https://doi.org/10.1021/acs.est.2c09189

Singh, U., Rizwan, M., Malik, H., & García Márquez, F. P. (2022). Wind Energy Scenario, Success and Initiatives towards Renewable Energy in India—A Review. In *Energies* (Vol. 15, Issue 6). https://doi.org/10.3390/en15062291

Sofia, D., Gioiella, F., Lotrecchiano, N., & Giuliano, A. (2020). Cost-benefit analysis to support decarbonization scenario for 2030: A case study in Italy. *Energy Policy*, *137*. https://doi.org/10.1016/j.enpol.2019.111137

Solangi, Y. A., Longsheng, C., & Shah, S. A. A. (2021a). Assessing and overcoming the renewable energy barriers for sustainable development in Pakistan: An integrated AHP and fuzzy TOPSIS approach. *Renewable Energy*, *173*. https://doi.org/10.1016/j.renene.2021.03.141

Solangi, Y. A., Longsheng, C., & Shah, S. A. A. (2021b). Assessing and overcoming the renewable energy barriers for sustainable development in Pakistan: An integrated AHP and fuzzy TOPSIS approach. *Renewable Energy*, *173*, 209–222. https://doi.org/10.1016/j.renene.2021.03.141

Soltani, M., Moradi Kashkooli, F., Souri, M., Rafiei, B., Jabarifar, M., Gharali, K., & Nathwani, J. S. (2021). Environmental, economic, and social impacts of geothermal energy systems. *Renewable and Sustainable Energy Reviews*, *140*, 110750. https://doi.org/10.1016/j.rser.2021.110750

Song, G., Lu, Y., Liu, B., Duan, H., Feng, H., & Liu, G. (2023). Photovoltaic panel waste assessment and embodied material flows in China, 2000–2050. *Journal of Environmental Management*, *338*. https://doi.org/10.1016/j.jenvman.2023.117675

Sørensen, C. H., Hansson, L., & Rye, T. (2023). The role of meta-governance in public transport systems: A comparison of major urban regions in Denmark and England. *Transport Policy*, *130*. https://doi.org/10.1016/j.tranpol.2022.10.018

Sovacool, B. K., Barnacle, M. L., Smith, A., & Brisbois, M. C. (2022). Towards improved solar energy justice: Exploring the complex inequities of household adoption of photovoltaic panels. *Energy Policy*, *164*. https://doi.org/10.1016/j.enpol.2022.112868

Stadelmann-Steffen, I., & Dermont, C. (2021). Acceptance through inclusion? Political and economic participation and the acceptance of local renewable energy projects in Switzerland. *Energy Research and Social Science*, *71*. https://doi.org/10.1016/j.erss.2020.101818

Suman, A. (2021). Role of renewable energy technologies in climate change adaptation and mitigation: A brief review from Nepal. In *Renewable and Sustainable Energy Reviews* (Vol. 151). Elsevier Ltd. https://doi.org/10.1016/j.rser.2021.111524

Sun, H., Edziah, B. K., Sun, C., & Kporsu, A. K. (2019). Institutional quality, green innovation and energy efficiency. *Energy Policy*, *135*. https://doi.org/10.1016/j.enpol.2019.111002

Susskind, L., Chun, J., Gant, A., Hodgkins, C., Cohen, J., & Lohmar, S. (2022). Sources of opposition to renewable energy projects in the United States. *Energy Policy*, *165*. https://doi.org/10.1016/j.enpol.2022.112922

Tahir, F., Dwyer, S., & Kelly, S. (2024). Emergent opportunities and barriers on the feasibility of microgrids: Qualitative findings from an Australian funding program. *Energy Research and Social Science*, *109*. https://doi.org/10.1016/j.erss.2024.103423

Takeuchi, A. (2023). Social Dimensions of Offshore Wind Energy: a Review of Theories and Frameworks of Multi-criteria Decision-Making. In *Current Sustainable/Renewable Energy Reports* (Vol. 10, Issue 4). https://doi.org/10.1007/s40518-023-00225-2

Tapia, M., Ramos, L., Heinemann, D., & Zondervan, E. (2023). Power to the city: Assessing the rooftop solar photovoltaic potential in multiple cities of Ecuador. *Physical Sciences Reviews*, *8*(9). https://doi.org/10.1515/psr-2020-0061

Tayebi, S. T., Sambucci, M., & Valente, M. (2024). Waste Management of Wind Turbine Blades: A Comprehensive Review on Available Recycling Technologies with A Focus on Overcoming Potential Environmental Hazards Caused by Microplastic Production. *Sustainability*, *16*(11), 4517. https://doi.org/10.3390/su16114517

