

CARBON STORAGE NEWSLETTER

C S N

VOL. 21, NO. 8

This newsletter is compiled by the National Energy Technology Laboratory to provide information on recent activities and publications related to carbon storage. It covers domestic, international, public sector, and private sector news in the following areas:

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CARBON STORAGE PROGRAM DOCUMENTS and REFERENCE MATERIALS

- ▷ Carbon Storage Educational Resources
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DOE/FECM/NETL HIGHLIGHTS

DOE-Sponsored, SSEB-Managed CCUS Partnership Completed.

The Southeast Regional Carbon Sequestration Partnership (SECARB), one of the U.S. Department of Energy's (DOE) *Regional Carbon Sequestration Partnerships (RCSPs)*, has concluded after nearly 20 years of collaboration and research. Established in 2003 and managed by the Southern States Energy Board (SSEB), SECARB set out to identify major sources of carbon dioxide (CO₂) emissions, characterize the geology of a 13-state region, determine the most promising options for commercial deployment of CO₂ storage technologies in their region, and validate the technology options. Phase III of SECARB consisted of two large-scale injection tests (the "Early Test" at Cranfield oilfield near Natchez, Mississippi, and the "Anthropogenic Test" at the Citronelle injection site in Alabama) that helped lay the foundation for future carbon capture, utilization, and storage (CCUS) projects. The conclusion of SECARB follows that of another National Energy Technology Laboratory (NETL)-funded RCSP, *the Midwest Regional Carbon Sequestration Partnership (MRCSP)*. From *NETL News Release*. July 2021.



ANNOUNCEMENTS

The New Vision of the Office of Fossil Energy.



U.S. DEPARTMENT OF
ENERGY

Fossil Energy and Carbon Management

DOE's Office of Fossil Energy officially changed its name to the Office of Fossil Energy and Carbon Management (FECM), aligning itself with the climate goals set forth by the Biden-Harris Administration. FECM is a key part of DOE's leadership role in the new Administration's all-of-government approach to addressing climate issues. [Click here](#) to learn more about work conducted by FECM.

2021 DOE/NETL Carbon Management and Oil and Gas Research Project Review Meeting Agenda Available.

The DOE/NETL *2021 Carbon Management and Oil and Gas Research Project Review Meeting* was held in August 2021 through a series of virtual meetings. The project review meeting allowed researchers to present results from more than 250 projects funded through a variety of program areas, including carbon storage and utilization. Conference proceedings [are available](#).

FECM Acting Assistant Secretary Speaks at CCUS Forum.

DOE's Acting Assistant Secretary for FECM, Dr. Jennifer Wilcox, [spoke](#) at the *First Asia CCUS Network Forum*. The event focused on global goals and expectations for CCUS and how advances in technology can help address potential climate concerns.



Australia Explores Offshore CO₂ Storage.

The Australian government sought nominations from companies for offshore acreage to explore locations for CO₂ storage as part of a government initiative to promote carbon capture and storage (CCS). Companies nominated areas for potential storage locations in Australian federal waters, which start three nautical miles offshore. The nominations were collected in July 2021 and will be open for bidding in December 2021.

CCS Service Launched.



CARBON CAPTURE AS A SERVICE
Carbon capture made easy™

Aker Carbon Capture launched a service designed to accelerate deployment of CCS across industries. As part of *Carbon Capture as a Service; Carbon capture made easy™*, Aker Carbon Capture will deliver and operate the carbon capture facilities; transport and storage will be included through strategic partnerships.

ANNOUNCEMENTS *(cont.)*

Companies to Develop CCS Solutions on Ships.

The Norwegian company TECO 2030 and American manufacturer Chart Industries signed a Memorandum of Understanding (MOU) to jointly develop technology solutions to capture and store CO₂ emitted by ships. The MOU involves the development of onboard carbon capture solutions for ships using *Cryogenic Carbon Capture™* technology.

RGGI States Initiate Auction Process.

The states participating in the Regional Greenhouse Gas Initiative (RGGI) released the *Auction Notice for CO₂ Allowance Auction 53*, to be held September 8, 2021. According to the notice, the states will offer 22,911,423 CO₂ allowances for sale using a minimum reserve price of \$2.38 in 2021. Auction 53 will also make available a cost containment reserve (CCR) of 11,976,778 CO₂ allowances, which will be accessed if the interim clearing price exceeds the CCR trigger price of \$13.00, as well as an emissions containment reserve (ECR) of 11,307,333 allowances, which are available to be withheld if the interim clearing price is less than the ECR trigger price of \$6.00.

