EGI Carbon Portal Test User Manual

Introduction

EGI Carbon Portal is a tool whose goal is to bring all Carbon Capture and Sequestration information into one website. By placing this data in a single, convenient location, it will hopefully lower the barriers to CCS development.

EGI Carbon Portal consists of the main application (**EGI Carbon Portal**) and support applications (such as **EGI Carbon Portal Corpus**) that work together to make this goal possible, as well as address all administrative needs.

This document gives a hands-on example for using EGI Carbon Portal.

Register and login

1) Enter **EGI Carbon Portal** (<u>https://test.ui.carbonportal01.egiu.net</u>) and click the "Login" button at the top right-hand corner.

	Home	Video	Privacy	Contact	Login
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EGI CARBON PORTAL	Home Vid	deo Privacy Contact Login	₽ 		

2) If this is your first-time accessing Carbon Portal, click "Sign up" at the bottom of the login box. Enter your preferred email and password, then click continue.

Welcome		Welcome	
Log in to continue to EGI Carbon Portal.		Sign Up to continue to EGI Carbon	Portal.
Email address*		Email address*	
Password*		Password*	0
orgot password?			
Continue		Continue	

3) You should now be on the "Database Access" page. This will allow you to view all of the available data processed and indexed in the database.



Access Data in the Database: Formations

The following instructions will guide you to view formation data, send it to the My Map application, and download the original data.

1) Under the <i>Geological</i>	category, click Formati	on. A list of formations	in the database appears.
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File Database Tools Help	😩 🕼 🗖 🚺 Page 1	× +		
	← C 🗇 https://dev.	ui.carbonportal01.egiu.net/formation-vlist		A 🟠 🗘 🗘
Geological	File Database Tools	Help	Database Access	user@email.com
	Formation List	Items per p	page: 10 💌 1 - 10 of 123 < >	
Chronostratigraphy	Primary Name 个	Name	Polygon	Reservoir Type
Formation	1 <u>Akota</u>	Akota		Unconventional
	2 <u>Arbuckle</u>	Arbuckle	MULTIPOLYGON	Conventional
	3 Armstrong Canyon	Armstrong Canyon		Unconventional
Laboratory	4 Atoka	Atoka	MULTIPOLYGON	Conventional
Method	5 <u>Bakken</u>	Bakken		Unconventional
Quarternary Fault	6 Barnett Shale	Barnett Shale		Unconventional
Rock Class Unit	7 <u>BSMN</u>	BSMN	POLYGON	Conventional
Sedimentary Basin	8 Buckhorn Springs	Buckhorn Springs		Unconventional
	9 Burro Canyon	Burro Canyon	MULTIPOLYGON	Conventional
	10 Buttermilk Canyon	Buttermilk Canyon		<u>Unconventional</u>

2) The *Formation List* will show whether geospatial data is available under the *Polygon* column with the tag "POLYGON" or "MULTIPOLYGON" (click to see the Polygon). The Reservoir Type column provides the Conventional/Unconventional classification for each formation.

By clicking on either Conventional or Unconventional, then the three lines next to the Name, you will be able to view the definition for these terms.

Arbuckle	MULTIPOLYGON		<u>Conventional</u>	Metadata	Ľ	×
Reservoir Type	Ľ	×	Unconventional	<u>View full details and download original data in EG</u> Definition/Units	<u>I Carbon Portal Corpus</u>	
Primary Name ≔			Conventional	Conventional or Unconventional		•
			<u>Unconventional</u>	Conventional oil and natural gas production: Cri well drilled into a geologic formation in which th	ude oil and natural gas that is produced by a he reservoir and fluid characteristics permit	I
Unconventional			Unconventional	the oil and natural gas to readily flow to the wel	lbore.	•
			<u>Conventional</u>	Original Measurement		_
Buckhorn Springs			<u>Unconventional</u>	Value	Units	

3) To filter a specific formation name, click on *Primary Name* and type in "Yates". Then click the check mark \checkmark at the top right-hand corner of the filter box.



The formation record for "Yates" will appear.

For	mation List	II	ems per page: 10 👻 1 - 1 of 1 < >		0	=	>
	Primary Name 1 filter	Name	Polygon	Reservoir Type			
1	Yates	Yates	MULTIPOLYGON	Conventional			

To unfilter, select Primary Name again, delete the formation name and click the check mark \checkmark .

3) To view the formation data in *My Map* application, click on *Tools* and select *My Map*. A second page will appear with the tab heading *Page 2*. The goal is to move the formation data from the Database Access (Page 1) to My Map (Page 2).



