

PRIMRE: Portal and Repository for Information on Marine Renewable Energy

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Marine energy information, organized.



What Is PRIMRE?

The U.S. Department of Energy's Portal and Repository for Information on Marine Renewable Energy (PRIMRE) provides broad access to marine energy data, information, and other resources through its seven knowledge hubs:

- **Marine Hydrokinetic Data Repository (MHKDR)** hosts marine energy datasets
- **Tethys** hosts documents on the environmental effects of marine energy
- **Tethys Engineering** hosts documents on marine energy engineering
- **Marine Energy Projects Database** hosts detailed project and device information
- **Marine Energy Software** hosts commercial and open-source software
- **Marine Energy Atlas** hosts geospatial data and map-based analysis tools
- **Telesto** hosts resources and guidance for each stage of the project lifecycle

Other key features of PRIMRE include an events calendar, archived webinars, marine energy basics, a bi-weekly newsletter, prize information, and online tools.



Improving Access to Data

The PRIMRE team also works with other marine energy data systems to address barriers to data sharing for universal and transparent access and to improve connections between data providers, subject matter experts, and the communities of people using marine energy data. PRIMRE seeks to provide universal access to data through integration with PRIMRE's centralized search and through the adoption of cloud-based, centralized data lakes, which remove barriers to access for big, complex datasets and empower communities of all sizes to interact with big data. These improvements further connect communities to the data they need to inform decisions, design and deploy wave and tidal devices, advance marine energy research, and develop innovative solutions to local energy problems.

