

# Increasing Access and Accelerating Innovation with EDX disCO<sub>2</sub>ver

*Catalyzing Collaboration & Accelerating Innovation*



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NETL / Maximus Federal**

# Disclaimer



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# Acknowledgement

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## 5 Years, Focus on Delivering...

Inform

Analyze  
& Optimize

Integrate  
& Label

Explore &  
Transform

Move & Store

Discover & Collect

...democratizing stakeholders  
and community access to CTS  
digital infrastructure & putting  
data assets to work



- CTS Integrated *Data Resources*
- CTS *Tools*
- Core CTS EDX disCO<sub>2</sub>ver platform
- *Outreach & Capacity Building*

### THE INFRASTRUCTURE INVESTMENT AND JOBS ACT:

*Opportunities to Accelerate Deployment in Fossil Energy and Carbon Management Activities*

*The Infrastructure Investment and Jobs Act, also known as the Bipartisan Infrastructure Law, is a long-overdue investment in the United States' infrastructure, workers, families and competitiveness.*

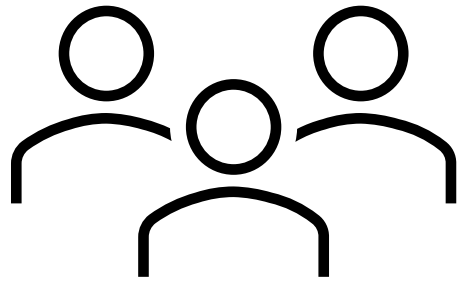
#### CARBON DIOXIDE UTILIZATION AND STORAGE

*Carbon Storage Validation and Testing:  
\$2.5 billion*

For FYs 2022-2026, DOE is allocated \$2.5 billion to develop new or expanded large-scale commercial carbon sequestration projects and supporting transport infrastructure. These projects will prioritize commercial capacity development and the ability to support storage from multiple carbon capture facilities—enhancing FECM's efforts to ensure long-term reliable storage for captured CO<sub>2</sub>. Commercial CO<sub>2</sub> storage is critical both for CO<sub>2</sub> mitigation and CO<sub>2</sub> removal.



# What is EDX DisCO2ver?



## Community Focused

- Data Curation,
- Advanced Search and Exploration,
- News and Project Information

