**DOE/NETL HIGHLIGHTS**

*NETL’s Decarbonization Work Highlighted at Meeting.*

The National Energy Technology Laboratory (NETL) Director, Brian Anderson, shared information on NETL’s decarbonization work while speaking at a Massachusetts Institute of Technology (MIT) Energy Initiative meeting. NETL’s advancements in cost-effective implementation of carbon capture, utilization, and storage (CCUS) technologies were highlighted, as was NETL’s Carbon Storage Program. Video of the Director’s presentation is available online. From NETL News Release. March 2020.

**ANNOUNCEMENTS**

*NETL Celebrates 2019 Achievements.*

NETL celebrated more than 30 notable 2019 Science and Technology (S&T) accomplishments at the S&T Accomplishments Session held at its Pittsburgh, Pennsylvania (USA) site. The interactive poster session featured a broad range of NETL researchers sharing work that showcased NETL’s facilities and core science and engineering capabilities.

*FY 2021 Congressional Budget Request Released.*

The President’s FY 2021 Congressional Budget Request seeking funding for the U.S. Department of Energy’s (DOE) Office of Fossil Energy (FE) was released. The Budget Request includes funding for the Fossil Energy Research and Development (R&D) Program, which includes R&D programs in CCUS.

*NETL Releases New Infographic.*

NETL released an infographic highlighting the role of advanced manufacturing in reducing costs associated with carbon capture. The “Advanced Manufacturing to Drive Down Capture Costs” infographic is part of a series of infographics published by NETL in support of the Carbon Capture Program.

*RGGI Releases Interim Compliance Report.*

Regional Greenhouse Gas Initiative (RGGI) carbon dioxide (CO₂) budget sources participating in the 2019 interim control period were required to provide allowances equal to 50% of their 2019 emissions. The 2019 Interim Compliance Summary Report contains data regarding CO₂ allowances provided by CO₂ budget sources to meet their 2019 interim control period obligation.
ANNOUNCEMENTS (cont.)

MOU Includes CCS.
Fortum Corporation, a Finnish clean-energy company, and Kvaerner, a Norwegian engineering, procurement, and construction company, signed a Memorandum of Understanding (MOU) to identify projects and opportunities for technical or commercial operation, which may include plants with carbon capture and storage (CCS) technology.

World Carbon Fund Launched.
A London-based environmental asset management firm launched the World Carbon Fund, which ties a percentage of fund investment to carbon storage. Carbon Cap Management’s fund also invests in and trades liquid carbon allowance certificates, carbon futures, and carbon options.

PROJECT and BUSINESS DEVELOPMENTS

NETL-Funded Research Project to Study Geologic CO2 Storage.
Scientists at Virginia Polytechnic Institute and State University (USA) are researching geologic CO2 storage through two projects, one of which is funded by DOE/NETL’s University Coalition for Fossil Energy Research Program. This project aims to develop a machine-learning-based, scale-bridging, data assimilation framework with applications to geologic CO2 storage. The other project is funded by the National Science Foundation to study the fundamentals of miscible density-driven convection in porous media, which is encountered in geologic carbon storage. From Carbon Capture Journal. March 2020.

ADNOC Expands CCUS Program.
The Abu Dhabi National Oil Company (ADNOC) announced plans to expand its CCUS program. According to officials, ADNOC plans to expand the capacity of the program by more than 500%, with a goal of reaching 5 million metric tons of CO2 per year. ADNOC’s Al Reyadah facility in the emirate of Abu Dhabi currently has the capacity to capture 800,000 metric tons of CO2 annually. From Gasworld. February 2020.

Drilling Project Confirms Carbon Storage Site.
Results from drilling at the Northern Lights project were released and, according to the Norwegian Ministry of Energy and Petroleum, the respective area on the Norwegian Continental Shelf could be suitable for CO2 storage. Part of Norway’s full-scale CO2 capture and return project, the Northern Lights project will capture CO2 from a cement plant in Brevik and a waste-to-energy plant in Klemetsrud, eventually transporting it via pipeline offshore to a storage location below the seabed in the North Sea. From The Maritime Executive. March 2020.

