Coal deposits have long been viewed as potentially viable geologic sites for the capture and storage of carbon because of their affinity to sorb carbon dioxide. While most coal is buried too deeply to be economically recovered, much of it contains natural gas (i.e., coal bed methane) which can be produced by reducing the hydrostatic pressure within the reservoir. Coal bed methane (CBM) was once thought to have formed millions of years ago when the coal itself was being formed but recent scientific discoveries suggest that much of the gas was generated long after the initial process of coalification by anaerobic microbial systems. This type of CBM, referred to as secondary biogenic natural gas, can be considered a “renewable” source of carbon-positive natural gas because the microorganisms use the carbon derived from coal (a fossil fuel) as the substrate or food source. We can contrast this type of natural gas with the methane produced from landfills and anaerobic digesters in which the microorganisms use organic matter derived from atmospheric carbon dioxide recently fixed by plants. Although the extent varies depending upon carbon intensity, this type of biogas is generally considered carbon-neutral. Biogas with Carbon Capture and Storage (BG-CCS) is a novel, patent-pending technology recently developed at the Center for Biogenic Natural Gas Research at the University of Wyoming. The technology is designed to generate carbon-negative biogas by delivering biomass-derived substrates to shallow, biogenically active coal deposits. Since atmospheric carbon dioxide is fixed by biomass and sequestered by coal in the process, burning the gas can result in a net reduction in carbon dioxide emissions. Through off-setting carbon dioxide emissions and leveraging existing CBM and natural gas infrastructure, BG-CCS has the potential to bridge the gap between fossil fuels and renewable energy.