# EDX disCO<sub>2</sub>ver – Unlocking FECM’s Digital Future

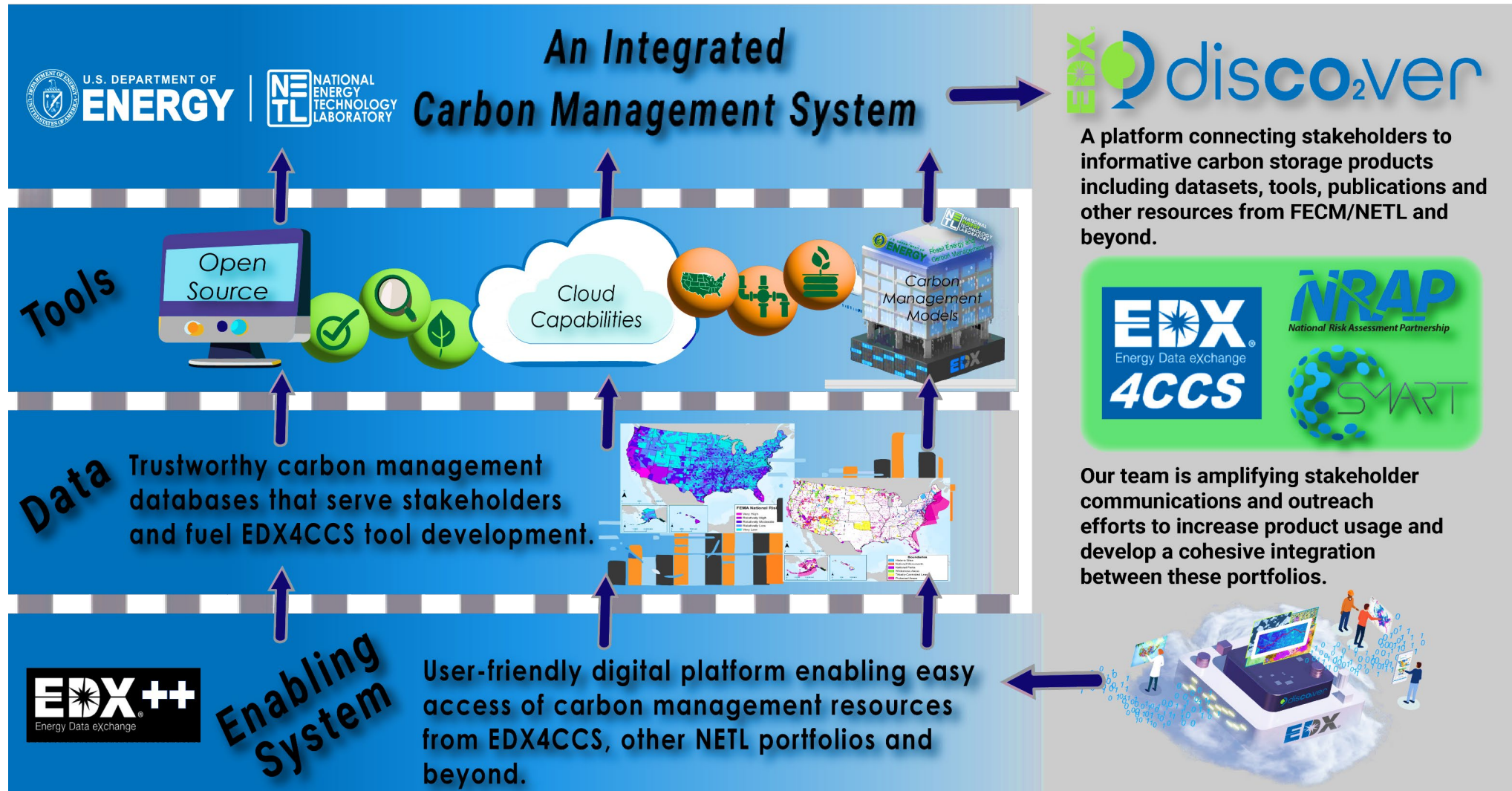
## Connecting Stakeholders to Authoritative Data & Digital Resources

This integrated vision of virtual digital infrastructure is in progress for major FECM and NETL RD programs including:

- EDX disCO<sub>2</sub>ver for CCS
- EDX insigH<sub>2</sub>t for Hydrogen
- EDX ClaiMM for Critical Minerals and Materials
- EDX Spatial for geospatial

Future (FY26+) efforts includes:

- EDX Labs for autonomous lab services



# Community Focused Data and Tools



Integrated EDX Workflow – Inclusion of EDX Submission into groups will connect data discovery for DisCO<sub>2</sub>ver.

Easy publication and inclusion of Public EDX Submissions within a Group.

A screenshot of the EDX (Energy Data eXchange) web interface. The page title is "NETL's Energy Data eXchange". The breadcrumb trail shows "Groups / DisCO2ver Datasets". The page features a search bar, navigation tabs for "Submissions", "Activity Stream", "About", and "Nominated Submissions", and a "Find data products on EDX..." search field. Below the search field, it displays "19 submissions found" and a toggle for "Products: AI/ML: NET". Three submission cards are visible: "NATCARB" (ID: 10.18141/1474110), "Offshore Gulf of Mexico Data Collection" (ID: 10.18141/1644086), and "RokBase - Beta" (ID: 10.18141/1987658). Each card includes a description, a "HTML" link, and a "Show Resources" button. On the left side of the page, there is a "DisCO2ver Datasets" section with a description, a "Followers" count of 2, a "Submissions" count of 19, a "Follow" button, and three bars showing "Data Usage: 568.674 GB", "Downloads: 8056", and "Resources: 115".