CCS Assessment Atlas Completed in Canada.
TGS, a provider of geoscience data for exploration and production companies, announced the completion of a CCS assessment atlas, which provides an understanding of geologic carbon storage locations (onshore and offshore) throughout British Columbia. Collaborating with Canadian Discovery Limited, TGS created a framework for carbon storage assessment and an atlas for potential storage locations. From TGS Press Release. March 2020.

CCS Policy Forum Convened.
CO2CRC convened the inaugural CO2CRC CCS Policy Forum to develop an industry view on practical CCS policy framework that will stimulate CCS project investment in Australia.

CCS Forum Held in Washington, DC.
The Global CCS Institute hosted the ninth annual forum on CCS in Washington, DC (USA). Experts discussed key areas to advance CCS in North America, including enabling access to geologic storage hubs and solutions across the CCUS value chain.
科学新闻

科学家使用AI存储CO₂。

麻省理工学院的科学家开发了一种使用人工智能（AI）来绘制地下结构的机器学习系统，以存储CO₂。研究团队通过模拟地震产生的高频数据来研究“隐藏关联”，以识别将有助于绘制地下景观的低频波。AI学习如何找到可以用来估算低频率的模式，从而创建一个能够更准确地绘制地下景观的算法系统。详情请见Engadget。2020年3月。

新方法将CO₂转换为低温甲烷。

来自日本筑波大学的科学家开发了一种新方法，可以将CO₂转换为有价值的化学物质以用于碳捕获和利用。该方法在Chemical Letters上报告，其潜在的用途包括提取从空气中捕获的CO₂，然后将其转化为甲烷，从而为工厂提供无限的甲烷生产。详情请见Waseda University。2020年2月。

碳排放交易

S&P道琼斯推出欧盟碳排放配额指数。

S&P道琼斯公司推出了一个指数来追踪欧盟碳排放配额的价格。该指数为投资者提供了可供参考的碳排放配额指数，其中包含一系列的单一商品系列，基于S&P GSCI。详情请见Carbon Pulse。2020年3月。

第47次RGGI拍卖结果发布。

RGGI参与的各州宣布第47次拍卖结果。总计售出16,208,347个二氧化碳排放配额，平均价格为5.65美元，最低价格为2.32美元，最高价格为6.75美元。在第47次拍卖中有1180万成本保含储备（CCR）配额没有被出售。详情请见RGGI新闻。2020年3月。

立法和政策

执行命令指示俄勒冈州机构减少排放。

俄勒冈州的州长签署了一项行政命令，要求俄勒冈州的机构采取一系列措施减少该州的温室气体（GHG）排放。根据州长办公室的新闻稿，该命令更新了该州现有的碳排放目标，设定了到2035年45%的减排标准，以及到2050年80%的减排标准。详情请见The Register-Guard。2020年3月。

佛蒙特州众议院通过法案。

佛蒙特州（美国）的众议院批准了一项法案，该法案要求该州到2025年将温室气体排放减少26%，到2030年减少40%，到2050年减少80%。详情请见VTDigger。2020年2月。

欧盟公布工业战略，旨在到2050年成为碳中和。

欧盟委员会提出一项新的工业战略，旨在帮助欧洲到2050年实现碳中和。该战略包括加强现有的碳排放工具和确保低碳能源的供应，以及发展低碳工业的联盟。政府还宣布将在英国建立至少两个碳捕获和存储（CCS）中心，一个在2025年中期，另一个在2030年。详情请见ReNews.biz。2020年3月。
Natural Gas Combined Cycle Carbon Capture Retrofit Database.

The following is a description of this DOE/NETL document: “This tool provides high-level analysis on the incremental costs for retrofitting point sources with carbon dioxide (CO₂) capture and/or compression systems. Options are available to include costs of other technological improvements that would be required to comply with various regulations and New Source Performance Standards when installing CO₂ scrubbing technology.”

Innovating to Net Zero.

The following is from the Executive Summary of this Energy Systems Catapult document: “Meeting the UK’s Net Zero target will require unprecedented innovation across the economy. Innovation not just in new technologies, but in new ways of deploying existing technologies, new business models, new consumer offerings, and, crucially, new policy, regulation and market design. Unleashing innovation at the pace and scale needed requires a deep understanding of how the different parts of the energy system interact; in short, taking a whole system approach. This report updates Energy Systems Catapult’s national Energy System Modelling Environment (ESME) to consider the potential pathways to 2050, and to help identify the technologies, products and services which are most important to meeting Net Zero. It recommends what needs to happen during this Parliament to deliver Net Zero levels of investment, infrastructure and innovation. While the challenge is daunting, the commercial opportunity for those companies able to deliver the innovations needed is huge. This analysis will help identify those opportunities, and what may be needed to unlock them.”

