

## 2024 NETL Resource Sustainability Project Review Meeting

### Interactive Tool Demos

Updated: 3/29/24

**Name of Tool: EDX ClaiMM: The Energy Data eXchange Critical Minerals & Materials Platform (FWP-1022420)**

**Presenter: Devin Justman, National Energy Technology Laboratory**

**Description:** EDX ClaiMM is a virtual common operating platform that provides digital resources for the Critical Minerals & Materials community. The platform serves as a gateway to geospatial and non-spatial data, interactive tools & applications, and publications to aid in critical mineral resource investigations and assessments.

**Related Presentation (If Applicable):** Tuesday, April 2, 10:45 a.m., EDX ClaiMM - Unlocking a Digital Future for REE/CM (FWP-1022420) *Kelly Rose, National Energy Technology Laboratory (NETL)*

**Related Poster (If Applicable):** N/A

**Name of Tool: Energy Data Exchange (EDX)**

**Presenter: Kevin Kuhn, National Energy Technology Laboratory**

**Description:** The Energy Data exchange (EDX) is a virtual data laboratory and library where users can find, curate, use, and re-use data to advance fossil energy, environmental, and innovative Research and development.

**Related Presentation (If Applicable):** N/A

**Related Poster (If Applicable):** N/A

**Name of Tool: RokBase (FWP-1025007)**

**Presenter: Dustin Crandall and Tom Paronish, National Energy Technology Laboratory**

**Description:** Online platform to access digital core information from unconventional field laboratories, and other subsurface resources.

**Related Presentation (If Applicable):** N/A

**Related Poster (If Applicable): Non-Destructive Core Characterization (FWP-1022420)**

*Dustin Crandall, National Energy Technology Laboratory*

**Name of Tool: NEWTS Database and Dashboard Demo (FWP-1022428)**

**Presenters: Nicholas Siefert and Rachel Yesenchak, National Energy Technology Laboratory**

**Description:** The goal of the NEWTS Database and Dashboard is to help researchers and community members understand the composition and location of energy-related wastewater streams, including power plant leachate, acid mine drainage waste, brackish water, and O&G produced water.

[NEWTS National Energy Water Treatment and Speciation Database - Groups - EDX \(doe.gov\)](#)  
[NEWTS Database Dashboard \(arcgis.com\)](#)

**Related Presentation (If Applicable):** Wednesday, April 3, 11:15 a.m., Water Management for Power Systems (FWP-1022428) *Nicholas Siefert, National Energy Technology Laboratory*

**Related Poster (If Applicable):** N/A

**Name of Tool: Advanced Infrastructure Integrity Model (AIIM)**

**Presenter: Lucy Romeo, National Energy Technology Laboratory**

**Description:** NETL's Advanced Infrastructure Integrity Model (AIIM) is a science-based, big data, big data computing, and multi-machine learning model informed approach to assessing offshore energy infrastructure integrity for safe future use and repurposing. This award-winning method-turned-tool enables information insight visualization, data interrogation, and extensive database access for offshore platforms and pipelines in the U.S. Gulf of Mexico.

**Related Presentation (If Applicable):** N/A

**Related Poster (If Applicable):** N/A

**Name of Tool: PARETO – DOE's Produced Water Optimization Framework**

**Presenter: Elmira Shamlou, Key Logic**

**Description:** PARETO is a free and open-source decision-support application that can help organizations better manage, treat, and – where possible – beneficially reuse produced water from oil and gas operations.

**Related Presentation (If Applicable):** Wednesday, April 3, 10:45 a.m., **An Optimization Framework for Produced Water Management and Beneficial Reuse (FWP-1022477)**

*Elmira Shamlou, Key Logic*

**Related Poster (If Applicable):** N/A

**Name of Tool: Unconventional Rare-Earth and Critical Mineral (URC) Assessment Method**

**Presenter: C. Gabriel Creason, National Energy Technology Laboratory**

**Description:** The world's first peer-reviewed, artificial intelligence (AI) multi-modeling unconventional rare-earth element (REE) and critical mineral (CM) resource assessment model, to identify domestic deposits and unlock the REE and CM supply from unconventional systems. With this method, NETL is finding the "needles" in the geological "haystack"!

**Related Presentation (If Applicable):** N/A

**Related Poster (If Applicable):** Deploying a New AI Software Tool for Rapid Characterization & Quantification of Unconventional Sources of Critical Minerals (TC-23NT020203) *C. Gabe Creason, National Energy Technology Laboratory*

**Name of Enhanced Poster: DOE: Energy Justice, Equity, Societal Considerations and Impacts, and Workforce Development**

**Presenters: Emily Brooks, Natenna Dobson, and Caleb Woodall, U.S. Department of Energy, FECM**

**Description:** Experts on community engagement, equity, and energy justice from DOE Fossil Energy and Carbon Management are available to discuss and answer any questions you may have about community benefits plans, Justice40, and DOE's work to advance environmental justice. A representative for DOE's workforce development (in methane mitigation and critical minerals and materials) will also be available for discussion and exchanging of ideas.

**Related Presentation (If Applicable):** Tuesday, April 2, morning plenary "Addressing Energy Justice, Equity, and Societal Considerations and Impacts Through a Community Benefits Plan Framework: A Discussion", Wednesday, April 3, morning plenary "Workforce Discussion (Methane Mitigation and Critical Minerals & Materials)"

**Related Poster (If Applicable):** N/A

**Name of Tool: Critical Minerals & Materials Matchmaker (CM3)**

**Presenters: Jennifer Bauer and Neyda Maymi, National Energy Technology Laboratory**

**Description:** The Critical Minerals & Materials Matchmaker (CM3) is an online information resource created to help connect users across the critical minerals and materials supply chain. CM3 includes a survey designed for organizations to self-identify their critical minerals and materials-aligned activities and interests, and an interactive map that displays those on-going activities in a dynamic way. <https://www.energy.gov/fecm/cm3>

**Related Presentation (If Applicable):** N/A

**Related Poster (If Applicable):** N/A