JBIC to Support Exports from CCS Power Plants.



The Japan Bank for International Cooperation (JBIC) will provide

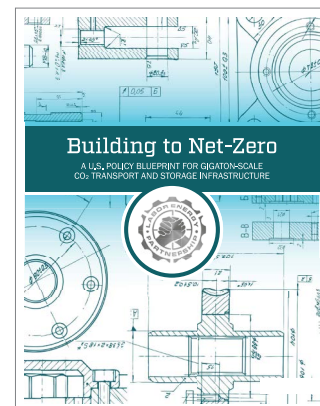
support for exports from coal power plants if they are equipped with CCS, according to officials. Under a new three-year plan, the bank will help transition finance to support CCUS.

Report on Large-Scale Emissions Reduction.

According to a new study by the Coalition for Negative Emissions, technologies such as bioenergy with carbon capture and storage (BECCS), direct air capture and storage (DACS), and natural climate solutions are needed to help meet global climate targets. A summary of *The Case for Negative Emissions: A Call for Immediate Action* findings is also *available*.

Report Presents U.S. Policy Blueprint for CO₂ Transport and Storage.

The Energy Futures Initiative released a report that presents a policy roadmap to build out CO₂ infrastructure while supporting the development of jobs, infrastructure, and pathways to net-zero emissions by mid-century. *Building to Net-Zero: A U.S. Policy Blueprint for Gigaton-Scale CO₂ Transport and Storage Infrastructure* is also available as a *webinar presentation* and a *webinar recording*.



PROJECT and BUSINESS DEVELOPMENTS

Partnership to Develop CO₂ Storage, Transport System.

Two Canadian companies (Pembina Pipeline Corporation and TC Energy Corporation) announced a partnership to jointly develop a carbon transport and storage system. The Alberta Carbon Grid (ACG) will have the potential to transport more than 20 million metric tons of CO₂ annually, according to the companies. Designed to be an open-access system, the ACG will support the CCUS industry in Alberta, Canada. From *TC Energy News Release*. June 2021.

Shell to be Technical Developer of CCS Project.

Shell will be the Technical Developer for the Acorn CCS Project in Scotland, the oil and gas company announced. In that role, Shell will be responsible for the technical planning and execution of CO₂ capture, transport, and storage. Based at the St. Fergus gas terminal in Northeast Scotland, the Acorn CCS Project plans to repurpose existing gas pipelines to take CO₂ directly to a storage site located approximately 60 miles offshore from St. Fergus. In addition, the Acorn CCS *Project signed an MOU with a group of companies* to advance a CCS system linking Scotland's industrial heartland to the Acorn CO₂ transport and storage system in Northeast Scotland by 2027. From *Offshore Engineer*. June 2021.



Partnership to Explore CCS in France.

A group of companies signed an MOU to explore the development of CCS infrastructure in the industrial basin in the Normandy region of France. The objective of the MOU—among Air Liquide, Borealis, Esso S.A.F., TotalEnergies, and Yara International ASA—is to reduce CO₂ emissions by up to 3 million tons per year by 2030. The companies will assess the technical and economic feasibility of implementing an industrial CCS chain from their industrial facilities for storage in the North Sea. From *Air Liquide News Release*. July 2021.

Carbon Storage Project Announced.

Green Carbon Technologies, Texas Forest Services, and Texas Parks and Wildlife will collaborate on new carbon storage and forestation efforts, the companies announced. The new company, Green Carbon Technologies LLC, projects their efforts will result in storage of an average of 7 tons of CO₂ per year, per acre, over their lifespan, with initial project sites estimated to be up to 250,000 acres in size. From *Digital Journal*. June 2021.

Companies Offer Full Value Chain CCS.

Companies in Norway and Iceland will combine their technologies to offer the full CCS value chain. Aker Carbon Capture and Carbfix signed an MOU to collaborate on CCS solutions to accelerate carbon removal. The agreement also covers opportunities to evaluate strategic options on future storage projects and collaboration. In addition, *Aker Carbon Capture signed another MOU*—with Carbfix and Elkem Iceland—to reduce CO₂ emissions at Elkem Iceland's ferrosilicon plant through CCS in basalt structures. From *Aker Carbon Capture*. July 2021.



CCUS Partnership Announced.

