

Energy and Food: The Prices Impacting You at Your Table



The latest **U.S. Department of Agriculture food price outlook** shows that [Americans will pay nearly 6% more](#) for food this year than last. That's already evident because Americans have been grumbling about the [price of milk, bread and eggs](#) for months now, which is no shock because those staples cost almost 5% more than they did in 2022.

That may seem like a small number but let's put it in perspective: a family of four following USDA grocery budget recommendations is now [spending as much as \\$15,656](#) a year on food. Add in higher interest rates, higher gasoline costs, and price increases caused by the highest inflation our nation has seen in four decades, and financial pressure is a front-and-center, everyday issue for American families and small businesses.

Yet nearly every public dialogue about inflation and food costs is missing a key ingredient: the direct correlation between high food prices and the cost of energy.

The World Bank has found that the [cost of energy is the biggest driver of lasting food price increases](#), and that the [poorest people are harmed the most by high energy and food prices](#) in nations like the U.S.

Good energy policies must incorporate this basic understanding. Policies that restrict energy options or needlessly raise the cost of production, transmission and delivery ignore the economy-wide cost impact, to the detriment of Americans. In agriculture, the impact of bad energy policy is acute. In America today, from California to New York to Washington far too many of our energy policies proposed by our elected officials fail to consider these implications; creating lasting complications that will keep energy prices high and make energy less reliable – all while simultaneously failing to improve overall environmental performance.

Farm to Fork

Fuel and electricity account for about 15% of [U.S. farm operating costs](#), so every extra penny farmers pay to feed the nation ends up passed on to customers, be they restaurants or families stocking up for the week.

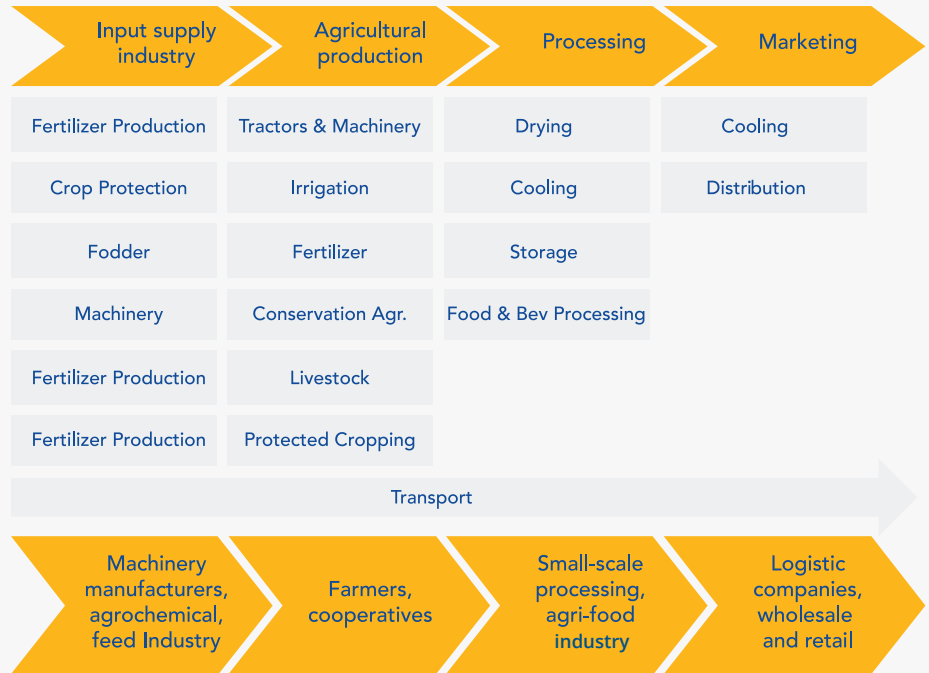
Farms and ranches spent an estimated [\\$67.9 billion](#) on energy in 2022, with crops like corn, wheat and cotton [requiring roughly double](#) the energy cost of livestock rearing. But if that number jumps, so do the prices each of us pays at the grocery store – either because that cost is passed on to consumers, or because energy costs are so high farmers and ranchers are forced to limit production and supplies drop.

The [agricultural sector](#) accounts for 3% of total U.S. end-use energy consumption. Tractors, harvesters and other farm machinery need gasoline and diesel, and so do the trucks that haul food and livestock to market. Electricity powers irrigation systems and cools agricultural buildings and equipment. Natural gas is used to heat structures and dry grain, and is an important feedstock in the production of fertilizers and some pesticides. That's a second layer of price impact: fertilizer prices alone account for roughly [a third of farm operating costs](#).

The energy used process raw ingredients into the finished products Americans consume on a daily basis equals roughly the same amount of energy [New Jersey](#) consumed in 2021. When you account for the energy used to move food to its final destination via plane, train or truck in addition to food handling and storage, it requires about five New Jerseys. The costs for this energy use are factored into the calculations that determine what we pay at a grocery store or a restaurant.



Energy Use in the Food Supply Chain



Source: [energypedia](https://energypedia.info/)



Generating Energy from Crops

Agriculture is not only an energy consuming sector, but it also produces feedstocks for biofuels. Sources of biofuels include crops and animal fats. Biofuels tout the advantage of reduced greenhouse gas (GHG) emissions and reduced dependence on foreign energy sources. A recent lifecycle analysis revealed today's biofuels produce on average [46% fewer GHG emissions than gasoline](#). Common biofuels produced today include ethanol, biodiesel and sustainable aviation fuel (SAF), also known as biojet or renewable jet fuel.

In 2021, [17.5 billion gallons of biofuels were produced](#) in the U.S., and about [16.8 billion gallons were consumed](#). Ethanol, a common gasoline additive, is produced from fermented corn and about [40% of the U.S. corn crop](#) is used to manufacture it. Today, more than [98% of the gasoline in the U.S. contains ethanol](#). Biodiesel, usually blended with petroleum diesel fuel, accounts for the second-largest share of U.S. biofuel production.

The International Energy Agency predicts a biofuels [feedstock supply shortage through 2027](#). Due to policies forcing low emission fuels, worldwide demand for biofuel feedstocks is projected to [increase 56%](#). U.S. policies such as renewable fuel standard, state-level low-carbon fuel standards and the Inflation Reduction Act's tax credits are driving a large portion of this increased biofuel consumption. Multiple U.S. agencies are working together on the [SAF Grand Challenge Roadmap](#) to address this issue by supporting ongoing innovation of new feedstock and conversion technologies. Policymakers and regulators must work together to ensure the balance of affordable food and affordable energy.

Farmers face the growing challenge of producing both food and fuel. However, with restrictive mandates such as the federal net-zero GHG emission deadlines fast approaching and with looming feedstock supply shortages, the path forward will be a rocky one. Increased demand for agricultural feedstocks is driving commodity rates higher and American consumers will ultimately pay the price.