Teff-Seker, Y., Berger-Tal, O., Lehnardt, Y., & Teschner, N. (2022). Noise pollution from wind turbines and its effects on wildlife: A cross-national analysis of current policies and planning regulations. In *Renewable and Sustainable Energy Reviews* (Vol. 168). https://doi.org/10.1016/j.rser.2022.112801

Teixeira, B., Brito, M. C., & Mateus, A. (2024). Raw materials for the Portuguese decarbonization roadmap: The case of solar photovoltaics and wind energy. *Resources Policy*, *90*. https://doi.org/10.1016/j.resourpol.2024.104839

Thaller, A., Posch, A., Dugan, A., & Steininger, K. (2021). How to design policy packages for sustainable transport: Balancing disruptiveness and implementability. *Transportation Research Part D: Transport and Environment*, *91*. https://doi.org/10.1016/j.trd.2021.102714

Tong, D., Farnham, D. J., Duan, L., Zhang, Q., Lewis, N. S., Caldeira, K., & Davis, S. J. (2021). Geophysical constraints on the reliability of solar and wind power worldwide. *Nature Communications*, *12*(1). https://doi.org/10.1038/s41467-021-26355-z

Tong, L., Geng, Y., Zhang, Y., Zhang, Y., & Wang, H. (2024). Testing the effectiveness of deploying distributed photovoltaic power systems in residential buildings: Evidence from rural China. *Environmental Impact Assessment Review*, *104*. https://doi.org/10.1016/j.eiar.2023.107300

Tonn, B., Marincic, M., & Rose, E. (2024). A dollar well spent: Monetizing the societal benefits of low-income weatherization programs in the United States. *Energy Research and Social Science*, *107*. https://doi.org/10.1016/j.erss.2023.103341

Topouzi, M., Killip, G., Fawcett, T., & Owen, A. (2019). Deep retrofit approaches: Managing risks to minimise the energy performance gap. *Eceee Summer Study Proceedings*, *2019-June*.

Torul Yürek, Y., Özyörük, B., Özcan, E., & Bulut, M. (2023). Socio-political evaluation of renewable energy resources under uncertain environment. *Engineering Applications of Artificial Intelligence*, *126*. https://doi.org/10.1016/j.engappai.2023.106881

Triguero-Mas, M., Martínez-Solanas, È., Barrera-Gómez, J., Agis, D., Pérez, N., Reche, C., Alastuey, A., Querol, X., Pérez, K., & Basagaña, X. (2020). Public Transport Strikes and Their Relationships with Air Pollution, Mortality, and Hospital Admissions. *American Journal of Epidemiology*, *189*(2). https://doi.org/10.1093/aje/kwz202

Trottier, G., Turgeon, K., Boisclair, D., Bulle, C., & Margni, M. (2022). The impacts of hydropower on freshwater macroinvertebrate richness: A global metaanalysis. *PLoS ONE*, *17*(8 August). https://doi.org/10.1371/journal.pone.0273089

Tsakalidis, A., Gkoumas, K., & Pekár, F. (2020). Digital transformation supporting transport decarbonisation: Technological developments in EU-funded research and innovation. *Sustainability (Switzerland)*, *12*(9). https://doi.org/10.3390/su12093762

Tumse, S., Bilgili, M., Yildirim, A., & Sahin, B. (2024). Comparative Analysis of Global Onshore and Offshore Wind Energy Characteristics and Potentials. *Sustainability*, *16*(15), 6614. https://doi.org/10.3390/su16156614

Tuominen, P., Forsström, J., & Honkatukia, J. (2013). Economic effects of energy efficiency improvements in the Finnish building stock. *Energy Policy*, *52*. https://doi.org/10.1016/j.enpol.2012.10.012

Turley, B., Cantor, A., Berry, K., Knuth, S., Mulvaney, D., & Vineyard, N. (2022). Emergent landscapes of renewable energy storage: Considering just transitions in the Western United States. *Energy Research & Social Science*, *90*, 102583. https://doi.org/10.1016/j.erss.2022.102583

Ubierna, M., Santos, C. D., & Mercier-Blais, S. (2022). Water Security and Climate Change: Hydropower Reservoir Greenhouse Gas Emissions. In *Water Resources Development and Management*. https://doi.org/10.1007/978-981-16-5493-0_5

Underhill, L. J., Milando, C. W., Levy, J. I., Dols, W. S., Lee, S. K., & Fabian, M. P. (2020). Simulation of indoor and outdoor air quality and health impacts following installation of energy-efficient retrofits in a multifamily housing unit. *Building and Environment*, *170*. https://doi.org/10.1016/j.buildenv.2019.106507

Uría-Martínez, R., & Johnson, M. M. (2023). *Hydropower Market Report 2023*.

