



## Alabama Biofuels – A Homegrown Revolution

*American Biofuels Now* is a coalition of business, industry, citizens, educators, researchers and leaders who want real policies to support real businesses providing a real alternative for future energy.

*American Biofuels Now* recognizes that we cannot turn off the fossil fuel taps today, but we need to prepare ourselves for tomorrow. We recognize that biofuels are not the “magic bullet” solution but they are available NOW.

Coupled with other policies, like increased fuel economy standards, energy efficiency and conservation and other renewable energy resources the United States can attain energy independence.

Specifically, American made biofuels create:

- (1) Local economic development
- (2) Sustainable and reliable energy supply
- (3) Energy and national security
- (4) Reductions in greenhouse gas emissions

### What Gasoline is Costing Alabama

Alabama currently ranks 18<sup>th</sup> in gasoline consumption at 7 million gallons per day, or **2.62 billion gallons per year**. Add 45 million gallons of ethanol to the mix, and Alabama residents spend approximately **\$5.93 billion per year** for gasoline blends, based on a conservative \$2.23 per gallon, according to the U.S. Energy Information Administration.

Since Alabama does not produce any ethanol, we send **\$100 million** out of state each year that could be locally produced. In addition, Alabama’s economy does not benefit from participating in the supply chain of producing that fuel, and thus, does not economically benefit from employment opportunities associated with its production. Local governments also miss out on increased tax revenue stemming from the purchased land and operating facility.

### What Diesel Fuel is Costing Alabama

Currently there are approximately **1.1 billion gallons of diesel sold in Alabama, according to the EIA**. Taking into consideration a very conservative price estimate of 2.38 per diesel gallons, we sent **\$2.6 billion dollars** out of state for diesel.

### Getting to the Source of Petroleum, Ethanol and Biodiesel

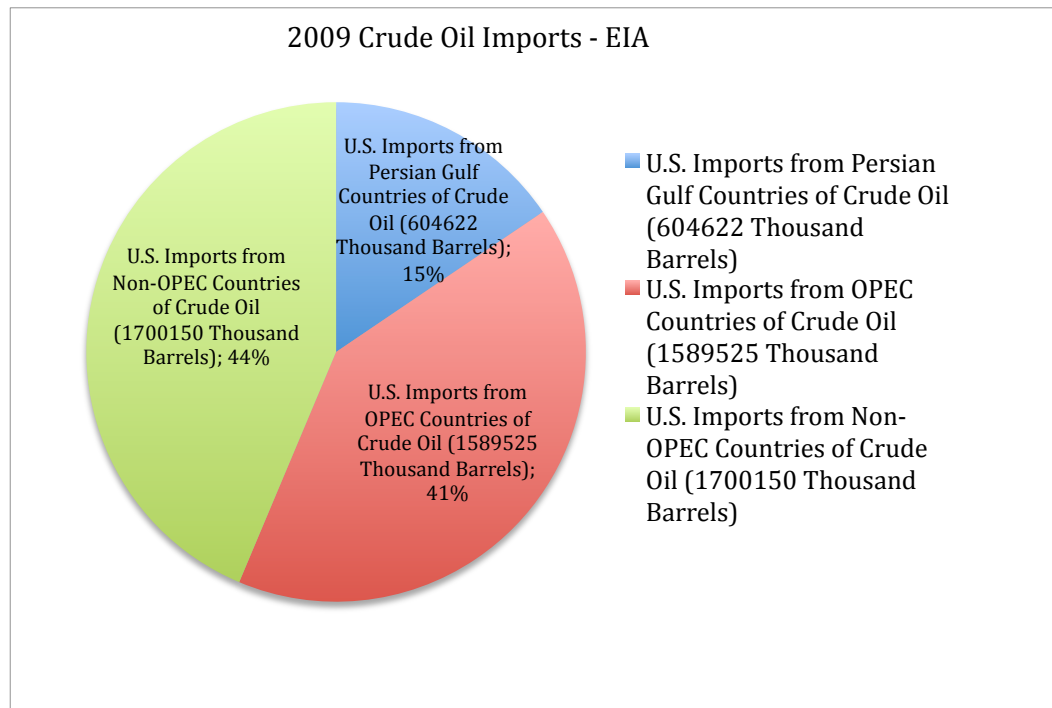
Alabama produces **23.6 million gallons** of finished petroleum fuels from its three refineries for regional and east coast markets, and receives additional finished fuel products from Texas and Louisiana via the Plantation and Colonial pipelines, according to the EIA.

