

Economic Impact of the Energy Sector and Petroleum Tank Storage Industry on Mobile County, Alabama

Prepared for: Mobile Area Chamber of Commerce

***Prepared By:
M. Keivan Deravi, PhD
Professor of Economics
Auburn University at Montgomery***

***Barbara Buchanan
Senior Program Manager
Auburn University Montgomery***

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This report attempts to estimate the economic impact of the energy sector and the petroleum tank storage industry on the economy of Mobile County, Alabama. The variables of interest to be analyzed are employment, earnings, and final demand.

At the very best, this economic report is an estimate, which is based on the sound theoretical foundation of the region's economy and the most updated socioeconomic, demographic, retail, and general business climate information available.

This study estimates possible changes to the regional economy predicated on an existing economic operation and does not consider the presence of any externalities, either positive or negative, in its computation.

The premise of this analysis is that there will be no major events to change the short or long-term economic foundation of the region, and there will be no other competing investment in the area in the future. In other words, we assume everything else will remain constant, as we run this exercise. We also opted to include near future capital expansion plans, which have been publically announced, in our economic impact projection.

Every attempt has been made to use the most recent information. The author, however, does not assume responsibility for any changes or revisions that may have been made to the source data.

| | |
|--|----|
| Executive Summary | 4 |
| Purpose | 4 |
| Introduction | 4 |
| Economics of Petroleum Tank Storage Industry | 4 |
| Primary Data | 5 |
| Current Operational Capacity | 5 |
| Economic Impact | 5 |
| Fiscal Impact | 5 |
| Other Related Industries | 5 |
| Area Refineries | 5 |
| Port of Mobile | 6 |
| Purpose | 9 |
| Introduction | 9 |
| Chemical Manufacturing Industry in Mobile County | 9 |
| Oil and Gas Activities in the Southwest Alabama Region | 10 |
| On-shore | 10 |
| Off-shore | 12 |
| Trends in the Oil Market and Petroleum Tank Storage Industry | 12 |
| Economic Impact – Methodology | 13 |
| Notes about Impact (Analysis) Model | 14 |
| Primary Data | 15 |
| Economic Impact | 16 |
| Vertical and Horizontal Integration – A Panoramic View | 19 |
| Petroleum and Refineries | 19 |
| The Port of Mobile | 20 |
| Final Words | 21 |
| | |
| Figure 1: Oil and Gas Activity in Alabama | 11 |
| | |
| Table 1: Direct Impact of the Industry’s Existing Assets in Place | 16 |
| Table 2: The Total Economic Impact-Operation Phase of the Industry | 18 |
| Table 3: The Total Economic Impact-Employment of the Operation Phase of the Industry.. | 18 |

Executive Summary

Purpose

- The purpose of this report is to estimate the economic impact of the Energy Sector in general and the Petroleum Tank Storage Industry (the Industry) in specific on the economy of Mobile County, Alabama.

Introduction

- Chemical industry has long been a major player in Mobile's manufacturing profile.
- This has to do with Mobile's strategic location, facilities and services offered by the Port of Mobile, and its abundant reserve of oil and gas.
- Over the past 60 years, the region witnessed formation of a cluster of refineries and petrochemical plants that opted to locate in Mobile County to take advantage of Mobile's rich resources and its ready access to the Gulf of Mexico.
- Later these businesses begun to expand horizontally and vertically thus were creating a complex and integrated business network of production, transportation, storage, and distribution of petroleum products.

Economics of Petroleum Tank Storage Industry

- The U.S. is now the global growth leader in crude oil production capacity.
- Over the last four years, the U.S. added nearly 1.2 million barrels per day of capacity.
- Given the growth in the U.S.'s production capacity for crude oil, the past two years have witnessed rapid build up of oil and gas infrastructure assets (pipelines and storage tanks).
- Petroleum tank storage investments play an important role in the United States overall oil and gas industry.
- This is because they serve as a buffer point in a supply chain, as a logistic necessity, and as a trade stock for speculation.
- Location decisions for Petroleum tank industries are based on two conventionally accepted criterions.
 - They have to have access to readily available and well-maintained sea, land, and pipeline connections (most storage facilities are built in seaports), and
 - There has to be an abundant supply of skilled labor to maintain and service the infrastructure need of the Industry.

Primary Data

Current Operational Capacity

- It is our estimate that the Industry employees 1,807 full time and contract employees as of 2013.
- The payroll associated with the Industry is \$80 million.
- Finally, it is our estimate that the Industry is also responsible for approximately \$556 million of annual non-payroll expenditures.

Economic Impact

- The Industry's economic impact on the region's economy is summarized as follows:
 - Total annual GDP (output) impact of \$687.6 million
 - Employment Impact of 5,220 permanent jobs
 - Total annual earning impact of \$313.2 million annually

Fiscal Impact

- The city sales and property tax collection is projected to total to \$5.3 million, annually.
- The county's non-education sales and property tax is estimated at \$2.4 million, annually.
- The tax collection earmarked for education is estimated at \$0.5 million, annually.