Blue Planet and Sulzer will partner to further develop and optimize Blue Planet's carbon mineralization process for CCUS. The U.S.-based Blue Planet is developing a sustainable CCUS system that captures CO₂ from a variety of emissions sources, mineralizing the CO₂ to form synthetic limestone aggregates by storing the CO₂ in a solid form to be incorporated in concrete. From *Carbon Capture Journal*. June 2021.

LEGISLATION and POLICY

Legislation Aims to Reduce CO₂ Emissions.



The U.S. House of Representatives introduced legislation that would create a national renewable energy standard with a goal of reducing CO₂ emissions. The *American Renewable Energy Act of 2021* would require U.S.

energy producers to meet goals for renewable energy generation, resulting in a net decrease in emissions of criteria air pollutants in impacted communities. From *U.S. Congressman Peter Welch Press Release*. June 2021.

Legislation Helping to Standardize Carbon Market Passes U.S. Senate.

Legislation that may help agricultural activities qualify for carbon market credits passed the U.S. Senate. The *Growing Climate Solutions Act* aims to help private landowners find the right carbon market for their operations by addressing the uncertainties and variabilities surrounding practices, such as no-till farming or planting cover crops, and standardizing best practices. From *Williston Herald*. June 2021.

EMISSIONS TRADING

RGGI Report Details Investment of 2019 Auction Proceeds.

The RGGI-participating states released a report tracking the investment of proceeds generated from their regional CO₂ allowance auctions. *The report* tracks investments of RGGI proceeds in 2019, providing state-specific success stories and program highlights. In 2019, according to the report, \$217 million in RGGI proceeds were invested in programs such as energy efficiency, clean and renewable energy, greenhouse gas (GHG) abatement, and direct bill assistance. From *RGGI Press Release*. June 2021.



SCIENCE

Study to Investigate Reduced BECCS Costs.

A study by Phoenix BioPower and Drax will investigate how turbine technology could reduce the costs of BECCS plants. The feasibility study will look at how energy-efficient gas turbines could make new-build BECCS projects more cost-effective by generating 50% more power with the same amount of fuel. Results from Phoenix's test facilities in Sweden and Germany will inform the study. From *Carbon Capture Journal*. June 2021.

Scientists Freeze CO₂ for Storage.

Scientists are testing a method to reduce emissions by freezing CO₂ combusted from energy production and storing the solid form underground or using it for beneficial use. A team of scientists at King Abdullah University of Science and Technology (Saudi Arabia) is testing a technology developed by Sustainable Energy Solutions (based in Utah) that can capture approximately 1 ton of CO₂ per day; within two years, the scientists hope to capture up to 25 tons per day. If the project is successful, it could lead to the creation of a unit capable of storing approximately 1,000 tons of CO₂ per day. From *Bloomberg*. June 2021.

Researchers Study Barriers to CCUS.

Researchers from the University of Wyoming and the University of Texas–Austin will study the economic and political barriers related to CCUS technology. The study will explore questions about CCUS costs, barriers to investment and implementation, and tradeoffs relative to other climate mitigation approaches and policies. The study includes a look at CO₂ sources and users, geologic storage sites, and pipelines and other CCUS infrastructure. From *Carbon Capture Journal*. June 2021.

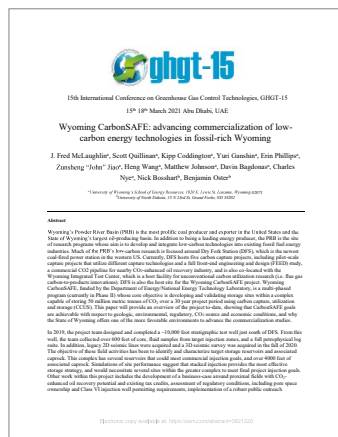
Study Shows Potential of Storing CO₂ in Old Oil Fields.

In a case study of the Delaware Basin (USA), Stanford University geophysicists found that the influence of past oil drilling changes stresses on faults that make the injection of fluids less likely to induce earthquakes. According to the researchers, targeting these sites of past oil production, with their lower earthquake risk, could be a good approach for carbon storage. From *Science Daily*. June 2021.

PUBLICATIONS

Wyoming CarbonSAFE: Advancing Commercialization of Low-Carbon Energy Technologies in Fossil-Rich Wyoming.