Leveraging operational information from wastewater injection wells to evaluate CO₂ injection performance for carbon storage applications in the Appalachian Basin.

The following is from the abstract of this article: “Geologic parameters, geophysical logging, injection testing, and operational metrics from wastewater injection wells were integrated to develop a preliminary design of a carbon storage facility in the Appalachian Basin. A scattered group of 10–20 commercial wastewater injection wells dispose off produced water from oil and gas wells in the region, utilizing a sequence of stacked deep saline formations for injection zones. These wastewater injection wells provide practical benchmarks for understanding the feasibility of carbon dioxide (CO₂) storage. Geologic models were developed based on characterization data from the wastewater injection wells. Reservoir simulations were calibrated according to injection testing and operational data from the wastewater injection wells. Long-term operational data on injection flow rates and pressures measured in the wastewater injection wells were especially useful to evaluate the performance of carbon storage applications. The simulations were used to estimate injection pressures, radius of CO₂ saturation, and pressure response for industrial scale CO₂ storage applications. Results were also used to provide a design basis in terms of number of injection wells, well spacing, area of review, injection system components, monitoring plan, and CO₂ pipeline distribution system. The analysis demonstrates that there is sufficient injectivity in the deep saline formations in the west-central Appalachian Basin to store commercial volumes of anthropogenic CO₂. The geologic system appears suitable for supporting CO₂ injection rates of 0.5–1.0 million metric tons per year at injection pressures below formation fracture pressure in a single well. The long-term operational data of wastewater injection wells within the study area suggested a lower permeability-thickness values than indicated by initial reservoir tests. A workflow for developing realistic permeability values for input into reservoir simulations is presented.”

Comparing the explicit and implicit attitudes of energy stakeholders and the public towards carbon capture and storage.

The following is from the abstract of this article: “Research on the attitudes of energy stakeholders and the general public towards Carbon Capture and Storage is a necessary starting point for the industry to understand the development trajectory of the technology. However, previous studies have only used explicit approaches, such as self-report questionnaires, to measure attitudes. Some researchers have argued that explicit measures are not able to reflect participants’ true thoughts. To investigate the potential gap between the results of explicit tests and the true attitudes of participants, this study uses the implicit association test, to detect the attitudes towards environmental technology for the first time (to [the authors’] knowledge), by comparing the explicit and implicit attitudes of energy stakeholders and the general public towards carbon capture and storage. The results indicate that energy stakeholders hold favorable attitudes, whereas public vary across the two tests. Public show supportive attitudes in the explicit test, but present their concerns about the risk of carbon capture and storage in the implicit test. The inconsistencies between the explicit and implicit test results among the public indicate that researchers need to be very cautious about the method they use to understand attitudes towards carbon capture and storage as well as other environmental technologies. Further, [the authors] suggested that implicit association test would be an effective and easy-to-use approach to complement traditional explicit tests to discover participants’ real attitudes towards environmental technologies in the future research.”

Large CO₂ Storage Volumes Result in Net Negative Emissions for Greenhouse Gas Life Cycle Analysis Based on Records from 22 Years of CO₂-Enhanced Oil Recovery Operations.