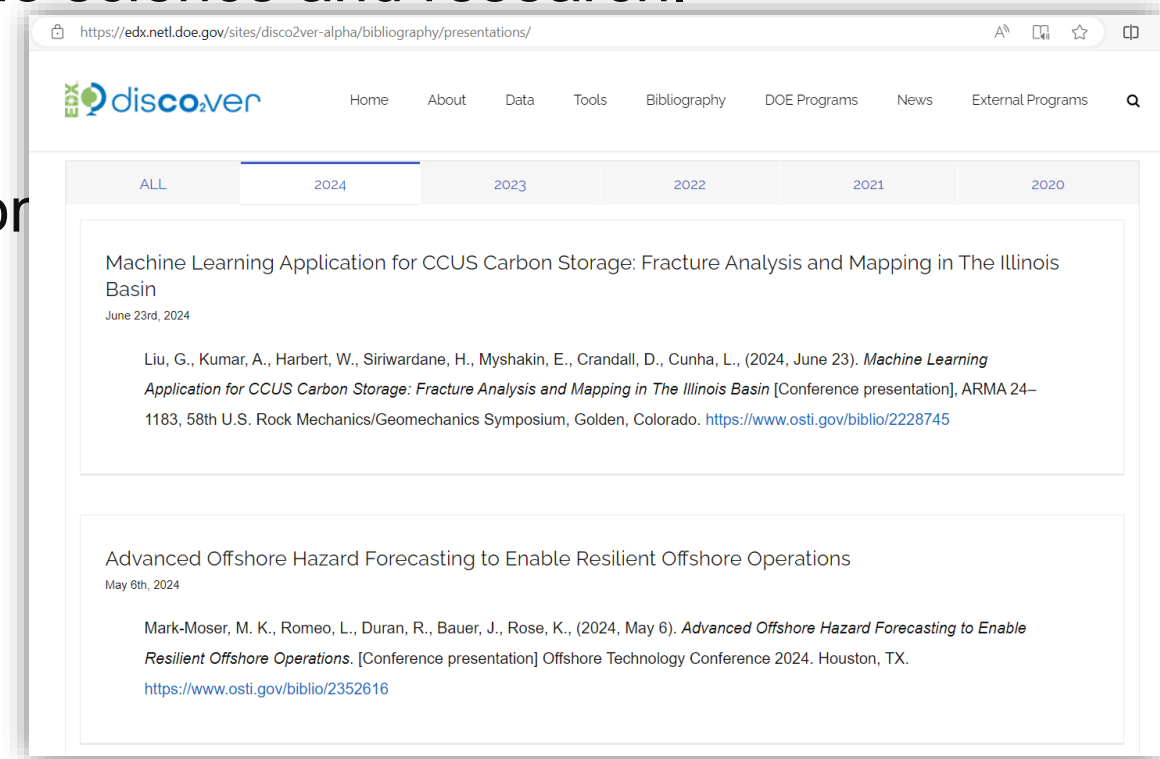
# Data Discovery Tools



- Data Resources (both on EDX and from authoritative external sources) including:
  - Carbon capture and storage facilities, emissions/point source datasets, field study data collections, energy justice/social justice, geosample/core data, infrastructure, offshore-specific datasets, resource and storage assessments, spatial data, and subsurface geologic datasets.
- Tools including:
  - Resource assessment, cost modeling, environmental justice/social justice, risk assessment, monitoring design, subsurface property prediction, and spatial data tools.