Uwineza, L., Kim, H. G., & Kim, C. K. (2021). Feasibilty study of integrating the renewable energy system in Popova Island using the Monte Carlo model and HOMER. *Energy Strategy Reviews*, *33*. https://doi.org/10.1016/j.esr.2020.100607 van de Grift, E., & Cuppen, E. (2022). Beyond the public in controversies: A systematic review on social opposition and renewable energy actors. *Energy Research & Social Science*, *91*. https://doi.org/10.1016/j.erss.2022.102749

van Zoest, S., & Daamen, T. A. (2024). Explaining Value Capture Implementation in New York, London, and Copenhagen: Negotiating Distributional Effects. *Urban Affairs Review*, *60*(5). https://doi.org/10.1177/10780874231222174

Vargas, C. A., Caracciolo, L., & Ball, P. J. (2022). Geothermal energy as a means to decarbonize the energy mix of megacities. *Communications Earth & Environment*, *3*(1), 66. https://doi.org/10.1038/s43247-022-00386-w

Vecchio, G., Tiznado-Aitken, I., Castillo, B., & Steiniger, S. (2024). Fair transport policies for older people: accessibility and affordability of public transport in Santiago, Chile. *Transportation*, *51*(2). https://doi.org/10.1007/s11116-022-10346-0

Veers, P., Dykes, K., Basu, S., Bianchini, A., Clifton, A., Green, P., Holttinen, H., Kitzing, L., Kosovic, B., Lundquist, J. K., Meyers, J., O'malley, M., Shaw, W. J., & Straw, B. (2022). Grand Challenges: wind energy research needs for a global energy transition. *Wind Energy Science*, *7*(6). https://doi.org/10.5194/wes-7-2491-2022

Venus, T. E., Hinzmann, M., & Gerdes, H. (2022). Public Acceptance of Hydropower. In *Novel Developments for Sustainable Hydropower*. https://doi.org/10.1007/978-3-030-99138-8_3

Verma, S., Paul, A. R., & Haque, N. (2022). Assessment of Materials and Rare Earth Metals Demand for Sustainable Wind Energy Growth in India. *Minerals*, *12*(5). https://doi.org/10.3390/min12050647

Vine, E., Williams, A., & Price, S. (2017). The cost of enforcing building energy codes: an examination of traditional and alternative enforcement processes. *Energy Efficiency*, *10*(3). https://doi.org/10.1007/s12053-016-9483-2

Walston, L. J., Hartmann, H. M., Fox, L., Macknick, J., McCall, J., Janski, J., & Jenkins, L. (2024). If you build it, will they come? Insect community responses to habitat establishment at solar energy facilities in Minnesota, USA. *Environmental Research Letters*, *19*(1). https://doi.org/10.1088/1748-9326/ad0f72

Wang, H. B., & Zhang, Z. J. (2024). A mechanism for efficiently controlling the safety risks of pumped storage power station construction. *Journal of Physics: Conference Series*, *2752*(1), 012154. https://doi.org/10.1088/1742-6596/2752/1/012154

Wang, S., Curtis, C., & Scheurer, J. (2020). Public transport and private travel preferences: A comparative study between chinese and australian communities. In *Handbook on Transport and Urban Transformation in China*. https://doi.org/10.4337/9781786439246.00025

Wang, S., Song, R., Xu, Z., Chen, M., Di Tanna, G. L., Downey, L., Jan, S., & Si, L. (2024). The costs, health and economic impact of air pollution control strategies: a systematic review. *Global Health Research and Policy*, *9*(1), 30. https://doi.org/10.1186/s41256-024-00373-y

Wang, T., Ru, X., Deng, B., Zhang, C., Wang, X., Yang, B., & Zhang, L. (2023). Evidence that offshore wind farms might affect marine sediment quality and microbial communities. *Science of the Total Environment*, *856*. https://doi.org/10.1016/j.scitotenv.2022.158782

Wang, X., Bamisile, O., Chen, S., Xu, X., Luo, S., Huang, Q., & Hu, W. (2022). Decarbonization of China's electricity systems with hydropower penetration and pumped-hydro storage: Comparing the policies with a techno-economic analysis. *Renewable Energy*, *196*. https://doi.org/10.1016/j.renene.2022.06.080