Currently, no ethanol fuel production facilities exist in Alabama and there are no operating commercial biodiesel production facilities. Therefore, all the ethanol and the majority of biodiesel is imported via rail

or barge and blended with petroleum products at distribution centers before delivery to the retail outlet.

Ethanol, to be blended with gasoline, is imported primarily from the Midwest, the Caribbean Basin and Brazil. Gasoline is blended at the refineries from crude purchased on the world market.

The United States imports approximately 62 percent of its oil with 41 percent of that coming from OPEC (which includes Venezuela), 15 percent from the Persian Gulf, and the remaining 44 percent from non-OPEC countries like Canada, which provides 20 percent of this nation's oil, and Mexico, which provides another 10 percent. Many of these countries are unstable or simply unfriendly to Americans. Dependence on foreign sources leaves us politically and economically vulnerable to supply disruptions and cost increases.



### What it Means for Alabama

If Alabama produced the 10 percent of ethanol needed for blending, this state would retain at least **\$100 million** that is currently flowing to sister states and foreign nations. This estimate is very conservative since it does not take into account the "trickle-down" economic growth associated with producing 45 million gallons of ethanol annually.

The impact of ethanol production and use reaches virtually every sector of our market. Economists measure ethanol production using a variety of metrics, but we can conservatively estimate that based on a typical 40 million gallon ethanol plant, it will generate the following economic activity:

- The plant will provide a one-time boost of \$71 million to the local economy during construction.
- The plant will expand the local economic base of the community by \$70.2 million each year through the direct spending of \$58 million.

- The plant will create at least 33 full-time jobs at the plant and a total of at least 120 jobs throughout the local economy.
- The plant will increase household income for the community by \$6.7 million annually.

*Source: Nebraska Public Power District, Employment and Other Economic Impacts Associated with the Construction of an Ethanol Production Facility (January 2005), and Estimated Economic Effects for the Prospective Ethanol Production Facility in Boone County, Nebraska (June 2004).*

Economic benefits vary significantly depending on plant type, and many of the economic studies fail to measure the impacts on other industries – feedstock, research, by-products, etc. Adding to the complexity is that the larger the plant, the greater the economic multiplier. Below are some economic impacts by plant type:

- One 49 million gallon per year cellulosic ethanol plant will generate about 194 jobs and \$105.5 million annually to the local economy in the first phase of operation (Flanders and McKissick, *the Economic Impact of Cellulosic Ethanol Production in Treutlen County, 2007*)
- A 110 MGY biodiesel plant will add \$117 million to the local economy and create 635 new jobs in all sectors of the economy. (Urbanchuk, *The Economic Impact of the Biodiesel Industry, 2007*)
- One 110 MGY ethanol plant will generate about 265 jobs and \$34.98 million annually to the local community. (*Palmer, Economic Impact of Ethanol Production in Hall County, 2007*)

To produce its own ethanol, Alabama would have to build at least one plant, which in the process would create 33 full-time jobs, another 120 jobs throughout the local area, and funnel at least \$70.2 million into local economies annually.

Alabama doesn't have a biodiesel mandate, but the Federal Renewable Fuels Standard – as administered by the Environmental Protection Agency – does mandate the limited production and use of biodiesel. To incentivize the use, the federal government offers a blender credit as a carrot. If just 5 percent of Alabama's 1.1 billion gallons of diesel were to be blended with Alabama biodiesel, we would need to make about 55 million gallons. This would generate approximately \$50 million and create approximately 310 jobs (based on the example plant above).

## **What's Next**

Since current Alabama law does not mandate the use of biofuels, this creates a significant opportunity for us to invest in the industry ourselves. The EPA recently released a decision to increase blends to 15 percent ethanol for most cars, an indication that the industry will soon move to a higher blend at retail pumps.

Several Federal laws are set to expire which will devastate the industry as well, these include:

- Volumetric Ethanol Excise Tax Credit (VEETC), set to expire at the end of 2010
- Small Producers Tax Credit
- Cellulosic Ethanol Producer Tax Credit that expires at the end of 2012.

Clearly, Alabama has a tremendous opportunity to create a sustainable market for biofuels that will reduce our dependence on imported fuels both petroleum- and bio-based. By creating our own markets we create tremendous residual benefits to communities, our economy, our security and our environment.