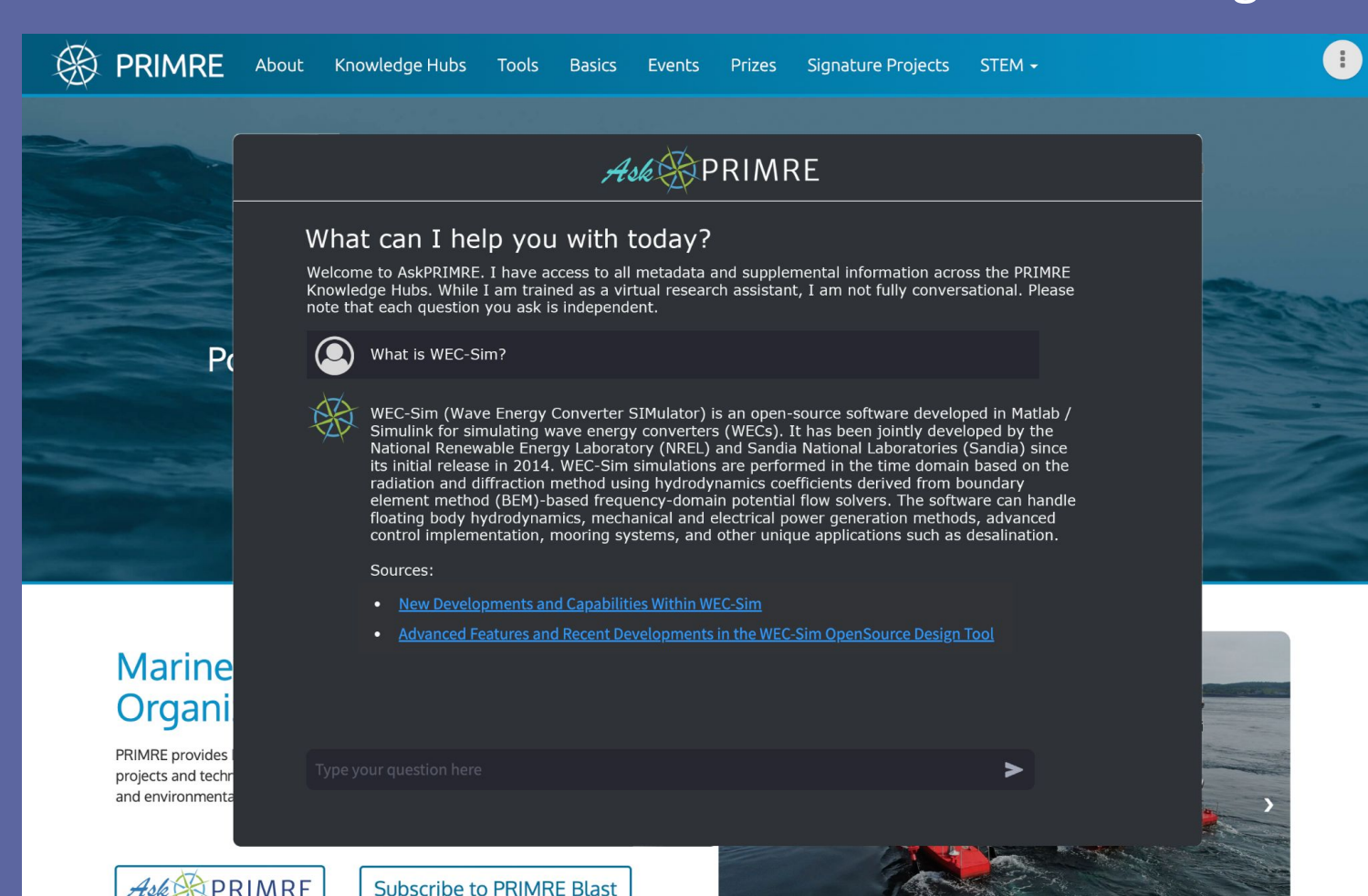


Knowledge Hubs



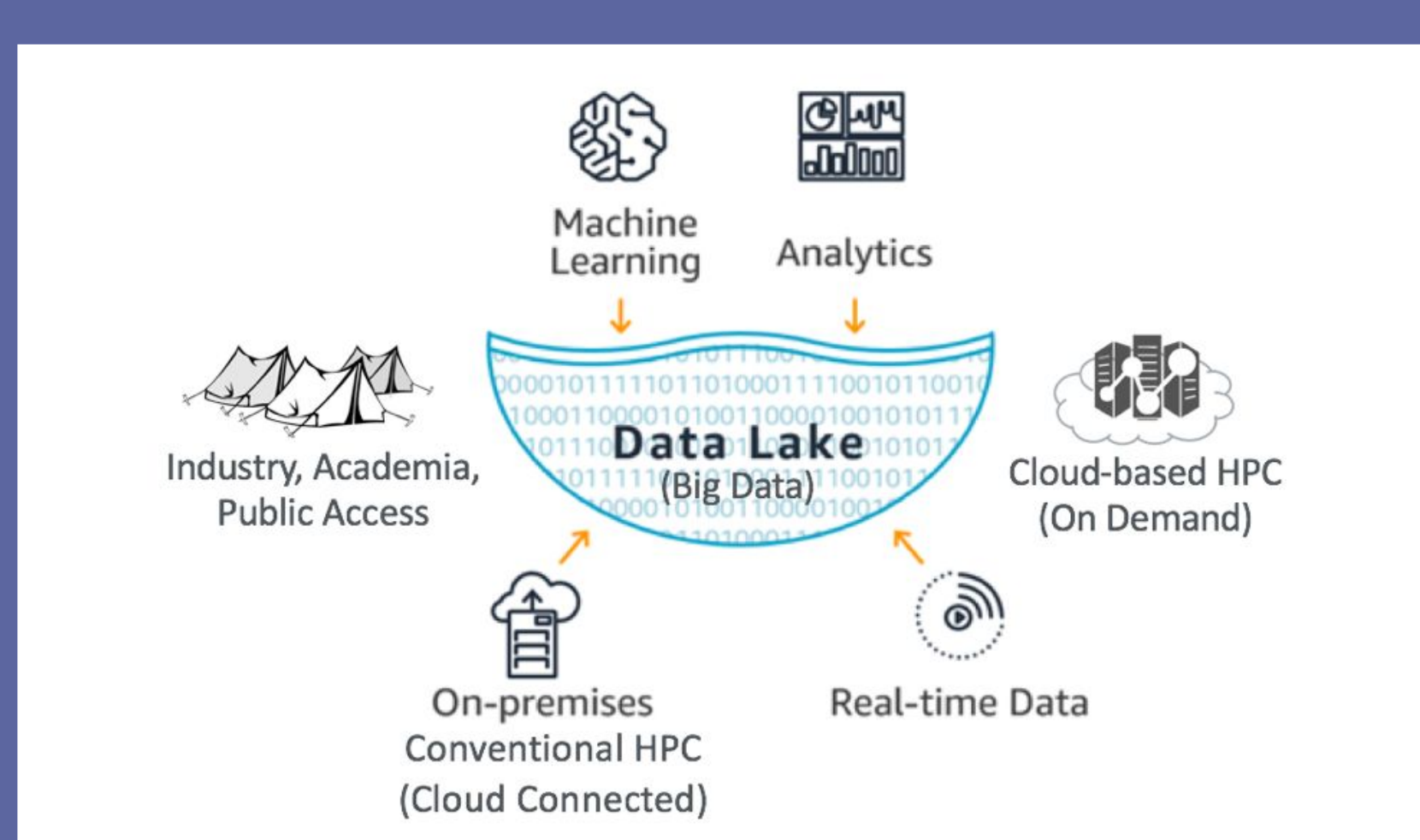
AskPRIMRE

The PRIMRE team is developing **AskPRIMRE**: an AI-powered research assistant using a Large Language Model (LLM) trained on metadata and documents from PRIMRE's Knowledge Hubs.