Wang, Y., Wu, N., Tang, T., Wang, Y., & Cai, Q. (2022). Small run-of-river hydropower dams and associated water regulation filter benthic diatom traits and affect functional diversity. *Science of the Total Environment*, *813*. https://doi.org/10.1016/j.scitotenv.2021.152566

Wang, Z., Chan, F. K. S., Feng, M., & Johnson, M. F. (2024). Greenhouse gas emissions from hydropower reservoirs: emission processes and management approaches. *Environmental Research Letters*, *19*(7), 073002. https://doi.org/10.1088/1748-9326/ad560c

Wasti, A., Ray, P., Wi, S., Folch, C., Ubierna, M., & Karki, P. (2022). Climate change and the hydropower sector: A global review. In *Wiley Interdisciplinary Reviews: Climate Change* (Vol. 13, Issue 2). https://doi.org/10.1002/wcc.757

Weber, J. (2023). Coordination Challenges in Wind Energy Development: Lessons from Cross-Case Positive Planning Approaches to Avoid Multi-Level Governance 'Free-Riding.' *Land*, *12*(11), 1964. https://doi.org/10.3390/land12111964

Wołek, M., Wolański, M., Bartłomiejczyk, M., Wyszomirski, O., Grzelec, K., & Hebel, K. (2021). Ensuring sustainable development of urban public transport: A case study of the trolleybus system in Gdynia and Sopot (Poland). *Journal of Cleaner Production*, *279*. https://doi.org/10.1016/j.jclepro.2020.123807

Wong, Y. J., Shiu, H. Y., Chang, J. H. H., Ooi, M. C. G., Li, H. H., Homma, R., Shimizu, Y., Chiueh, P. Te, Maneechot, L., & Nik Sulaiman, N. M. (2022). Spatiotemporal impact of COVID-19 on Taiwan air quality in the absence of a lockdown: Influence of urban public transportation use and meteorological conditions. *Journal of Cleaner Production*, *365*. https://doi.org/10.1016/j.jclepro.2022.132893

Wooster, E. I. F., Fleck, R., Torpy, F., Ramp, D., & Irga, P. J. (2022). Urban green roofs promote metropolitan biodiversity: A comparative case study. *Building and Environment*, *207*. https://doi.org/10.1016/j.buildenv.2021.108458

Wu, D., Zhou, D., Zhu, Q., & Wu, L. (2024). An investigation into the role of Residents' cognitive preferences in distributed renewable energy development. *Applied Energy*, *372*, 123814. https://doi.org/10.1016/j.apenergy.2024.123814

Wu, J., Wang, S., Meng, Z., & Zhang, R. (2023). Public acceptance of residential photovoltaic installation: A case study in China. *Heliyon*, *9*(10). https://doi.org/10.1016/j.heliyon.2023.e20891

Xia, Z., Li, Y., Zhang, W., Chen, R., Guo, S., Zhang, P., & Du, P. (2022). Solar photovoltaic program helps turn deserts green in China: Evidence from satellite monitoring. *Journal of Environmental Management*, *324*. https://doi.org/10.1016/j.jenvman.2022.116338

Xie, Y., Tyler, M., Huckett, J., Bartlett, R., Chen, Y., Salcido, V., Mendon, V., & Rosenberg, M. (2023). A Review of the Evaluation of Building Energy Code Compliance in the United States. In *Energies* (Vol. 16, Issue 16). https://doi.org/10.3390/en16165874

Xu, L., Feng, K., Lin, N., Perera, A. T. D., Poor, H. V., Xie, L., Ji, C., Sun, X. A., Guo, Q., & O'Malley, M. (2024). Resilience of renewable power systems under climate risks. *Nature Reviews Electrical Engineering*, *1*(1). https://doi.org/10.1038/s44287-023-00003-8

Xu, R., Zeng, Z., Pan, M., Ziegler, A. D., Holden, J., Spracklen, D. V., Brown, L. E., He, X., Chen, D., Ye, B., Xu, H., Jerez, S., Zheng, C., Liu, J., Lin, P., Yang, Y., Zou, J., Wang, D., Gu, M., … Wood, Eric. F. (2023). A global-scale framework for hydropower development incorporating strict environmental constraints. *Nature Water*, *1*(1). https://doi.org/10.1038/s44221-022-00004-1

Xu, Y., Xing, Y., Huang, Q., Li, J., Zhang, G., Bamisile, O., & Huang, Q. (2023). A review of resilience enhancement strategies in renewable power system under HILP events. *Energy Reports*, *9*. https://doi.org/10.1016/j.egyr.2022.12.128

