

Natural gas ignites Louisiana boom



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The Port of South Louisiana is fortunate to sit where it does. Its district sprawls out over 86 kilometres (and three Louisiana river parishes) on the lower Mississippi River with a high concentration of facilities located along its banks that can access 33 of the nation's states (and two Canadian provinces) via the inland waterway system. Most importantly, its proximity to the Gulf of Mexico allows quick access to international sailing routes.

South Louisiana is also an area with the highest concentration of natural gas pipelines in the United States. The synergy of these components is what has consistently ranked the Port of South Louisiana the largest port district in the Western Hemisphere, the top grain exporter in the US, and most recently, the number one energy transfer port in the nation. With low, stable prices on a copious amount of natural gas, it is a crucial element that makes the Port of South Louisiana very attractive to industries looking to locate to the 'River Region'.

Natural gas production

Since 2008, the US has been the world's largest producer of oil and natural gas after overtaking Russia's output. In fact, Louisiana is one of the country's top natural gas producers (providing almost 10% of the overall national figure) due to the output from shale rock formations which were discovered fairly recently with the availability of new technologies such as hydraulic fracturing. According to predictions, Louisiana's Haynesville Shale—as the rock formations are identified—could hold about 200 trillion cubic feet of natural gas. Another study predicts that there are plenty of deposits in the US to satisfy a century of the current national natural gas demand.

Within a three-year period (2011-2014) the American Chemistry Council

counted almost 200 announcements of new chemical plants or upgrades to existing industry in the US, with investments totaling \$124 billion. The boom in fracking has driven gas prices to an all-time low. Inexpensive natural gas prices offer prospects such as lower electricity costs, which is a great plus for the manufacturing sector. Other producers use natural gas, instead of petroleum, as a raw material.

The battle for Mississippi

National and international energy companies are vying for waterfront real estate along the Mississippi River within the Port of South Louisiana. The port is now witnessing the most economic development along the Mississippi River since the 1960s when the petrochemical industry started to locate in the region. The present boom is driven by the low price of natural gas and reinforced by the deep-water location along the river. The difference from 50 years ago is that we are seeing more foreign companies investing and building their factories here. We have foreign investors, all of whom will use natural gas to make their product that will, in turn, be exported to their respective country because it makes economic sense for them to do so. Within the same timeframe as that observed by the American Chemistry Council, there were five project announcements for the River Region directly related to the low cost of natural gas.

In early 2011, Nucor broke ground in St. James Parish with a Direct Reduced Iron (DRI) facility that will be one of the largest industrial projects in Louisiana history. During the first phase alone, the project is slated to create 150 permanent jobs and 500 construction jobs and with subsequent phases planned, Nucor expects to create 1,250 permanent jobs and a total capital investment of \$3.4 billion. The plant's process uses direct reduction

technology to convert natural gas and iron ore pellets into high-quality reduced iron.

Recent developments

Fast forward to 2013 when Zeep Ltd of Austin, Texas, in conjunction with the New Zealand-based Todd Corporation, announced a \$1.3 billion joint venture located in St. James Parish. The Zeep-Todd joint-venture became known as 'South Louisiana Methanol', and this project, which is expected to create 63 new direct jobs, will convert natural gas into around 1.7 million tonnes of methanol annually. Methanol, in turn, will be used by manufacturers to produce everyday goods such as plastics, polyester, fibres and fabrics, as well as pharmaceuticals and adhesives.

In mid-2013, Russian-based EuroChem announced the company's commitment to build a \$1.7 billion, natural gas-based, ammonia and urea production plant to manufacture and distribute fertilizer products throughout the US and other markets. A site in St. John the Baptist parish is currently under option and evaluation, which, if chosen, will create 200 new direct jobs with an annual payroll of \$11.6 million for the residents of the River Region.

Later in the same month, AM Agrigen Industries selected a site in St. Charles Parish for a \$1.2 billion plant for the manufacturing of granulated urea. Natural gas is a key raw material for producing nitrogen-based fertilizers. This prospect would create 150 new direct jobs with an average salary of \$55,000 per year plus benefits for the local workforce.

Then in July, Yuhuang Chemical, Inc., whose parent company is based out of China, disclosed their intention to invest \$1.85 billion into a world-scale methanol manufacturing complex (using natural gas in the process) in St. James Parish. This endeavor will create 400 new direct



About the author

Paul Aucoin is the Executive Director of the Port of South Louisiana. He previously provided legal counsel to the port after spending 40 years as an attorney. Aucoin graduated from the Loyola Law School in 1970.

About the organisation



The Port of South Louisiana's jurisdiction on the Mississippi River consistently handles around a quarter billion tonnes of cargo annually, ranking it the largest tonnage port district in the Western Hemisphere. Along the 173 kilometres of deep-water frontage on both banks of the river, there are seven grain transfer facilities, four major oil processing plants, and 11 petrochemical manufacturing facilities with a combined total of more than 50 piers and docks owned and operated by an impressive group of resident tenants such as ADM, ArcelorMittal, Dow, Cargill, DuPont, Motiva Enterprises, Marathon, Shell, and Nucor Steel.

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jobs, with an average annual salary of \$85,000 plus benefits. Following the first phase, the company will build a second methanol plant with a goal to reach an annual capacity of 3 million metric tonnes of methanol.

Conclusion

Currently it is estimated that Louisiana has \$80 billion worth of prospects looking at locating in the state; \$13 billion of those are looking at the three river parishes. With over 20,000 acres and thousands of metres of river frontage available within the district, the Port of South Louisiana can be instrumental in facilitating a company's relocation.

If a company wants to locate on the Mississippi River, because of the low cost of natural gas and the deep-water access,

the Port of South Louisiana can assist in building a dock or an entire facility on the landside for that matter. We can build the facility, lease it to the company, and, after so many years, ownership is turned over to the company. That's how we facilitate new industry and foster economic development for the state of Louisiana. It's worked beautifully through the years and we expect it to continue.

With all the elements in place for a healthy economy (accessibility to national and international markets, a strong business climate, the low cost of natural gas, and a skilled manufacturing workforce), the Port of South Louisiana's main objective is to prepare for the growth wave that's hitting the state of Louisiana.