Return to Page 1, click on the Send icon \blacktriangleright located on the top right.

3) Switch to Page 2. Scroll down the formation list to find one of interest, such as "Yates". Click on the *Name* attribute under the properties pane.



The *Name* properties box will open. Click on the menu icon to open the *Metadata* box for more information on the Yates formation.

Name 😑 X	Metadata	Z ×
Yates	Definition/Units Definition A widely used name for this formation. The same formation can have various names, which can cause some confusion.	
	Original Measurement Value Units	~

5) To access the source of the Yates formation data, select the link "View full details and download original data in EGI Carbon Portal Corpus".

Metadata

This will take you <u>View full details and download original data in EGI Carbon Portal Corpus</u> **rpus**, which tracks the extraction of data from thousands of files. Notice that the Program, Funding Source, Project Site, Contribution Information, Citation, location in the Corpus (large body of files), Type of Data, involved states and other data are all available for public viewing.

e Database Access Tools Contribute Help	Database Access	user@email.com	RBON PORTALCORPU	
Vorkunit	Ŧ		Cancel	
Primery Name Guid 22b758d6-c7fd-41e7-ba			Downloads	Ľ Q … ※ X
Title Workunit-2			CarbonPortal_ Open file	Workunit-2_2024-10-04-18-38-12.zip
Program Funding Source Project SWP DOE Atlas I	SWP states	Contributor Contribute Date b.j.mcpherson@utah.ed 08/21/2023		
Contributor Suggested Mapping			<i>Å</i>	
George Hall, The United States 2012 Carbon Utilization and Stora	nge Atlas, 2014-07-01, https://edx.netl.doe.gov	/dataset/the-united-states-2012-carbon-utilizati	on-and-storage-atlas %	
Descriptionatlas 4 formations				
- Directory				
/SWP/atlas/AtlasIV/atlasiv_formations.gdb				

From here the formation file geodatabase can be downloaded by clicking on the down arrow. The data will be zipped with the name of the program, workunit # and date. The stakeholder now has possession of the original data.

CUSP Focused Projects

To view the list of CUSP Focused projects and PI information, click on *Contributors* in the menu on the top left and select *CUSP* in the dropdown.



Data for these projects are currently being acquired and will be added to the database.

File Database Tools Contributors Help	CUSP Focused Projects			user@email.com	CARBON PORTAL
	Data collection in progress.				
Name		Project Type	Primary Investigator (PI)	PI Contact	PI Institution
Planning Amongst Uncertainty: Designing CCS Infrastructure Resilient to Capture, Transport, and Storage		Paper Study	Sean Yaw	sean.ya@montana.edu	Montana State University
Laboratory Feasibility Study for Eventual Field Deployment of a Downhole Source Tomographic Design for Co	2 Plume Detection	Bench-scale	Kevin McCormack	kmmcormack@egi.utah.edu	University of Utah
Site Characterization for CO2 Storage to Support Escalante Hydrogen Power Plant Project		Bench-scale	Sai Wang	sai.wang@nmt.edu	New Mexico Tech
Regional-Scale Assessment of CO2 Geological Storage in Sedimentary Basin Geothermal Reservoirs of New	ada	Paper Study	Steven Bacon	steven.bacon@dri.edu	Desert Research Institute
Characterization of CO2 Storage Potential in Harquahala Basin, Western Central Arizona		Characterization	Brian Gootee	bgootee@email.arizona.edu	University of Arizona
Derisking CO2 Mineralization Storage in Basalt Reservoirs		Characterization	Todd Schaef	todd.schaef@pnnl.gov	PNNL
CCS at the Iron Mountain Iron Mine and Direct Reduced Iron Processing Plant, Southern Utah		Field-centric	Brian McPherson	b.j.mcpherson@utah.edu	University of Utah
CCS Hub 2.0 Concept for ONEOK. Infrastructure Development for Handling of New Gaseous Products for Fre Plants in Kansas and Oklahoma	actionation Gas Liquids and Gas Processing	Field-centric	Brendan Bream	bbream@ku.edu	Kansas Geological Society
Laying the Cornerstones of a Regional Storage Hub in California		Field-centric	Tony Kovscek	kovscek@stanford.edu	Stanford University

4) Conclusion

The program **EGI Carbon Portal** contains a large amount of organized scientific data from various categories and sources. This data is easy to query and to visualize so as to assist the stakeholder in finding solutions for Carbon Capture and Sequestration.

The program **EGI Carbon Portal Corpus** shares the same login as **EGI Carbon Portal** and describes the source of all data in **EGI Carbon Portal**. This allows the stakeholder to have easy access to the original files and their provenance.