Xue, J., Hou, X., Zhou, J., Liu, X., & Guo, Y. (2022). Obstacle identification for the development of pumped hydro storage using abandoned mines: A novel multi-stage analysis framework. *Journal of Energy Storage*, *48*, 104022. https://doi.org/10.1016/j.est.2022.104022

Yang, Q., Huang, T., Wang, S., Li, J., Dai, S., Wright, S., Wang, Y., & Peng, H. (2019). A GIS-based high spatial resolution assessment of large-scale PV generation potential in China. *Applied Energy*, *247*. https://doi.org/10.1016/j.apenergy.2019.04.005

Yin, Y., Zhang, D., Zhu, M., Zhang, H., Liu, D., Sun, Y., Zhong, H., Ren, M., & Wang, P. (2024). Improving land-use efficiency of solar power in China and policy implications. *Solar Energy*, *280*, 112867. https://doi.org/10.1016/j.solener.2024.112867

Zaeh, S. E., Koehler, K., Eakin, M. N., Wohn, C., Diibor, I., Eckmann, T., Wu, T. D., Clemons-Erby, D., Gummerson, C. E., Green, T., Wood, M., Majd, E., Stein, M. L., Rule, A., Davis, M. F., & McCormack, M. C. (2021). Indoor air quality prior to and following school building renovation in a mid-atlantic school district. *International Journal of Environmental Research and Public Health*, *18*(22). https://doi.org/10.3390/ijerph182212149

Zawadzki, S. J., Vrieling, L., & van der Werff, E. (2022). What influences public acceptability of sustainable energy policies? The crucial role of funding and who benefits. *Energy Research and Social Science*, *87*. https://doi.org/10.1016/j.erss.2021.102468

Zdzisław Krasnodębski. (2023). *Report on geothermal energy*. https://www.europarl.europa.eu/doceo/document/A-9-2023-0432_EN.html

Zhai, Z., Fu, X., Yi, M., Sheng, M., & Guang, F. (2022). Haze management: is urban public transportation priority effective? *Environmental Science and Pollution Research*, *29*(22). https://doi.org/10.1007/s11356-021-17871-y

Zhang, H., Yu, Z., Zhu, C., Yang, R., Yan, B., & Jiang, G. (2023). Green or not? Environmental challenges from photovoltaic technology. In *Environmental Pollution* (Vol. 320). https://doi.org/10.1016/j.envpol.2023.121066

Zhang, L., Dong, Z., Tan, Z., Luo, J., & Yan, D. (2024). Institutional Performance and Carbon Reduction Effect of High-Quality Development of New Energy: China's Experience and Policy Implication. *Sustainability*, *16*(16), 6734. https://doi.org/10.3390/su16166734

Zhang, S., Chen, Y., Liu, X., Yang, M., & Xu, L. (2017). Employment effects of solar PV industry in China: A spreadsheet-based analytical model. *Energy Policy*, *109*. https://doi.org/10.1016/j.enpol.2017.06.058

Zhang, Z., Liu, X., Zhao, D., Post, S., & Chen, J. (2023). Overview of the development and application of wind energy in New Zealand. In *Energy and Built Environment* (Vol. 4, Issue 6). https://doi.org/10.1016/j.enbenv.2022.06.009

Zhao, C., Andersen, P. B., Træholt, C., & Hashemi, S. (2023). Grid-connected battery energy storage system: a review on application and integration. In *Renewable and Sustainable Energy Reviews* (Vol. 182). https://doi.org/10.1016/j.rser.2023.113400

Zhao, D. X., He, B. J., Johnson, C., & Mou, B. (2015). Social problems of green buildings: From the humanistic needs to social acceptance. In *Renewable and Sustainable Energy Reviews* (Vol. 51). https://doi.org/10.1016/j.rser.2015.07.072

Zhao, G., Zhou, P., & Wen, W. (2022). What cause regional inequality of technology innovation in renewable energy? Evidence from China. *Applied Energy*, *310*. https://doi.org/10.1016/j.apenergy.2021.118464

Zhao, J. F., Oh, U. J., Park, J. C., Park, E. S., Im, H. Bin, Lee, K. Y., & Choi, J. S. (2022). A Review of World-wide Advanced Pumped Storage Hydropower Technologies. *IFAC-PapersOnLine*, *55*(9). https://doi.org/10.1016/j.ifacol.2022.07.030

Zhou, Y. (2023). Climate change adaptation with energy resilience in energy districts—A state-of-the-art review. In *Energy and Buildings* (Vol. 279). https://doi.org/10.1016/j.enbuild.2022.112649