One of the first industrial projects that would be able to use Ohio natural gas is in the planning stages.

**Baard Energy**, a Vancouver energy development company, is proposing to build a $3.5 billion refinery in Columbiana County south of Youngstown to manufacture jet and diesel fuel from natural gas.

The refinery would require about 200 acres and would use about 450,000 cubic feet of pipeline natural gas per day, initially, switching to Ohio shale gas as it becomes available.
Geological experts believe there are billions of cubic feet of natural gas deep under Ohio, and early test wells have been impressive enough attract big oil and gas companies such as ExxonMobile, Hess Corp. and Shell Oil.

**Baard's Ohio River Clean Fuels** refinery would convert the gas into 50,000 barrels, or 2.1 million gallons, of jet and diesel fuel per day, said John Baardson, chief executive officer of the company.

Baard four years ago proposed building a refinery that would have made the jet and diesel fuel from Ohio coal, which is among the most dirty in the nation. The coal refinery would have cost $6.9 billion and would have required about 450 acres.

The company obtained air and water permits from the Ohio Environmental Protection Agency and the U.S. Army Corp of Engineers and had the attention of the Pentagon, but legal opposition from environmental groups concerned about mercury and other pollutants stalled development until last week.

On Friday, the **Natural Resources Defense Council** and the **Sierra Club** agreed to suspend further legal action if Baard switched to natural gas, which is not only cleaner than coal but also would cut the refinery's carbon dioxide emissions by 75 percent.

Nachy Kanfer of the Sierra Club's **Beyond Coal** campaign said that, despite agreeing to the deal, his organization in principle does not support converting natural gas to aviation and motor fuel either. But the Sierra Club saw the agreement as an opportunity to strike a "giant blow" to dirtier coal, Kanfer said.

Baardson said he believes the agreement will give his company a better chance of financing the project.

"The business case for natural gas is compelling," he said. "And there is a fair amount of interest from financial people. We should be in construction by 2012."

Shannon Fisk, senior attorney for the Natural Resources Defense Council, said the settlement ends Baard Energy's interest in coal and should permanently end efforts by others as well to use coal to make liquid fuels.

"Coal to liquids technology has always been dirty and expensive -- and today's announcement makes it clear that it remains a bad bet," he said. "Four years into this mess, the Baard facility has not been able to sort out its pollution permits or financing because making liquid fuel out of coal simply doesn't work economically or environmentally."