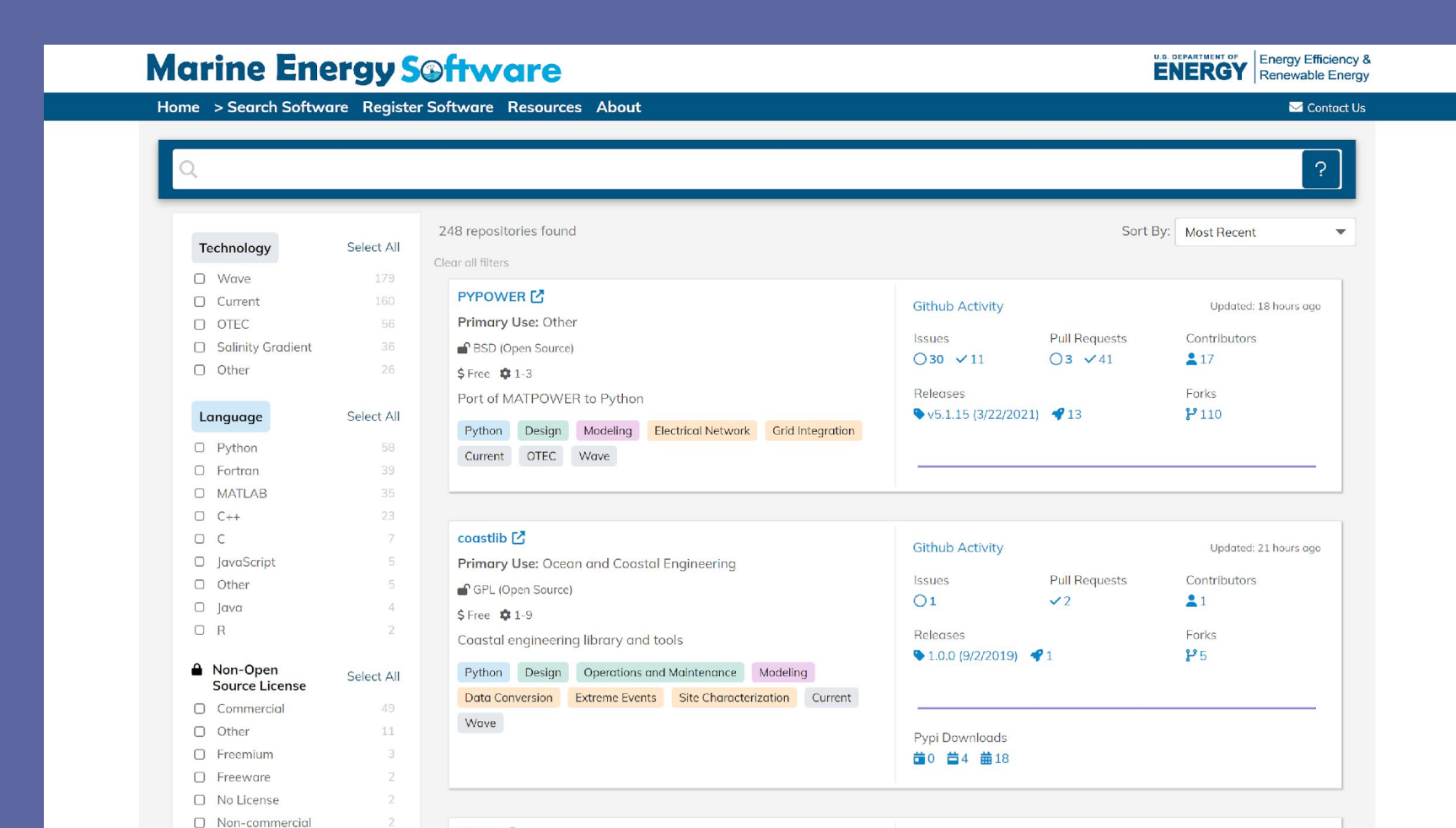
Data Lakes

MHKDR and the Open Energy Data Initiative are improving access to high-value marine energy datasets through **Data Lakes**, which provide universal data access to anyone with internet.



Marine Energy Software

Marine Energy Software is a collection of open-source and commercial software packages that are relevant to marine energy research, development, and deployment.



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