The following is from the abstract of this report: “Wyoming’s Powder River Basin (PRB) is the most prolific coal producer and exporter in the United States and the State of Wyoming’s largest oil-producing basin. In addition to being a leading energy producer, the PRB is the site of research programs whose aim is to develop and integrate low-carbon technologies into existing fossil fuel energy industries. Much of the PRB’s low-carbon research is focused around Dry Fork Station (DFS), which is the newest coal-fired power station



in the western US. Currently, DFS hosts five carbon capture projects, including pilot-scale capture projects that utilize different capture technologies and a full front-end engineering and design (FEED) study, a commercial CO₂ pipeline for nearby CO₂-enhanced oil recovery industry, and is also co-located with the Wyoming Integrated Test Center, which is a host facility for unconventional carbon utilization research (i.e. flue gas carbon-to-products innovations). DFS is also the host site for the Wyoming CarbonSAFE project. Wyoming CarbonSAFE, funded by the Department of Energy/National Energy Technology Laboratory, is a multi-phased program (currently in Phase II) whose core objective is developing and validating storage sites within a complex capable of storing 50 million metric tonnes of CO₂ over a 30 year project period using carbon capture, utilization and storage (CCUS). This paper will provide an overview of the project to-date, showing that CarbonSAFE goals are achievable with respect to geologic, environmental, regulatory, CO₂ source and economic conditions, and why the State of Wyoming offers one of the more favorable environments to advance the commercialization studies.”

PUBLICATIONS (cont.)

Carbon capture, utilization, and storage hub development on the Gulf Coast.

The following is from the abstract of this article: "The Gulf Coast of the United States hosts diverse power generation, refining, and petrochemical processing facilities, resulting in the nation's largest volumetric concentration of industrial CO₂ emissions, rivaled only by the Ohio River Valley. These emissions sources are concentrated in specific industrial clusters that allow combining emissions streams to achieve economies of scale. The region is currently undergoing globally significant industrial expansion and investment as a result of abundant and inexpensive regional unconventional natural gas availability, and is a growing exporter of liquefied natural gas (LNG). Opportunities to integrate CO₂ emission management within the diverse energy chains in the region are volumetrically significant and include both concentrated and dilute sources. Significant examples of capture, transport, and storage exist. Offshore storage is particularly attractive, as it provides simplified land leasing models (single governmental land owner), proven reservoir quality, and presents fewer risks to both protected groundwater and populated areas. Projects can now take advantage of recently expanded opportunities under section 45Q of the Internal Revenue Service tax code. The region continues to evolve as an active carbon-handling hub, and is uniquely suited to justify additional investment in carbon capture, utilization, and storage (CCUS) technologies via a large-scale integrated project development. Continued development of integrated projects will allow the region to continue to grow economically within its strong fossil-fuel handling competence focus while advancing low-carbon energy technologies that maintain global competitiveness." **T.A. Meckel, A.P. Bump, S.D. Hovorka, and R.H. Trevino**, *Greenhouse Gases: Science and Technology*. (Subscription may be required.)

Energy storage system based on transcritical CO₂ cycles and geological storage.

The following is from the abstract of this article: "The use of CO₂ as a working fluid in power generation and storage applications has experienced a significant boost in recent years, based on its high-performance characteristics in power generation or heat pumps. This work proposes a novel combined use of transcritical CO₂ cycles as an energy storage system and carbon dioxide storage inside geological formations. In this work, the layouts for concept integration were developed. They were adapted to operate under different scenarios and operation modes based on storing energy from renewable sources or storing energy to capture CO₂. The preliminary results show these cycles as promising energy storage technologies, with a high potential to compete in terms of electric to electric storage efficiencies (42–56%) and costs (70–120 USD/MWh). Besides, results show that more than 1 Mton/year of CO₂ could be additionally stored with this renewable energy storage concept depending on the conditions. These results show the opportunity for the concept as an energy storage system, with special interest when combined with carbon-intensive industries as cement or chemicals." **A. Carro, R. Chacartegui, C. Ortiz, J. Carneiro, and J.A. Becerra**, *Applied Energy Engineering*. (Subscription may be required.)

An empirical analysis of the non-linear effects of natural gas, nuclear energy, renewable energy and ICT-Trade in leading CO₂ emitter countries: Policy towards CO₂ mitigation and economic sustainability.