# Project Information

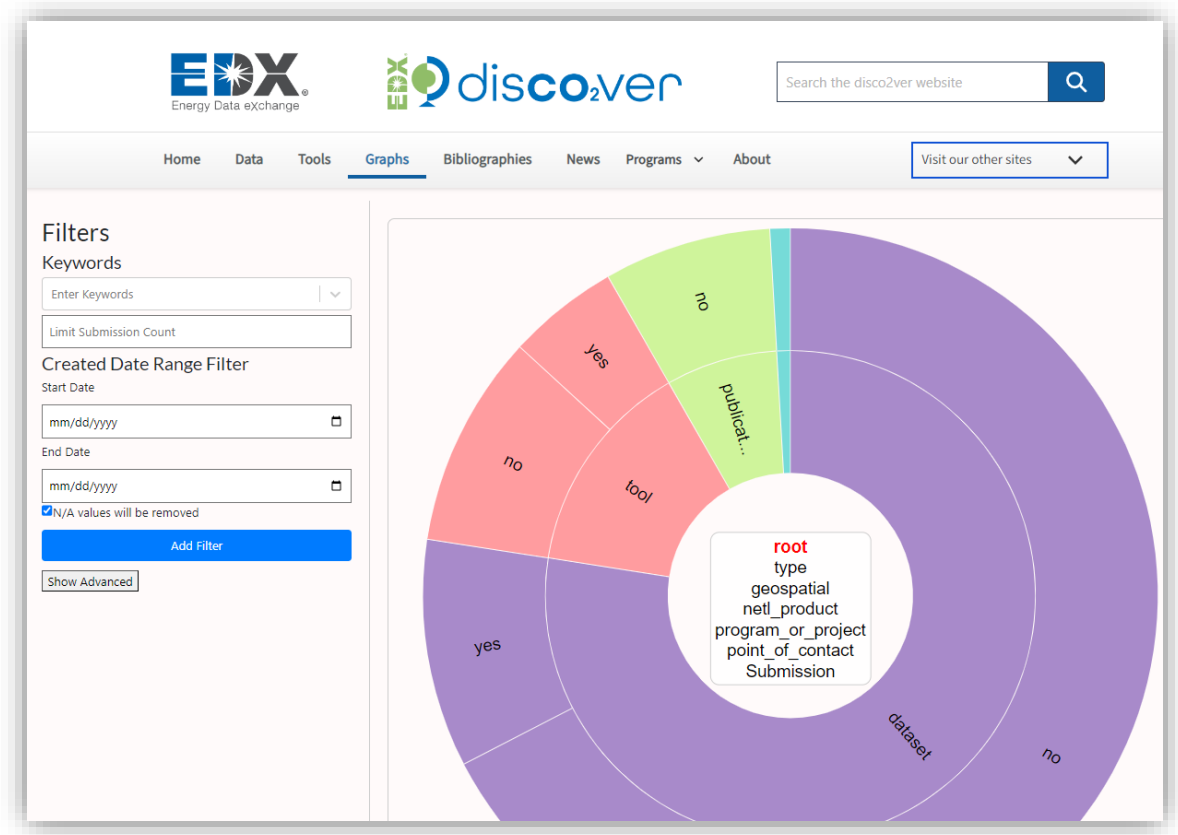
- Key Publications includes:
  - Resources recently published by the community that have applicability for understanding the current state of the science and research.
- DOE Programs includes:
  - Key CTS related DOE programs and Access to webpages for further information
- External Programs includes:
  - Key CCS related research programs outside of DOE and how to access their webpages for further information.



# What's Next?

## DisCO<sub>2</sub>ver Beta to Launch Q3 2024

- Extensive User Interface Redesign
- Easy Site Navigation on EDX platform
- Enhanced, Intuitive Visualization Search
- Clickable Graphical Search
- Advanced Metadata search Functions



