

Marine Energy Social and Economic Data Collection Toolkit – Instructions

The Marine Energy Social and Economic Data Collection Toolkit is an online, searchable database that presents metrics for understanding social and economic impacts that have been used for current and previous marine energy projects. For each metric, the tool includes the following information:

- **Category:** whether the metric is social, economic, or both
- **Metrics:** identified in a literature review with definitions
- **Synonyms or related metrics:** similar metrics. Click on the blue text to jump to that metric.
- **Methods:** in what ways these metrics can be or have been measured in the literature
- **Examples from marine energy:** marine energy papers that have assessed these metrics
- **Examples from other relevant industries,** relevant papers from other industries such as offshore wind, fisheries management or coastal development that have assessed these metrics
- **Tools:** examples of existing tools that can be used to measure or provide information on each metric

Category	Metrics	Synonyms or related metrics	Methods	Examples from marine energy	Examples from other relevant industries	Tools
Economic	capacity a non-static aspect describing the human, technical, economic, or social resources available in a community to participate	adaptation resilience	case study, comprehensive vulnerability framework, economic analysis, focus group, fuzzy logic model, geospatial analysis, industry research, interviews, observations, participatory methodologies, scenarios, social capital analysis, structural equation modeling, survey	Marine Energy Wales 2020, Kazimierczuk et al. 2023	Tull et al. 2016 ↗	AEDG Community Metric Explorer ↗

Whether the metric is economic, social, or both

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	capacity a non-static aspect describing the human, technical, economic, or social resources available in a community to participate	adaptation resilience	case study, comprehensive vulnerability framework, economic analysis, focus group, fuzzy logic model, geospatial analysis, industry research, interviews, observations, participatory methodologies, scenarios, social capital analysis, structural equation modeling, survey	Marine Energy Wales 2020, Kazimierczuk et al. 2023	Tull et al. 2016 ↗	AEDG Community Metric Explorer ↗

Metric name and definition based on literature review

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Economic	economic, or social resources available in a community to participate	adaptation resilience	case study, comprehensive vulnerability framework, economic analysis, focus group, fuzzy logic model, geospatial analysis, industry research, interviews, observations, participatory methodologies, scenarios, social capital analysis, structural equation modeling, survey	Marine Energy Wales 2020, Kazimierczuk et al. 2023	Tull et al. 2016 ↗	AEDG Community Metric Explorer ↗

Similar terms and metrics. The listed metrics can be clicked on to bring the user to their respective rows

Category	Metrics	Synonyms or related metrics	Methods	Examples from marine energy	Examples from other relevant industries	Tools
Economic	capacity a non-static aspect describing the human, technical, economic, or social resources available in a community to participate	Different ways of measuring the metric, derived from the literature	case study, comprehensive vulnerability framework, economic analysis, focus group, fuzzy logic model, geospatial analysis, industry research, interviews, observations, participatory methodologies, scenarios, social capital analysis, structural equation modeling, survey	Marine Energy Wales 2020, Kazimierczuk et al. 2023	Tull et al. 2016 ↗	AEDG Community Metric Explorer ↗

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At the top of the tool there is a filter with drop-down options to help narrow down your search. This filter includes the terms "Economic", "Social", and "Any". There is also an open search box to type in specific text to search. The search returns results that match all words in any of the displayed fields, so it is advised to limit searches to a single word or short phrase, and to try another search if no results are returned.

Category: - Any - ▼

Search: Apply

Q
- Any -
 Economic
 Social

Synonyms or related metrics	Methods

The online tool shows the main information available for each metric, however additional information is available by clicking on the reference links under the different columns. There are references available under the Examples and Tools columns.

For any remaining questions or difficulties with the tool, please contact deborah.rose@pnnl.gov.