The following is from the abstract of this article: "Achieving reliable energy supply and environment sustainability whereby mitigating CO₂ emissions and promoting sustainable development has become a global effort. Thus, the current study intends to verify the non-linear influence effects of natural gas, nuclear energy, renewable energy and information and communication technology trade on economic growth and carbon dioxide emission in ten leading CO₂ emitter countries from [2000–2016]. The panel regression, such as pooled regression, model fixed effect, random effects, robust least squares and panel causation procedures are applied for panel data appraisal. The regression analysis results mention that nuclear energy, renewable energy, and Information and communication technology (ICT-trade) stimulate economic growth, whereas environmental results illustrate that renewable energy and ICT-trade contribute to eliminating CO₂ emissions. The causality findings indicate that renewable energy consumption and ICT trade cause economic growth as well as CO₂ emissions. Therefore, policymakers should invigorate to exploit renewable energy and achieve the benefits from the significant influence of economic growth and a clean environment through the potential of green ICT-trade." **Anam Azam, Muhammad Rafiq, Muhammad Shafiq, and Jiahai Yuan**, *Journal of Environmental Management*. (Subscription may be required.)

Evaluation of the carbon tax effects on the structure of Finnish industries: A computable general equilibrium analysis.

The following is from the abstract of this article: "Limitations and environmental effects of fossil fuels have encouraged decision-makers to create and implement different energy policies, in which carbon tax is one of the most important financial policies. Governments are considering the implementation of the carbon tax to achieve lower greenhouse gas emission, higher national incomes and tax systems, deployments of renewable energy sources, and increasing the efficiency of the energy systems. Therefore, understanding the effects and consequences of the carbon tax policy on different economic, social welfare, and industries is imperative due to its impact on the costs of productions, inflation, and competitiveness of the industries. This research is to evaluate the impact of the carbon tax on the structure of the Finland industry as one of the high energy-intensive consumption countries. [The authors] use a computable general equilibrium model to create a connection between the effects of the carbon tax and economic indicators, production, and consumption sector. In this research, the effect of the carbon tax on the macro-economic and industry sector is studied. The results of this research indicate that the application of carbon tax policies leads to adverse effects on gross domestic production (GDP). By studying the fluctuations of the trade balance, export and import level, production price, and energy consumption level in the industry sector, considerable results have been achieved. For instance, considering the specific coverage of industries in Finland, they have higher competitiveness in general." **Mojtaba Khastar, Alireza Aslani, Mehdi Nejati, Kaveh Bekhrad, and Marja Naaranoja**, *Sustainable Energy Technologies and Assessments*. (Subscription may be required.)

PUBLICATIONS *(cont.)*

Authority–enterprise equilibrium based mixed subsidy mechanism for carbon reduction and energy utilization in the coalbed methane industry.

The following is from the Abstract of this article: “As coalbed methane, the natural gas adsorbed in coal seams, is a greenhouse gas that is 21 times stronger than CO₂, coalbed methane extraction significantly influences carbon reduction and energy conservation efforts. While the injection of CO₂ into coal seams is known to effectively enhance coalbed methane recovery, this process has been limited because of high investment and production costs. Therefore, to promote the application of CO₂ injection techniques in coalbed methane industry, this paper proposes an authority–enterprise equilibrium based mixed subsidy mechanism which combines direct subsidies with indirect tax-incentives. Specifically, a multi-objective bi-level programming model is established under uncertainty to assign a practical constraint and achieve a trade-off between the local authority and the coalbed methane plants. A practical case validates the feasibility and efficiency of the proposed method, proving that an authority–enterprise equilibrium based mixed subsidy mechanism is able to achieve carbon emissions reductions and conserve energy. Further analysis indicated that the marginal energy efficiency gains were greater than the authority costs under a strict energy utilization policy and that the environmental protection target had larger impacts on the coalbed methane plant performances.” **Lurong Fan and Jiuping Xu**, *Energy Policy*. (Subscription may be required.)

Criteria for selecting sites for integrated CO₂ storage and geothermal energy recovery.

The following is from the abstract of this article: “One of the currently considered methods of reducing carbon dioxide emissions is the simultaneous storage of carbon dioxide (CCS) and production of geothermal energy accumulated in porous rocks (hydrothermal systems). The exploitation of geothermal heat and the storage of carbon dioxide are carried out in rock formations containing groundwater and lying at sufficient large depth. The selection of sites for combined heat recovery and CCS is a complex issue, conditioned by many different criteria [...] The paper proposes the criteria for selecting geological structures in aquifer for the simultaneous recovery of geothermal energy and the storage of carbon dioxide (main goal). A set of 12 geological criteria was developed for this purpose. Based on the Analytical Hierarchy Process method, the importance of individual criteria was assessed. This assessment was made by pairwise comparison based on expert opinion of 10 decision makers. On this basis, the influence of individual factors on the main goal is estimated and an analysis of the order of occurrence of individual criteria in the aggregated ranking is made.” **Barbara Uliasz-Misiak, Joanna Lewandowska-Śmierchalska, and Rafał Matuła**, *Journal of Cleaner Production*. (Subscription may be required.)