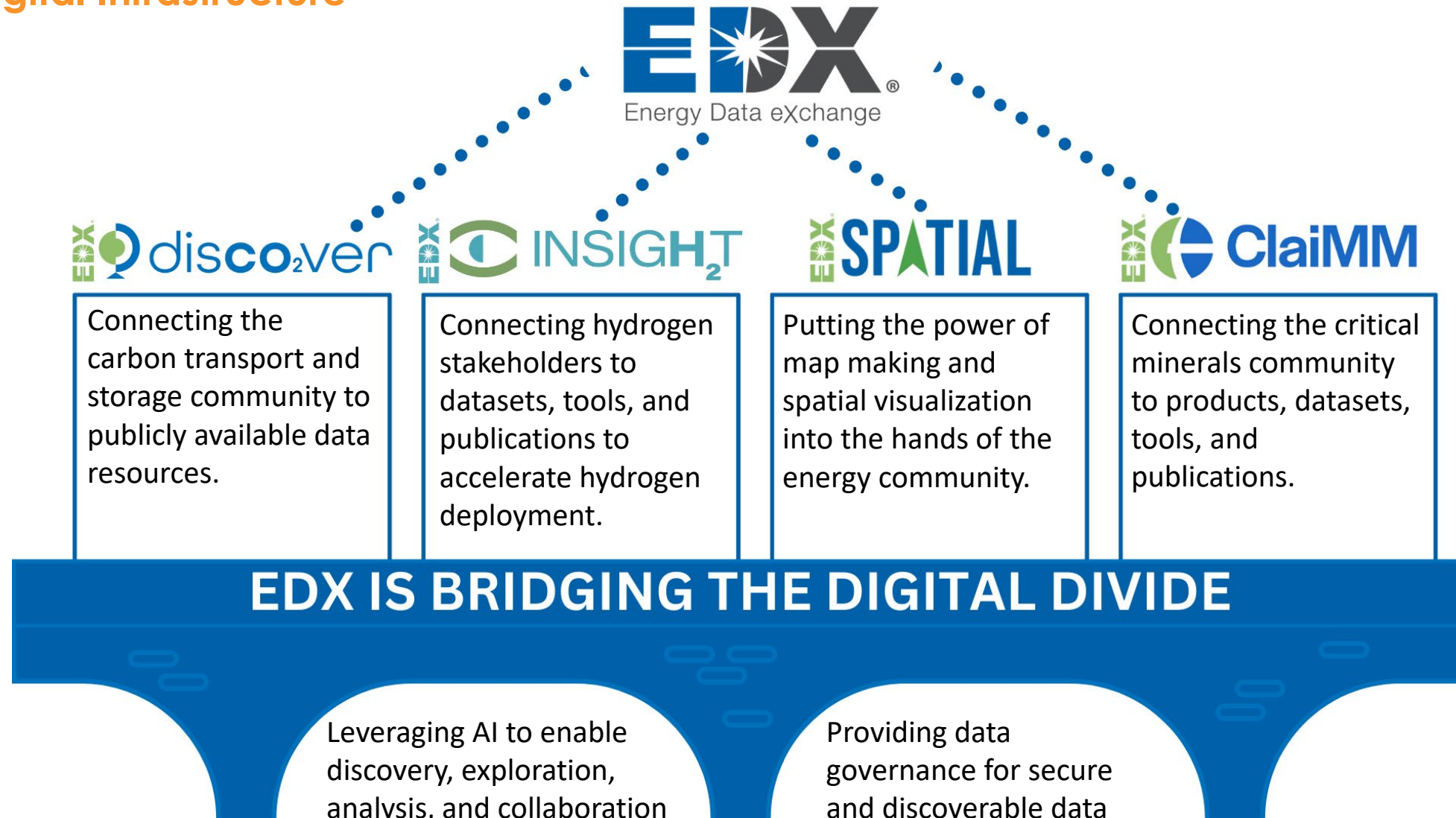
# Whats Next: Advanced Data Discovery Tools



- AI empowered Search (in development)
- AI improved data descriptions (in development)
- Integrated Community and Project information

