



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*



USDA Agricultural Outlook Forum - 2002

The Economics of Ethanol and Bio-Diesel Production

Mike Bryan

BBI International

Senator Tim Johnson of SD

“I believe renewable fuels such as ethanol and biodiesel should be the centerpiece of our future energy strategy, because these fuels are home grown solutions.”

The Economics of Value-Added

Farmers often produce → **raw products** that are sold at → **wholesale prices** for **export to another state**, where they are **transformed into** → **value-added** products, and **shipped back** to the originating state, where they are → ***sold at retail.***

Production of Ethanol and Biodiesel Provide Opportunities that...

- 1). Allow growers to add value to the crop they grow - without exporting.
- 2). Create significant economic stimulus to the rural economy.
- 3). Improve the environmental quality of life.
- 4). Reduce our dependence on imported oil.
- 5). Improve the U.S. Balance of Trade.

Renewable Fuels Association

“Congress is engaged in an important debate about how to stimulate our economy and reduce our growing dependence on imported oil.”

Renewable Fuels Standard

- ✓ Congress is now considering the adoption of a **Renewable Fuels Standard** that would provide for the required introduction of domestically-produced, renewably-based alternative fuels.
- ✓ Clearly ethanol and biodiesel would be the primary contributors to this program

Economic Benefits of a Renewable Fuels Standard

- ✓ **8.8 billion gallons** of ethanol and biodiesel by **2016**
- ✓ Reduce oil imports by **2.9 billion barrels** and trade deficit by **\$63 billion** through **2016**
- ✓ Create **300,000** new American jobs

Economic Benefits of a Renewable Fuels Standard

- ✓ Increase **corn** demand from 650 million bushels per year to **2.5 billion bushels** and **soybean** demand from 51 million bushels per year to **318 million bushels**.
- ✓ Increase **corn and soybean prices** by over **11%**.

Economic Benefits of a Renewable Fuels Standard

- ✓ **\$10.5 billion** would be invested to build renewable fuels facilities
- ✓ Net farm income would increase by **\$6.6 billion**
- ✓ Direct farm payments to producers could be reduced by **\$7.8 billion**

Source: National Corn Growers Association, National Biodiesel Board and the Renewable Fuels Association

Total Economic Impact

40 Million Gallon Per Year Ethanol Plant	Total Economic Activity (\$MM)	Increased Earnings (\$MM)	Created Job-Years
Construction Phase	\$93.34	\$18.52	999
Operational Phase	\$98.32	\$20.01	1,079

Similar economic impact benefits would be attributable to biodiesel production.

Value-Added to Corn

	Annual Quantity	Price/ Unit	Revenue Cost	\$ Revenue /Bushel
Ethanol	40 mm gal	\$1.20	\$45,714,000	\$3.35
DDGS	128,000 tons	\$90	\$11,520,000	\$.77
CO2	107,000 tons	\$8.00	\$865,000	<u>\$0.06</u>
				\$4.18
Corn	15,056,000 bu	\$2.25	(\$33,876,000)	(\$2.25)
<i>Value-Added</i>				<i>\$1.93</i>

Similar value-added benefits are attributable to biodiesel production

State/Local Economic Benefits

- ✓ **85%** of the revenue generated by a renewable energy production facility is spent within a 75 mile radius of the plant.
- ✓ For every dollar in revenue generated a **\$2.25** overall economic impact is achieved.
- ✓ For states that have no oil/gasoline production, the economic benefits are significantly greater.

National Biodiesel Board

*“This is a common sense policy
for America”*



???

Questions

???