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Steel Finds Sweet Spot in the Shale

Natural-Gas Boom Begets Low Prices for Fuel, Strong Demand for Piping—a Double Boon for Mills

By JOHN W. MILLER

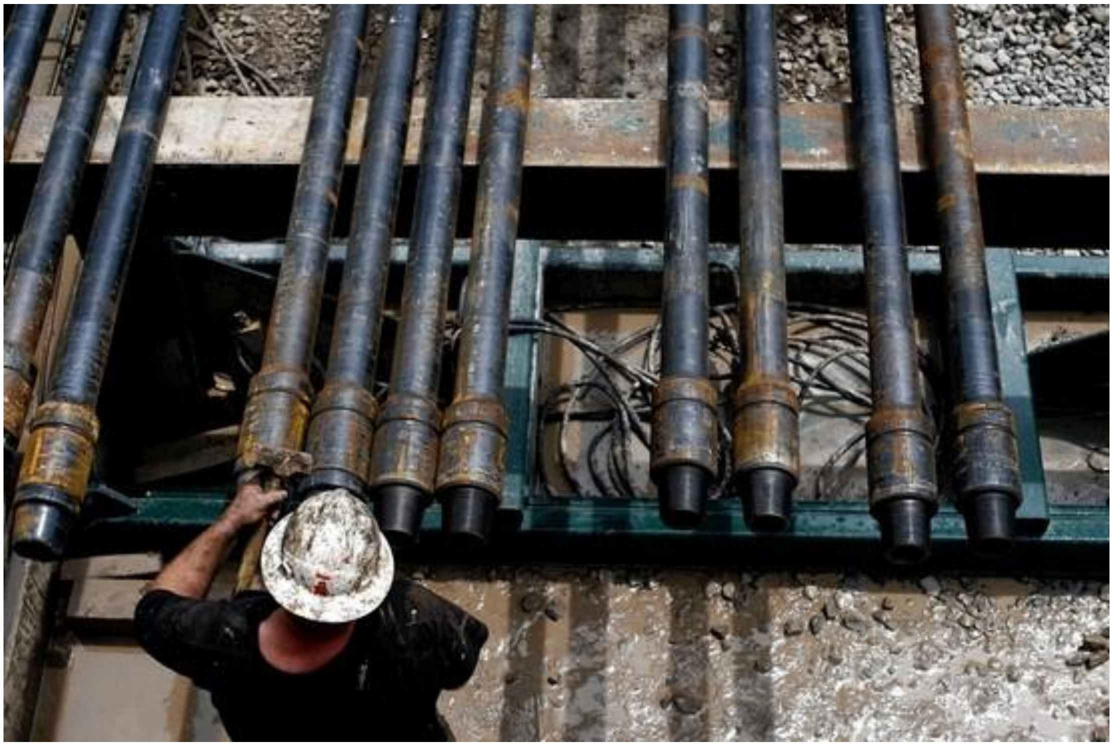
WEST MIFFLIN, PA.—The rising fortunes of a massive U.S. Steel Corp. plant here has much to do with what sits below: massive deposits of cheap natural gas.

Shiny coils roll off the line destined for energy companies drilling in the Marcellus Shale natural-gas formations that rest below much of southwestern Pennsylvania. Production for so-called tubular goods used for pipes, tubes and joints in gas drilling has doubled in two years, says Scott Bucksio, the general manager of the plant in the sprawling Mon Valley Works, as drillers have raced to extract ever-larger amounts of gas from the shale deposits.

As significant, or more so for energy-intensive steelmakers, is that newly plentiful natural gas "is also keeping costs down" said Mr. Bucksio of U.S. Steel.

With prices of natural gas down more than 35% to $2.21 per million British thermal units from a year ago due to abundant supply, the company has begun replacing coal with natural gas to power its blast furnaces.

Industrywide, a ton of steel costs around $600 to produce. Using natural gas instead of coal to run the furnaces cuts the costs by $8 to $10 per ton. Based on those figures, U.S. Steel could save $133 million this year alone, according to a recent report by UBS AG, which also said the Pittsburgh-based company could save another $80 million in 2012 energy costs for nonblast furnace operations.


