NATIONAL CENTER FOR POLICY ANALYSIS

The Future of the American Coal Industry

Brief Analysis No. 806

by Jacopo Zenti

January 30, 2015

Coal is abundant, reliable and affordable, and states that use it to generate at least half of their electricity pay up to 30 percent less for energy than states that depend on other energy sources.



Dallas Headquarters: 14180 Dallas Parkway, Suite 350 Dallas, TX 75254 972.386.6272

www.ncpa.org

Washington Office: 600 Pennsylvania SE, #310 Washington, DC 20003 202 830 0177



As shown in Figure I:

- Coal is the most used energy resource, generating 40 percent of all U.S electric power.
- Natural gas is quickly catching up to coal and now supplies 26 percent of U.S. electricity.
- Combined, nuclear, hydro and renewable sources generate 34 percent of U.S. electricity, 6 percentage points less than coal.

Current signs point to a difficult future for the American coal industry, at least domestically. Natural gas is increasingly replacing coal in new power plants. Indeed, technological advancements in hydraulic fracturing and horizontal drilling have greatly lowered natural gas prices by accessing huge reserves of previously unreachable natural gas. Furthermore, the Environmental Protection Agency (EPA) strictly regulates coal-fired electricity and has recently unveiled plans for even more regulation through the "Clean Power Plan," which will limit carbon dioxide emissions from power plants.

Global Demand for Coal. For over a century, the United States has held the largest proven coal

reserves in the world, an estimated 26 percent of the global total. In 2012, the United States produced 1 billion short tons of coal, of which over 125 million short tons were exported.

While the domestic market seems unfavorable to coal, the outlook abroad is more promising. Demand for coal continues to rise in China, Japan and India. While the American energy market is shifting toward natural gas and other resources, China continues to rely on coal for more than 70 percent of its electricity. Though some American coal is already exported to these destinations, much more could be.

In 2012, there were plans for 1,200 coal plants throughout the world, including 455 in China and 363 in India.

Figure II shows the top 11 destinations for exported American coal in 2012. Note that substantially more U.S. coal exports reached European countries than China and India combined. Indeed, in the first eight months of 2012, a reported 42 million short tons of American coal were exported to Europe, but only 23 million to Asia.

Europe's demand for coal has also increased. In 2011, Germany opted to close all its nuclear plants by 2022, filling the gap in energy production with coal. Part of that coal is imported from the United States, which almost doubled coal exports to Germany

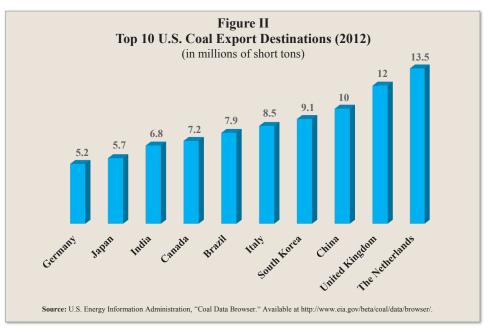
The Future of the American Coal Industry

from 2010 to 2011. Coal imports are also on the rise in the United Kingdom. American coal exports to Britain were 73 percent higher in the first three quarters of 2012 than in 2011 and will likely continue to rise.

Environmental Impact Fears.

Unlike oil and natural gas exports, which are heavily regulated or forbidden outright, coal exports actually face few to no federal restrictions. Yet, different obstacles cause significant delays in increasing coal exports, mainly from concerns about potential negative environmental impacts.

Environmental groups argue that new project planning — and regulatory reviews by the U.S. Army Corps of Engineers and other agencies — should take into account global environmental impacts rather than being limited to local ones. This affects several planned marine terminals, including one in Oregon and one in Washington, dedicated to coal exports to East Asia that require Corps approval. Environmentalists want to know how much increased



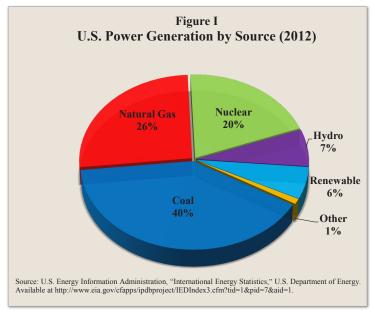
train traffic these terminals will generate, the potential environmental impacts of the increased traffic and of transporting the coal overseas and, most importantly, the impact of burning the coal in other countries. This demand for greatly increased analytical scope has already led to delays and restrictions for several projects. Indeed, potential delays have already led to the scrapping of three projects for coal export terminals

Increased export of American coal may not be as environmentally detrimental as many believe. For example, restricting coal exports to China will not reduce its emissions from burning coal. China, like all other coal consumers.

does not depend on American coal, and is actually the world's chief coal producer. Without American imports, China would simply look elsewhere — such as Indonesia or Australia — or consume more of its own coal, which often comes from unsafe, less regulated and environmentally damaging mines, often breaching environmental regulations. Furthermore, American coal exported to China is arguably cleaner than Chinese coal, and therefore its use lowers China's emissions.

Conclusion. Long-term, the world may hope to reduce its reliance on coal, but reality dictates that we must not stop using coal in the near future. The United States should be allowed to exploit this global movement. Restricting coal exports will not dissuade other countries from burning coal and will instead hurt the American economy.

Jacopo Zenti is a research associate with the National Center for Policy Analysis.



Note: Nothing written here should be construed as necessarily reflecting the views of the National Center for Policy Analysis or as an attempt to aid or hinder the passage of any legislation. The NCPA is a 501(c)(3) nonprofit public policy organization. We depend entirely on the financial support of individuals, corporations and foundations that believe in private sector solutions to public policy problems. You can contribute to our effort by mailing your donation to P.O. Box 650298, Dallas, TX 75265-9600 or by visiting our Web site at www.ncpa.org and clicking "Support Us."