The following is from the abstract of this article: “Emissions were documented in a greenhouse gas emission life cycle analysis of 22 years of CO₂-enhanced oil recovery (CO₂-EOR) operations for a site in the Northern Michigan Basin, U.S. At the site, CO₂ was cycled through a series of 10 carbonate reef structures 1500–2000 m deep in the subsurface. The CO₂ mobilized oil in the reefs, and the operator produced [294,321 metric tons (2,290,000 barrels)] of oil with CO₂-EOR at the site from 1996 to 2017. In the process, a total of [2,089,000] metric tons of CO₂ were stored in the deep rock formations, which is a very large volume for CO₂-EOR applications of this scale. The life cycle analysis accounted for greenhouse gas emissions related to CO₂ capture, compression, pipeline transport, CO₂ injection, oil processing, CO₂ recycle, dehydration, fugitive emissions, construction, land use, well drilling, oil transport, oil refining, hydrocarbon product combustion, and other processes. The analysis was based on site-specific operational records such as natural gas usage, drilling records, and system flow metering. Altogether, the upstream CO₂ capture, ‘gate-to-gate’ CO₂-EOR operations, and downstream fuel product refining/combustion had total emissions of [1,929,443] metric tons of CO₂ equivalent. Thus, the life cycle analysis showed [−159,907] metric tons of CO₂ equivalent net balance for the CO₂-EOR system for 1996–2017. The CO₂-EOR system obtains CO₂ from a gas processing facility that separates CO₂ from natural gas produced in the area, and the CO₂ would be otherwise vented to the atmosphere. A ready source of CO₂ that allowed a large volume of associated CO₂ storage, compressors that run on natural gas, a small pipeline distribution network, highly contained reservoirs, and government incentives to encourage CO₂ storage also contributed to the lower CO₂ emission balance when compared to other CO₂-EOR life cycle studies. While this site had many favorable factors to result in net negative emissions, it provides an example of managing CO₂-EOR operations and optimizing associated CO₂ storage to reduce net greenhouse gas emissions.”

Manoj Valluri, Joel Sminchak, Lydia Cumming, Joel Main, and Glenn Larsen, Greenhouse Gases: Science and Technology. (Subscription may be required.)
The permitting procedure for CO₂ geological storage for research purposes in a deep saline aquifer in Spain.

The following is from the abstract of this article: “Most European Member States that transposed the EU Directive 2009/31/CE on geological storage of carbon dioxide to each national legislation have not yet developed a regulatory framework to govern the permitting process of this industrial activity. This scenario does not help the deployment of Carbon Capture and Storage (CCS) technologies, as regulators, administrations, operators and general public do not handle a clear compendium of rules and standards to follow. This lack of regulation affects even more to the on-shore sites, which are usually surrounded by communities, industries, farms and other environmental elements that require the compliance of regulations to assure safe and controlled industrial processes. This article describes and analyses the workflow followed for granting the storage permit of Hontomin Technology Development Plant (TDP) in Spain. Hontomin is today the only onshore CO₂ injection site in Europe, recognized by the European Parliament as a key test facility for CCS technology development. The authors aim to show the experience gained from this real case as a guideline for regulators, operators and administrations to facilitate the grant of storage permits for supporting the development of industrial scale projects.” J. Carlos de Dios and Roberto Martínez, International Journal of Greenhouse Gas Control. (Subscription may be required.)

An economic-environmental asset planning in electric distribution networks considering carbon emission trading and demand response.

The following is from the abstract of this article: “Initiatives such as government programs and investment in low-carbon technologies have been adopted to mitigate the carbon emissions in the electricity sector. These initiatives have resulted in new challenges in the power sector, and to address them adequately, innovative frameworks are required in the electric distribution network (EDN) expansion planning and operation problems. Therefore, this work proposes an environmentally committed asset planning approach to remedy the existing issues to some extent. The proposed strategy investigates the benefits of the simultaneous allocation of several assets such as capacitor banks (CBs), distributed generation (DG) units based on renewable energy sources, and energy storage systems (ESSs). Moreover, an innovative carbon emission trading scheme is formulated in the planning stage to mitigate the CO₂ emissions while a demand response program is applied to modify the consumption behavior. The proposed approach is formulated as a two-stage robust mixed-integer programming model, which considers uncertainties associated with the electricity demand and renewable-based DG. To cope with the difficulties of this complex model, utilizing an efficient decomposition algorithm, such as the C&CG decomposition algorithm, is essential. The potential of the proposed approach is studied under different operating conditions and via several test cases on a 137-node EDN. In addition, to validate the performance of the proposed carbon emission scheme, a multi-region 54-node distribution network is adequately evaluated. Results show that by considering simultaneously multiple planning alternatives, carbon emission trading scheme, and the demand response program, the total CO₂ emissions are reduced by up to 15%.” Ozy D. Melgar-Dominguez, Mahdi Pourakbari-Kasmaei, Matti Lehtonen, and José R. Sanches Mantovani, Electric Power Systems Research. (Subscription may be required.)