Other Related Industries

Area Refineries

- There are four refineries, which depend, to a varying degree, on the storage tanks along the Mobile River for the supply of their crude oil and distribution of their refined products.
- Three of these refineries are in Alabama.
 - They are located near the Port of Mobile, in Tuscaloosa, on the Black Warrior River, and in Atmore, Alabama.
- Alabama's three petroleum refineries can process about 120,100 barrels of crude oil per day.
- The fourth refinery is located in Pascagoula, Mississippi and processes 330,000 barrels of crude oil per day to primarily produce motor gasoline, jet fuel and diesel fuel.
- Petroleum products made at these refineries are delivered to local and regional markets and shipped by pipeline to states in the northeast U.S.
- The majority of the petroleum consumed in Alabama is used as transportation fuels, particularly motor gasoline.

- It is important to note that growth or displacement of tank storage industry could provide a major opportunity or challenge for the operation of these four refineries. This is simply a matter of supply chain and product pricing.
- For example, displacement of the Industry could lead to higher local gasoline prices.
- The logic for predicting higher local gasoline prices has to do with the fact that, with the loss of local supply, gasoline and other refined petroleum products have to be provided to the southeast Alabama market from suppliers as far away as Louisiana and Texas.
- Under this scenario, consumers will absorb higher transportation costs since the demand for gasoline is price inelastic.

Port of Mobile

- The Port of Mobile is designated as an “Energy Transfer Port” and has handled petroleum products with related storage since at least the early twentieth century.
- The Energy Transfer Port designation is granted based on meeting the following two criteria.
 - The first is a port, as of 2012, must handle at least 40 million tons of cargo and,
 - Second, 25% of cargo must be qualified as an energy commodity.
- Energy commodities are defined as petroleum products, coal, natural gas, wind and solar energy components, and biofuels.
- This designation is required for the energy transfer ports to receive millions of dollars in additional federal dredging dollars.
- Such federal funds are then used for maintaining seaport navigation harbors and channels.
- As part of its maintenance and expansion program and in order to stay competitive, the Port relies on tonnage amounts in order to receive millions of dollars in federal revenue to service its ship channels.
- As of 2011, the Port of Mobile handled 55 million tons of products. A great majority of that tonnage (about 44%) was in energy related products.
- This makes the handling of energy/petroleum products, by the Port, a major consideration point for receiving the federal revenue and to be designated as a “federal navigation project”.
- It is our belief that the presence of the oil storage facilities along with their terminals plays a significant role in helping the Port to retain its “Energy Transfer Port” status.
- Loss of that traffic will make it a challenge, for the Port Authority to maintain its federal project designation hence, maintaining the shipping channels.

Coal

- The Port of Mobile handled over 20 million tons of coal in 2013 through the McDuffie Terminal, Bulk Terminal, and private terminals.
- Mobile is the fourth largest seaport for exporting U.S. coal most of which is bound for Europe and South America.
- Mobile also unloads more imported coal than any other US seaport.
- About half of the coal produced in Alabama is exported through the Port of Mobile. The other half is delivered to power plants in Alabama and to a small number of industrial facilities.
- Along with the important contribution of coal traffic towards the fulfillment of requirement for the Energy Transfer Port designation, transportation of coal products also has a sizeable economic impact on the local and regional economy.
- As of 2013, the transportation of coal products through the Port of Mobile is estimated to have created 2,629 direct jobs, 2,776 induced jobs, and 1,692 indirect jobs, for a total job impact of 7,097.
- The total annual GDP (output) impact from coal transportation through the port is \$764 million.
- Coal transportation through the Port generates over \$43 million in state and local taxes.

Final Words

- Mobile County's economy is the most diversified economy in the State of Alabama.
- It is endowed by natural resources, it has access to open waters for imports and exports, has the 12th largest port in the nation, has ship building and airplane assembly lines, and is home to a fast growing and well respected institution of higher education.
- It has air, land and rail services, a well-trained labor force, and a business friendly mentality.
- It has also been home to a growing cluster of energy related industries.
- This concentration has not happened randomly.
- Over the years, the abundant supply of oil and subsequent investment in supporting infrastructure led to such a high concentration of firms at the local level.
- Between the oil and gas sector (onshore and offshore), chemical manufacturing, oil storage, and coal, there is \$4 to \$5 billion of economic impact on the regional economy.
- Any displacement of this industry will have four possible significant impacts on the industrial landscape of the area.
 - First, a loss of 4% of the GDP will have to be filled by other industrial recruitments.

- Second, the area will not share any of the estimated \$890 billion investment in oil and gas infrastructure investment expected to occur over the next 11 years.
- Third, it may have unintended negative consequences for the operation and maintenance of the Port of Mobile.
- Finally, it may lead to higher gasoline and energy prices for residents and the business community alike.