# Aggregated Smart-Data Management

## NETL's Digital Infrastructure



# DEMO & POSTER SESSION

TUESDAY, AUGUST 6, 2024

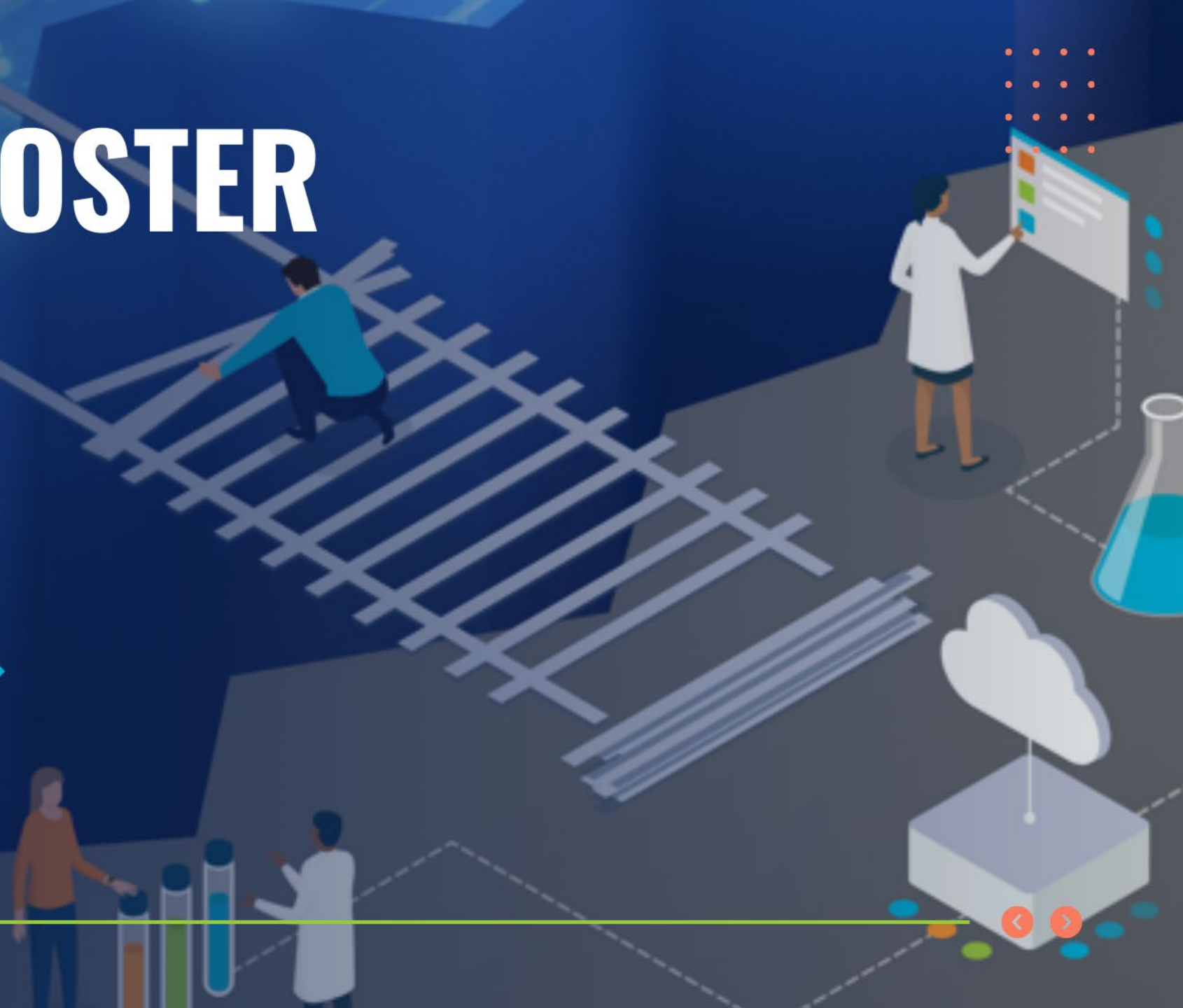
5:45 PM - 7:45PM

BALLROOM GALLERY

EDX DisCO<sub>2</sub>ver

 disco<sub>2</sub>ver

CARBON TRANSPORT & STORAGE DATA AND  
INNOVATION TO BRIDGE THE DIGITAL DIVIDE



# EDX DisCO2ver Demonstration

## DisCO2ver Beta to Launch Q3 2024

### Poster and Demonstration Session

- Tuesday 5:45-7:45PM Ballroom Gallery

Please stop by the EDX table for more information on EDX and EDX DisCO<sub>2</sub>ver!

### Contact Us

- Kevin Kuhn
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