Marine Energy Social and Economic Data Collection Toolkit - Definitions

This document contains definitions and references for each of the metrics considered in the Social and Economic Data Collection Template and Toolkit.

Metrics	Definition
acceptance	the positive or neutral reaction of citizens when a project is proposed in their local area (Roddis et al. 2018)
accessibility	the degree to which a process, product, device, service, environment, or facility is usable by as many people as possible (https://accessibility.iu.edu/understanding-accessibility/index.html)
adaptation	adjustment to changes in environmental or social conditions, particularly in the context of renewable energy (Kim & Park 2023)
aesthetics	visual or other beauty-related aspects of a landscape or seascape (Gee 2010)
affordability	the state of being cheap enough for people to be able to buy (https://dictionary.cambridge.org/us/dictionary/english/affordability)
barriers / enablers	the aspects of a project, process, or community that either facilitate or prevent success (Vallecha et al. 2021; Apolonia et al. 2021)
behaviors	human responses to change or patterns of resource use (Reddy et al. 2016)
capacity	a non-static aspect describing the human, technical, economic, or social resources available in a community to participate (<u>Hacker et al. 2013</u> ; <u>Meleddu & Pulina 2023</u> ; <u>Chaskin 1999</u> ; <u>Mask 2019</u>)
capital	an investment of money to acquire or upgrade fixed assets, typically a one-time
expenditure	cost that enables future growth
(CAPEX)	(https://www.investopedia.com/terms/c/capitalexpenditure.asp)
climate concerns	perspectives of individuals / community on the severity of impacts due to anthropogenic climate change or contributions to further environmental degradation (Nauges & Wheeler 2017; Searle & Gow 2010)
community benefits	positive impacts to a broad societal group generated by a project (Brummer 2018)
community structure	the relationships among the people, groups, institutions, stakeholders, and management of a community (<u>Kazimierczuk et al. 2021</u>)
compensation	payment or remuneration for work or services performed or for harm suffered (https://www.law.cornell.edu/wex/compensation)
conflict	any disagreement or difference of opinions between individuals or groups involved or impacted in the planning of a project (Rudolph 2014; Haggett et al. 2020; Biswas & Miller 2022)
cost	any aspect related to the payment required for items or services associated with a project (Maslov et al. 2015)

cultural values	the core principles and ideals on which a community exists and relies upon. These can be linked to the physical landscape, social identity and beliefs, or knowledge and customs/history (Novaczek et al. 2011; https://www.igi-global.com/dictionary/cultural-values/40861)
demographics	the social characteristics and statistics of a community, including: age, race, ethnicity, gender, education, employment, etc. (https://education.nationalgeographic.org/resource/resource-library-demographics/)
displacement	a situation in which people or traditional owners/users are forced to leave or feel excluded from a space where they have historically lived, visited, or operated within (Grabowski 1989; https://dictionary.cambridge.org/us/dictionary/english/displacement)
economic feasibility	the degree to which the economic advantages of something to be made, done, or achieved are greater than the economic costs (https://dictionary.cambridge.org/us/dictionary/english/economic-feasibility)
ecosystem services	the direct and indirect contributions of natural systems to human systems, including cultural, provisioning, regulating, and supporting services (Costanza et al. 2017; Picchi et al. 2019)
education	the level of formal schooling received by individuals in the community and the distribution of knowledge (<u>Leisher et al. 2012</u> ; <u>Kandpal & Broman 2014</u>)
emissions	the term used to describe the gases and particles which are put into the air by various anthropogenic sources, typically focusing on carbon dioxide (https://www3.epa.gov/airquality/emissns.html)
employment	available jobs and work opportunities created by a project (<u>Tourkolias & Mirasgedis 2011</u> ; <u>Bohringer et al.2013</u> ; <u>Heinbach et al. 2014</u>)
energy justice and equity	the concepts of equity, affordability, accessibility, and participation in the energy system and energy transition regardless of race, nationality, income, or geographic location (https://www.ncsl.org/energy/energy-justice-and-the-energy-transition)
energy security	the uninterrupted availability of energy at an affordable price (https://www.iea.org/topics/energy-security)
exports	resources, goods, and services that are produced domestically but sold abroad (https://www.investopedia.com/terms/e/export.asp)
fisheries	commercial, subsistence/cultural, or recreational harvest of fish, shellfish, or other species from the sea (https://www.msc.org/en-au/what-we-are-doing/our-collective-impact/what-is-a-fishery)
funding	money given by a government, organization, or other entity for an event or activity (https://dictionary.cambridge.org/us/dictionary/english/funding)
gender	characteristics or behavioral aspects of women, men, or other gender identies that are socially constructed, including norms, behaviors, and roles, as well as relationships and dynamics within a community (https://www.who.int/health-topics/gender)

