

THE ETHANOL ECONOMY



The U.S. ethanol industry experienced a record-breaking year in 2024, in several ways.

Weekly production estimates hit record levels multiple times, and annual output approached the previous high-water mark of 16.1 billion gallons set in 2018. This occurred in response to strong demand.

Domestic consumption was bolstered by continued expansion in the number of stations offering E15, along with growth in flex fuels like E85. However, the big story was record-smashing exports. Shipments surged to approximately 1.9 billion gallons, which was 450 million gallons more than in 2023 and roughly 200 million gallons above the previous record in 2018.

Exports were driven by favorable policies in major destination countries. Additionally, lower production costs helped keep ethanol competitive in price-sensitive markets—as well as at home.

Lower corn prices were the main driver of the reduction in production costs, as futures hit four-year lows in response to

another bumper crop. Subdued natural gas prices also contributed. Although it was a challenging environment for corn growers, solid demand from both the ethanol industry and the grain export market provided support. Approximately 5.5 billion bushels of corn worth over \$23 billion were processed into ethanol.

As a result of falling commodity prices, the industry's impact on the U.S. economy declined from 2023, since a substantial portion of the economic activity connected to ethanol occurs in the agriculture sector. Still, the industry continues to make significant contributions to gross domestic product and incomes

U.S. ETHANOL BIOREFINERY AVERAGE MANAGEMENT COMPENSATION BY POSITION

Maintenance Mgr.	\$111,875
Operations Mgr.	\$114,687
Lab/Quality Control Mgr.	\$115,683
EHS Mgr.	\$120,800
Plant Engineer/Engineering	\$124,583
Human Resources	\$128,500
Commodities/Sales Mgr.	\$181,500
Controller/CFO	\$187,500
Plant Mgr.	\$192,329
General Mgr.	\$253,000

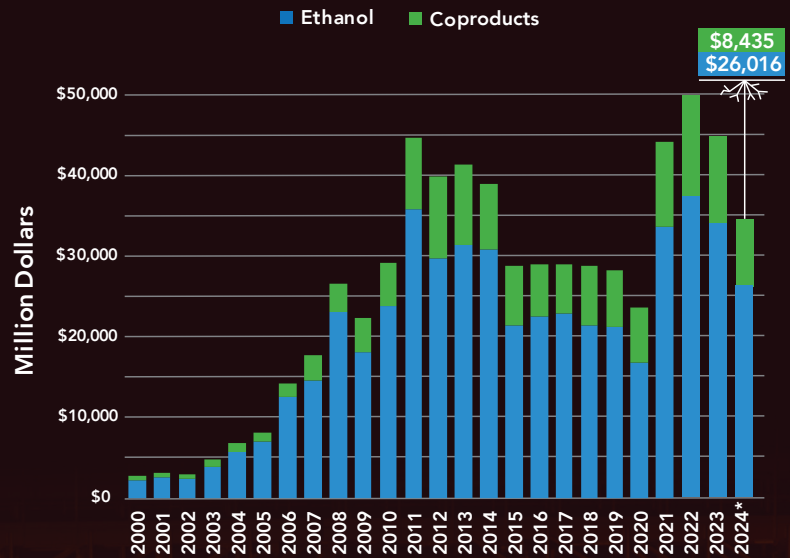
Source: RFA based on Ethanol Producer Magazine 2024 survey data

Ethanol and the 2024 Economy

Direct Jobs	55,810
Indirect/Induced Jobs	258,089
Household Income	\$28.3 Billion
GDP Contribution.....	\$53.0 Billion
Tax Revenues.....	\$10.3 Billion

Source: RFA

GROSS VALUE OF U.S. ETHANOL INDUSTRY OUTPUT

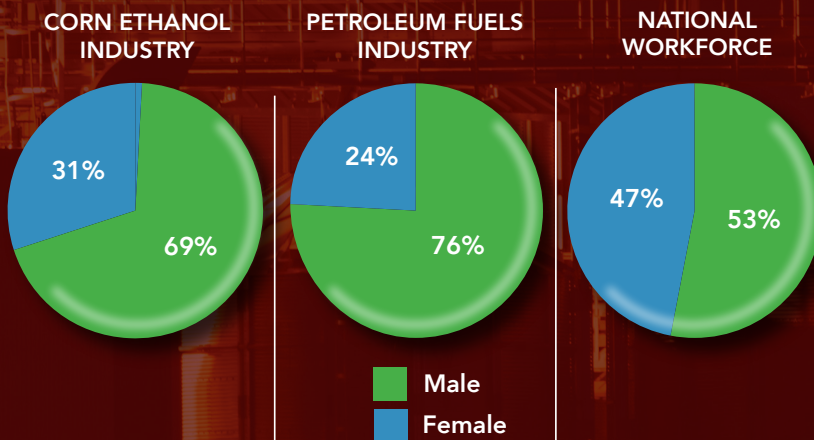


Source: RFA based on U.S. Energy Information Admin.
and U.S. Dept. of Agriculture data
*Forecast

and supports hundreds of thousands of jobs, with its impact most pronounced in rural America.

Going forward, the industry's impact will return to growth, given a 15-billion-gallon RFS requirement in 2025, the implementation of retail investments being made with \$500 million in USDA's Higher Blends Infrastructure Incentive Program (HBIIIP) funding, prospects for sustained export demand, and new uses such as sustainable aviation fuel on the horizon.

WORKFORCE DEMOGRAPHICS



SHARE OF WORKFORCE COMPOSED OF VETERANS

16%

10%

5%

Source: U.S. Dept. of Energy data