Price dynamics in the European Union Emissions Trading System and evaluation of its ability to boost emission-related investment decisions.

The following is from the abstract of this article: “The price of permits in the European Union Emissions Trading System (EU ETS) has historically been highly sensitive and prone to jumps. [The authors] consider different stochastic processes to model the price of permits, and show that the Variance Gamma (VG) model provides the best fit for the price distribution, among a selection of infinite activity processes. Using this result as a starting point, [the authors] assess the effects of the EU ETS in delivering low-carbon investments at the firm level, by modeling a price taker electricity producer subject to the EU ETS jurisdiction. [The authors] compute, via Least Squares Monte Carlo, the value of the real option the greenhouse gas emitter has, consisting in the opportunity to switch from its current high-carbon technology to a cleaner one. [The authors] use a VG specification for carbon prices, and a mean-reverting (Brennan–Schwartz) process for the price of fuel. Moreover, [the authors] further analyze the investment decision problem, in case of a CO₂ price stabilization mechanism in the form of a price floor, by explicitly computing the expected value of the investment project by means of Fourier methods. [The authors’] results show that the introduction of the price stabilization mechanism significantly affects the timing of the investment decision, and supports emission-related investments.” Maria Flora and Tiziano Varigliu, European Journal of Operational Research. (Subscription may be required.)

Flexible Carbon Capture and Utilization technologies in future energy systems and the utilization pathways of captured CO₂.

The following is from the abstract of this article: “Future 100% renewable energy systems will have to integrate different sectors, including provision of power, heating, cooling and transport. Such energy systems will be needed to mitigate the negative impacts of economic development based on the use of fossil fuels, but will rely on variable renewable energy resources. As two-thirds of global greenhouse gas emissions can be attributed to fossil fuel combustion, decarbonization of energy systems is imperative for combating the climate change. Integrating future energy systems with CO₂ capture and utilization technologies can contribute to deep decarbonization. As these technologies can be operated flexibly, they can be used to balance the grid to allow for high levels of variable renewable energy in the power mix. The captured CO₂ can be either utilized as a feedstock for various value-added applications in the chemical industry and related sectors such as the food and beverage industries. This paper reviews the state-of-the-art literature on CO₂ capture and utilization technologies, with an emphasis on their potential integration into a low-carbon, high-renewables penetration grid. The potential market size for CO₂ as raw material is also elaborated and discussed. The review paper provides an insight to the development and the technological needs of different energy system sectors, as well the limitations, challenges and research gaps to the integration of the variable renewable energy sources and flexible carbon capture and utilization technologies.” Hrvoje Mikulčić, Iva Rijdan Skov, Dominik Franjo Dominković, Sharifah Rafidah Wan Alwi, Zainuddin Abdul Manan, Raymond Tan, Neven Duić, Siti Nur Hidayah Mohamad, and Xuebin Wang, Renewable and Sustainable Energy Reviews. (Subscription may be required.)
Improved Vinegar & Wellington calibration for estimation of fluid saturation and porosity from CT images for a core flooding test under geologic carbon storage conditions.

The following is from the abstract of this article: “X-ray computed tomography (CT) of fluid flow in formation rocks is an important characterization technique in geologic carbon sequestration research to provide insight into the migration and capillary trapping of CO₂ under reservoir conditions. An improved calibration method adapted from traditional Vinegar & Wellington calibration is proposed to map the 3D pore and fluid distributions from the CT images of CO₂/brine displacement flooding. Similar to Vinegar & Wellington calibration, the proposed method adopts the linear scaling law of CT number transformation to mass density. However, different from Vinegar & Wellington calibration that uses a 100% brine-saturated core image and a 100% CO₂-saturated core image as references to calculate CO₂ and brine saturations at all time steps, the proposed method uses the CT numbers of CO₂ and brine to calculate the incremental of CO₂ and brine saturations from time step i to time step i + 1. The method is intended for cases in which the two 100% brine saturation and 100% CO₂ saturation images can not be successfully obtained. Overall, the improved calibration proposed by this study presents more reasonable results of CO₂ and brine distribution in a Berea sandstone core, as compared to traditional Vinegar & Wellington calibration. The reconstructed porosity image agrees with the laminated structure of the Berea sandstone core, and the average porosity evaluated over the entire core (0.176) is comparable to the physical porosity (0.165). Furthermore, the reconstructed saturation images using the improved calibration reveal a flat piston-like flooding front from a homogeneous longitudinal-section of the 3D orthogonal view and preferential fingerings from another non-homogeneous longitudinal-section, which are not present in the reconstructed saturation images using traditional Vinegar & Wellington calibration. Concerns and causes with respect to the uncertainty of linear CT number calibration are also explained, and approaches to alleviate the uncertainty are suggested.” Xiuxiu Miao, Yan Wang, Liwei Zhang, Ning Wei, and Xiao Chun Li, Micron. (Subscription may be required.)