	The state of the s
grid	aspects related to the existing electrical distribution system in a community and
	interconnection with broader regional systems (<u>Vugrin et al. 2017</u>)
gross value added (GVA)	the amount generated by any unit engaged in the production of goods and
	services, used to measure the contribution made by an industry or sector and is
	calculated by the output minus consumption
	(https://www.ons.gov.uk/economy/grossvalueaddedgva)
health	the physical and mental wellness of individuals in a community (Mckenzie et al.
	2011; Sharofutdinova et al. 2021)
income	The payment people or organizations receive for providing labor, resources, or
	services (https://www.dictionary.com/browse/income)
levelized cost of energy (LCOE)	summary metric that combines the primary technology cost and performance
	parameters: capital expenditures, operations expenditures, and capacity factor
	(Astariz et al. 2015; https://atb.nrel.gov/electricity/2021/definitions)
livelihood	a means of making a living that encompasses individual or group capabilities,
	assets, income and activities required to secure the necessities of life
	(https://leap.unep.org/knowledge/glossary/livelihood)
navigation	aspects related to the movement of vessels in the ocean, navigable waterways,
navigation	or around a marine energy project (Mehdi et al. 2020)
	a formula used to determine the current value of an investment, project, or
net present value	business in the future incorporating discounting
(NPV)	(https://www.investopedia.com/terms/n/npv.asp)
	involvement of individuals or groups in any aspect of a project (Armstrong 2021;
participation	Elkjaer et al. 2021)
1 1	the number of years required to recover the original cash investment (Kessler
payback period	2017)
	a belief or opinion, held by individuals or groups about how things seem (Hooper
perceptions	et al. 2015; Hooper et al. 2020)
place attachment	the emotional bond between person and place (Inalhan et al. 2021)
•	formal or informal structures of leadership and the ideas or plans used for
policies and governance	decision-making in development of projects (Brugger & Henry 2021; Lange et al.
	2018)
	the capacity to tolerate, absorb, cope with, and adjust to changing social,
resilience	economic or environmental conditions while retaining key elements of
Comerce	structure, function, and identity (Cinner & Barnes 2019)
	a measure of the extent to which someone or a community is threatened by a
	potential circumstance or event, and includes: i) the severity of adverse impacts
risk	if the event occurs; and ii) the likelihood of occurrence
	(https://csrc.nist.gov/glossary/term/risk)
safety	being protected from harm or danger or the precautions taken to avoid harm to
	individuals or a community (Yeter 2019)
	refers to the perceptions of local stakeholders that a project, a company, or an
social license	industry that operates in a given area or region is socially acceptable or
	legitimate (Raufflet et al. 2013)

spatial aspects	This term contains aspects of marine spatial planning, co-users of ocean space, topography, distribution of resources and people across a landscape, and all other spatially represented information. Note that this term is not a metric itself, but rather a categorization of types various types of data.
supply chain	sequence of processes involved in the production and distribution of a
	commodity (https://csrc.nist.gov/glossary/term/supply-chain)
tourism impacts	a broad concept encapsulating the direct, indirect, and induced effects of
	projects on existing tourism or recreational opportunities (Miller & Hadley 2005)
trust	the degree to which a community or individuals perceive governance structures,
	authorities, organizations or processes to be fair, reliable, and in their best
	interests (https://data.oecd.org/gga/trust-in-government.htm)
vision	comprises peoples' values, wishes, fears and desires for the future
	(https://www.canr.msu.edu/news/implementing community vision requires d
	etailed strategies)
	the susceptibility of an individual, a community, assets, or system to the
vulnerability	impacts of hazards due to the conditions determined by physical, social,
	economic, and environmental factors or processes
	(https://www.undrr.org/terminology/vulnerability)
well-being	Social: an end state in which basic human needs safety, health, happiness) are
	met and people are able to coexist peacefully in communities with opportunities
	for advancement (<u>Keyes 1998</u> ; <u>https://www.usip.org/guiding-principles-</u>
	stabilization-and-reconstruction-the-web-version/social-well-being)
	Economic: having ones most basic survival needs met and sustainable income
	and assets so to prosper (https://www.rescue.org/outcome/economic-
	wellbeing)