Bloomberg News

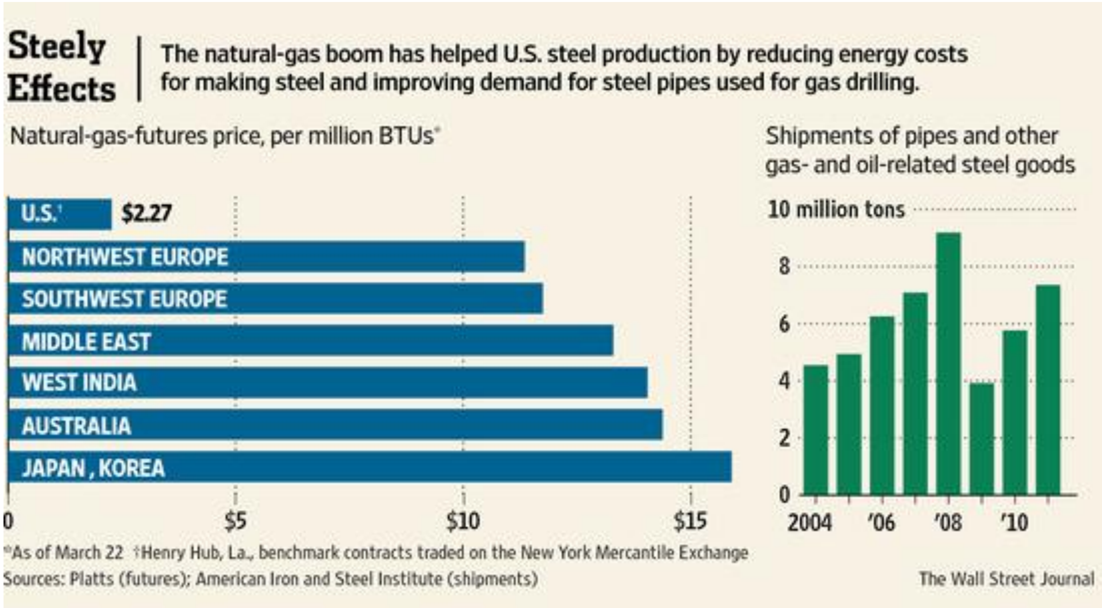
Drilling pipe is prepared for a natural-gas well in the West Virginia portion of the Marcellus Shale.

The gas boom is coming just in time for U.S. Steel, the country's largest and the world's eighth-largest steelmaker, with 37,400 workers world-wide.

After posting losses in the last three years, the company's stock price, which traded at a low of $20.19 last year, closed at $29.54 Monday and is up 13% in the past three weeks. The company expects a significant improvement in financial results for the first quarter, due in large part to the dual benefits of the natural-gas boom.

U.S. Steel shipped about 1.8 million tons of tubular goods used in drilling and transporting natural gas and oil in 2011, a 17% increase from year-earlier levels. Prices for those higher-premium products increased 7.9% to $1,612 per ton from $1,494, boosting the company's profit outlook.

"Shale resource development has the potential to make significant, positive contributions to U.S. Steel," Chief Executive John Surma said in a recent speech.



And for other industries: Low natural-gas prices, if they can be sustained, represent a competitive advantage across the U.S. manufacturing base. The price of natural gas is $11.35 per million BTUs in northwest Europe and $15.9 in Japan, according to researcher Platts, compared with U.S. levels of $2.27.

"Companies that had left the U.S. in sectors like chemicals and fertilizers are talking about coming back to take advantage of the low cost of gas," said Don Norman, an economist for the Manufacturers Alliance for Productivity and Innovation.

In January, Methanex Corp. of Vancouver said it would relocate a plant to manufacture methanol, used in making plastics and other materials, to Louisiana from Chile. At the time, Bruce Aitken, the company's chief executive, cited "the outlook for low North American natural-gas prices" as key reason for the move.

And low natural-gas costs were a factor in the decision by Brazil's Santana Textiles LLC to build a $180 million denim plant now under construction in Edinburg, Texas, rather than Mexico.

Associated Press

Steel operations at U.S. Steel's Mon Valley Works in Pennsylvania have seen costs fall along with gas prices, which are down over 35% in a year.

Steelmakers other than U.S. Steel have also seen strong demand from gas drilling. Total tubular-good shipments increased to 7.3 million tons last year from 3.9 million tons in 2009, according to the American Iron and Steel Institute. The steel sector has outperformed the market over the last three weeks, with U.S. Steel, Gerdau SA, ArcelorMittal and other big steel stocks climbing more than 5%, while the Dow Jones Industrial Average rose 2.2%.

"The gas boom is also putting downward pressure on coal prices," said IHS Inc. gas analyst Robert Ineson, another benefit for steelmakers' bottom line.

But the boost in natural-gas production could be short-lived. Natural-gas prices have fallen so low—they are down from about $9 per million BTUs four years ago—that some companies such as Oklahoma City's Chesapeake Energy Corp. are reducing investment and gas drilling.

At this point, however, in the eastern part of the U.S., brisk natural-gas drilling continues, although companies are starting to focus on shale deposits containing liquids like butane and propane that command higher prices than so-called dry natural gas used for electricity generation.

"We're going to continue to increase our production because much of that is in the liquids portion," said Matt Pitzarella, a spokesman for Range Resources Corp. which does much of its drilling in Pennsylvania.

That is good news for the U.S. Steel plant in the Mon Valley Works south of Pittsburgh, where 800 unionized workers take steel slabs made at the company's Edgar Thomson Mill in Braddock, founded by Andrew Carnegie in 1875, and roll them into thin coils that are turned into pipes at another nearby company location.

PGT Trucking, a Pennsylvania trucking company, said revenue related to transporting steel tubular goods like those made at the Mon Valley Works plant soared to $10 million in 2011 from $1 million in 2010.

CEO Patrick Gallagher has 500 employees and wants to add another 50 to 100 over the year. "And we're investigating a new fleet of trucks that run on liquid natural gas for 2013 and beyond," he said. "We're on a paradigm shift with natural gas becoming our main energy source."

—Kris Maher contributed to this article.

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