Towards carbon sequestration using stainless steel slag via phase modification and co-extraction of calcium and magnesium.

The following is the abstract of this article: “Iron– and steelmaking processes produce a large quantities of greenhouse gas and metallurgical slag. Using Ca/Mg–rich phases in the slag to capture and bind the CO₂ via mineral carbonation is a promising approach to reduction of emissions and solid wastes to be landfilled. However, Cr–bearing stainless steel slag (SSS) cannot straightforwardly be employed for carbon capture and storage (CCS) or rather carbon capture and utilization (CCU). For the dual–purpose of chromium immobilization and co–extraction of calcium and magnesium, a slag modification using added MnO is performed followed by an acid leaching treatment. Results show that the MnO content has a significant influence on the phase composition and element distribution of SSS. A Box–Behnken design (BBD) based acid leaching treatment of SSS is investigated and optimized. Second–order polynomial regression models that reveal a functional relationship between processing parameters and leaching yields of calcium and magnesium are established and verified by the analysis of variance (ANOVA). Model calculation results show a good agreement with the experimental data. The direct (linear) and cross-correlated effects of the processing parameters on the leaching yields are illustrated by three-dimensional (3D) response surfaces. The maximum leaching yields of calcium and magnesium obtained in this work are 65 % and 55 %, respectively, while for chromium the leached amounts are well below legislative limits.” Qing Zhao, Kun Liu, Lifeng Sun, Chengjun Liu, Maofa Jiang, Henrik Saxén, and Ron Zevenhoven, Process Safety and Environmental Protection. (Subscription may be required.)

Understanding public support for carbon capture and storage policy: The roles of social capital, stakeholder perceptions, and perceived risk/benefit of technology.

The following is from the abstract of this article: “As climate change mitigation technologies emerge, there is an increased need to understand public support for the technology and the policies that will shape or thwart its evolution. Of particular importance are the communities most directly impacted. The current study focuses on a random sample of 970 adults in eight counties within the oil and gas industry-reliant region of southeast Texas in order to explore support for carbon capture and storage (CCS), which is a climate change mitigation technology that has seen a great deal of investment in that area. Results of ordinary least squares (OLS) regression analysis and general linear modeling (GLM) suggest that policy support — individual support and perceived community support — is dependent on perceived risks and benefits of CCS, community-focused perceptions (including Bourdieu’s social capital), and perceptions about stakeholders (trustworthiness and expected role in CCS policy making). One key takeaway is that social capital was both a predictor and moderator in community-level CCS support and helped explain the hidden effects of risk perception of CCS and CCS knowledge on community-level CCS support. Implications for public policy and stakeholder relations are discussed.” Won-Ki Moon, Lee Ann Kahlor, and Hilary Clement Olson, Energy Policy. (Subscription may be required.)
ABOUT DOE’S CARBON STORAGE PROGRAM

The Carbon Storage Program at the 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 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.

Carbon Storage Program Resources

Newsletters, program fact sheets, best practices manuals, roadmaps, educational resources, presentations, and more information related to the 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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1450 Queen Avenue SW
Albany, OR 97321-2198
541-967-5892

3610 Collins Ferry Road
P.O. Box 880
Morgantown, WV 26507-0880
304-285-4764

626 Cochran's Mill Road
P.O. Box 10940
Pittsburgh, PA 15236-0940
412-386-4687

Program staff are also located in Houston, Texas and Anchorage, Alaska.

CUSTOMER SERVICE: 1-800-553-7681

www.netl.doe.gov

Contact
Andrea McNemar
304-285-2024
Andrea.McNemar@NETL.DOE.GOV

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