Passive acoustic monitoring of a natural CO₂ seep site – Implications for carbon capture and storage.

The following is from the abstract of this article: “Estimating the range at which an acoustic receiver can detect greenhouse gas (e.g., CO₂) leakage from the sub-seabed is essential for determining whether passive acoustic techniques can be an effective environmental monitoring tool above marine carbon storage sites. Here [the authors] report results from a shallow water experiment completed offshore the island of Panarea, Sicily, at a natural CO₂ vent site, where the ability of passive acoustics to detect and quantify gas flux was determined at different distances. Cross-correlation methods determined the time of arrival for different travel paths which were confirmed by acoustic modelling. [The authors] develop an approach to quantify vent bubble size and gas flux. Inversion of the acoustic data was completed using the modelled impulse response to provide equivalent propagation ranges rather than physical ranges. The results show that [the authors'] approach is capable of detecting a CO₂ bubble plume with a gas flux rate of 2.3 L/min at ranges of up to 8 m, and determining gas flux and bubble size accurately at ranges of up to 4 m in shallow water, where the bubble sound pressure is 10 dB above that of the ambient noise.” **Jianghui Li, Ben Roche, Jonathan M. Bull, Paul R. White, John W. Davis, Michele Deponete, Emiliano Gordini, and Diego Cotterle**, *International Journal of Greenhouse Gas Control*. (Subscription may be required.)

Development and surrogate-based calibration of a CO₂ reservoir model.

The following is from the abstract of this article: “Simulation-optimization framework is a widely used approach for numerical model calibrations, though its primary difficulty is its high-demand of computational efforts. In this study, Bagging MARS (BMARS) adapted from Multivariate Adaptive Regression Splines (MARS) algorithm, is used to construct the surrogate of a three-dimensional CO₂ reservoir model, which is developed to simulate CO₂ injection and migration in a fault-compartmentalized underground reservoir. The BMARS surrogate model is then used in model calibration to estimate specified reservoir model input parameters efficiently. The results demonstrate that the BMARS model can improve fitting stability and predictive accuracy against the ordinary MARS model. Parameter sensitivity analysis, which is efficiently conducted using the BMARS model, suggest that permeability of Fault#10 and caprock dominate the pressure buildup in this fault-compartmentalized reservoir. Hence priority should be given to investment in estimating these two reservoir properties. Overpressure propagation and CO₂ migration in the reservoir responding to three years of CO₂ injection are also analyzed using the calibrated model. The calibrated water-CO₂ flow model could be a useful tool to evaluate the future operation and risk assessment of the reservoir. The results comparison and sensitivity analysis demonstrated the proposed BMARS-based simulation–optimization framework is an efficient and accurate model calibration approach.” **Mingjie Chen, Osman A. Abdalla, Azizallah Izady, Mohammad Reza Nikoo, and Ali Al-Maktoumi**, *Journal of Hydrology*. (Subscription may be required.)

ABOUT DOE/NETL'S CARBON STORAGE PROGRAM

The **Carbon Storage Program** at the U.S. Department of Energy's (DOE) National Energy Technology Laboratory (NETL) is focused on developing and advancing technologies to enable safe, cost-effective, permanent geologic storage of CO₂, both onshore and offshore, in different depositional environments. The technologies being developed will benefit both industrial and power sector facilities that will need to mitigate future CO₂ emissions. The program also serves to increase the understanding of the effectiveness of advanced technologies in different geologic reservoirs appropriate for CO₂ storage—including saline formations, oil reservoirs, natural gas reservoirs, unmineable coal, basalt formations, and organic-rich shale basins—and to improve the understanding of how CO₂ behaves in the subsurface. These objectives are key to increasing confidence in safe, effective, and permanent geologic CO₂ storage.

The [DOE/NETL Carbon Storage Program Overview](#) webpage provides detailed information of the program's structure, as well as links to the webpages that summarize the program's key elements.

DOE/NETL Carbon Storage Program Resources

Newsletters, program fact sheets, best practices manuals, roadmaps, educational resources, presentations, and more information related to the DOE/NETL Carbon Storage Program is available on [DOE's Energy Data eXchange \(EDX\) website](#).



ABOUT NETL'S CARBON STORAGE NEWSLETTER

Compiled by the National Energy Technology Laboratory, this newsletter is a monthly summary of public and private sector carbon storage news from around the world. The article titles are links to the full text for those who would like to read more (note that all links were active at the time of publication).

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