

International Offshore Renewable Energy Code Book

These data and definitions refer only to the actual facility source of energy, not the delivery systems.¹

- **Country** = the country whose exclusive economic zone is the site where the offshore renewable energy project is (or will be) located
- **State/Region** = the country's state or region closest to the project²
- **Resource Type** = the type of offshore energy generation harnessed by the project
 - **Tidal/Current** = tidal energy,³ ocean current energy,⁴ or ocean wave energy⁵
 - **Offshore Wind**⁶ = offshore wind energy
- **Project Name** = name of the offshore renewable energy project
- **Latitude** = center latitude of project (in decimal degrees)
- **Longitude** = center longitude of project (in decimal degrees)
- **Technology Model** = name of device model
- **Technology Developer** = name of technology developer(s)
- **Developer** = name of project developer(s)
- **Operator** = name of project operator(s)
- **Distance to Shore (km)** = closest distance to shore from project (measured in kilometers)
- **Avg. Water Depth (m)** = average water depth in project area (measured in meters)
- **Development Stage** (general and specific)⁷
 - **Concept/Planning** = this stage entails the beginning stages of offshore energy development including: site development, planning, testing, and leasing (if applicable).
 - Agreement
 - Concept/Planning
 - Device Testing
 - Lease
 - Public Engagement
 - **Authorization** = after a site is selected and planning completed, sites go through an authorization process. This stage entails projects that are in the process of applying or receiving authorizations.
 - Authorizations Submitted
 - Authorized
 - Delayed
 - Pre-construction⁸
 - Tender Pending
 - Unconditional grid connection permit
 - **Operational Construction** = after all authorizations are obtained, operational construction begins.
 - Under Construction
 - **Post-Construction** = after operational construction is completed, projects are installed, fully commissioned, and finally operational.
 - Construction Completed
 - Installation

- Installed
- Operational
- Partially Operational
- **Operational Date** = year project became operational
- **Target Completion Date** = year projects aim to be completed (and become operational)
- **Project Costs** = capital costs per project (as reported)
- **Lease Length** = years of lease for the project
- **Proposed Capacity (MW)** = proposed power generation capacity in megawatts
- **Current Capacity (MW)** = current power generation capacity in megawatts
- **# of Devices** = number of turbines or other appropriate units generating power
- **Expected Employment Gained** = expected number of jobs gained with project (part-time, full-time, or combination as reported)
- **Project Area (hectares)** = area of wind farm in hectares
- **Lease Total Rent (\$/yr)** = cost of lease per year⁹
- **Lease Rental Rate (\$/acres/yr)** = cost of lease per acres per year¹⁰
- **Information** = additional information on project
- **Comments** = comments that add understanding to the project
- **Verification** = project is able to pass a double source verification or it has only one (non-governmental) data source.

¹ Note: These are broad definitions meant to demonstrate the general attributes and stages of an offshore renewable energy project; some countries may differ in the specifics.

² Depending on country, as some localities are involved in the authorization and regulation process.

³ Tidal energy converts energy of tidal differences more than 16 feet with barrages, dams, tidal fences, or tidal turbines. ([DOE](#)) ([DOE](#))

⁴ Ocean current energy harnesses the energy of currents carrying water across earth's oceans. ([BOEM](#))

⁵ Ocean wave energy captures energy directly from surface waves or from pressure fluctuations under water. ([BOEM](#))

⁶ Offshore wind energy harnesses the energy of winds over the bodies of water. ([BOEM](#))

⁷ See Code Book By County for country-specific development stages.

⁸ Includes FID (Final investment decision)

⁹ USA only

¹⁰ USA only