The National Commission on Energy Policy has recently commenced a study on the challenges for expanded coal production in the United States, according to Sasha Mackler, Research Director of the Commission. Given its relative abundance in the United States, coal will likely remain a significant component of the nation’s fuel mix for decades to come. The Department of Energy and other energy experts project that in order to meet the nation’s energy demand over the next 20 to 30 years, the production of coal will need to increase steadily from the current level of 1.2 billion tons to 1.8 billion tons or more. While there are serious concerns over the use of coal related to carbon emissions, its impact on the global climate is potentially manageable through implementation of carbon capture and storage (CCS) technologies. However, the upstream implications associated with increasing coal production to meet growing energy demand – even in a carbon constrained world – are less well understood and will be the focus of this effort. This study will take a detailed look at the key components of the coal production apparatus and evaluate the central issues that must be considered to ensure a coal production infrastructure that is consistent with our nation’s long term energy and environmental aspirations.

The question of whether and how coal appropriately fits into a low carbon energy system is not the focus of this project. The National Commission on Energy Policy believes that coal can remain an important energy resource if its utilization is combined with emerging technologies that capture and dispose of the carbon emissions before venting to the atmosphere. If and when these technologies are deployed, coal demand would likely remain substantial and could even grow in the coming decades. However, any expansion of the nation’s coal production system will require adjustments. Specifically, this study will address six areas related to coal mining where important modifications to current practices may be beneficial from an economic or social perspective. These areas are:

- Coal reserves determination (How much coal is available to be mined?)
- Mining technology and resource optimization (How should the coal be mined?)
- Coal processing technologies (How must the coal be cleaned so it can be used?)
- Health and safety issues (What protections must be in place for the mining workforce?)
- Environmental protection, standards and practices (How must coal be mined in a way that minimizes impacts to the planet?)
- Human resources issues (Who will be engaged in and conduct coal mining?)

Each of these areas has been identified previously in prominent studies as potentially limiting the long-term sustainability of the nation’s coal industry.

This report’s study committee will hold scoping meetings in various locations around the U.S. to gather input from key stakeholders, including: the coal industry, government officials, environmental and conservation groups, the financial sector, electrical utilities, academic experts, and others. The committee will also rely on other recent work, including the June 2007 report of the National Research Council of the National Academies of Science entitled “Coal Research, Technology, and Resource Assessments to Inform Energy Policy”. Dr. Michael Karmis, Stonie Barker Professor of mining engineering at Virginia Tech and Director of the Virginia Center for Coal and Energy Research is chairing the study committee. Also serving on the group are Dr. Harold Gluskoter, coal geologist and scientist emeritus with the U.S. Geological Survey; Dr. Gerald Luttrell, Massey Professor of mining engineering at Virginia Tech; Dr. Raja Ramani, emeritus George H. Jr. and Anne B. Deike Chair in mining engineering and emeritus professor of mining and geo-environmental engineering at Penn State; and, Dr. George Vance, J.E. Warren Distinguished Professor of Energy and the Environment at the University of Wyoming. The committee’s report is scheduled for release in 2008 and will include recommendations for future investigation. The project is being undertaken by the National Commission on Energy Policy with supporting contributions from the Joyce Foundation.