TAXPAYERS for COMMON SENSE

FACTSHEET

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E15: 15 Percent Ethanol

A corn field ready to be harvested in Nebraska
Taxpayers for Common Sense Photo

Nearly a half century has passed since the federal government first began subsidizing corn ethanol, a biofuel that is generally blended with gasoline at a 10 percent level (E10). Historically, ethanol subsidies were centered around federal production tax credits, but they have also taken the form of government biofuel mandates, infrastructure subsidies for new fueling pumps, grants for ethanol production facility upgrades, and more. Approximately 15 years ago, the ethanol industry also successfully began securing federal policies favorable to a blend of 15 percent ethanol and 85 percent gasoline, known as E15.

Congress eliminated certain ethanol subsidies more than a decade ago (specifically, the $6 billion-per-year ethanol tax credit in 2011), but since then both Democratic and Republican Administrations have circumvented lawmakers' intentions by adding other subsidies and special interest ethanol policies to an already distorted marketplace. Most recently, the One Big Beautiful Bill Act (OBBBA) of 2025 increased ethanol tax breaks by broadening eligibility for the Section 45Z Clean Fuel Production Credit, potentially allowing corn ethanol and other food-based biofuels to qualify.

When ethanol subsidies were initially scaled back in 2011, the ethanol lobby began seeking Congressional and the Administration's support for higher blends of ethanol to increase the amount of ethanol produced and sold in the U.S. Lobbyists attempted to secure policies that increased ethanol blends beyond the traditional 10 percent blend, which is the most widely used gasoline/ethanol mix in the U.S. One of the primary new fuels was E15, but E85 was also promoted.

In 2011, the Environmental Protection Agency (EPA) first approved the use of 15 percent ethanol blends with gasoline in non-summer months, which had been previously limited to a 10 percent blend due to air quality issues and incompatibility with fueling infrastructure and small and older engines, among other issues.[1] Then, in 2019, EPA announced its decision to lift restrictions on E15 use in summer months.[2] However, in July 2021, the U.S. Court of Appeals for the District of Columbia struck down EPA's interpretation of the law, finding that Congress only allowed for summertime use of E10, not E15.[3] In April 2022, President Biden announced plans to allow emergency use of E15 during summertime months, beginning in June 2022, despite the court's decision.[4] A renewed push for year-round E15 sales could be heard from ethanol proponents in 2025 and 2026.

Alongside increasing the allowable ethanol blend limits, from 2011 to 2022, the U.S. Department of Agriculture (USDA) unilaterally—without Congressional approval—subsidized ethanol blender pumps through at least three different programs: the Rural Energy for America Program (REAP), the Biofuels Infrastructure Partnership (BIP), and the Higher Blends Infrastructure Incentive Program (HBIIP). Blender pumps are new, specialized gasoline pumps with equipment compatible with higher blends of ethanol—including E15—which are more corrosive than other fuels. The Inflation Reduction Act (IRA) of 2022 added specific subsidies for ethanol blender pumps and biofuel infrastructure projects to the tune of $500 million. IRA subsidies represented the first time Congress specifically authorized taxpayer dollars—outside the tax code—to be used for ethanol blender pump projects.

Despite these subsidies and special interest carve-outs, the ethanol industry continues to lobby Congress and the Administration for more federal support and favorable policies. Additional subsidies for E15 and year-round approval of E15 sales have also been proposed in Congress.[5]

Adding more subsidies and special interest carve-outs for first-generation biofuels—such as corn- and soy-based fuels—would throw more money after bad. Not only would taxpayer dollars be wasted, but new subsidies would further distort the marketplace and pick winners and losers by locking in first-generation biofuels. Instead of wasting tens of billions more dollars and administrative staff time on government expansion of the ethanol industry, Congress should roll back decades-long subsidies and mandates for ethanol and other biofuels.

Background

The use of E15, a mixture of approximately 15 percent ethanol and 85 percent gasoline, was first approved in 2011. That year, EPA granted a partial request from an ethanol trade group—Growth Energy—to allow ethanol blends to increase from E10 to E15.[6] Growth Energy sought an expansion

of the already heavily subsidized industry to overcome the E10 blend wall, which at the time was widely considered the maximum amount of ethanol that can safely be blended into U.S. gasoline. Because of E15's incompatibility with older vehicles and small engines, among other issues, the ethanol market was generally limited to E10 prior to 2011.

At the time, due to concerns with air quality and engine damage or failure, EPA prohibited E15 use in summertime months and only allowed the new fuel to be used in certain engines—specifically Model Year 2001 and newer light-duty vehicles. In EPA's 2011 decision, E15 use was prohibited in older vehicles, motorcycles, chainsaws, lawnmowers, outboard/boat motors, ATVs, and other similar engines.[7] Ethanol is more corrosive than gasoline, so some fueling infrastructure, such as gas pumps and underground storage tanks, also must be replaced if the equipment dispenses or stores E15—often at taxpayers' expense.

Despite these and several other problems with E15—including higher food and feed prices[8], lower fuel economy[9], and greater greenhouse gas (GHG) emissions[10]—the Trump Administration approved year-round E15 sales in 2019.[11] The announcement was met with swift opposition from a diverse set of interests—anti-hunger advocates, food industry, environmentalists, and taxpayer advocates alike. At the time, some questioned whether the federal government alone retained the authority to expand E15 without Congressional approval, which proved correct in a July 2021 court ruling.[12] Despite this, Midwestern lawmakers reintroduced legislation[13] to allow E15 sales during the summer, and the Biden Administration announced plans to allow emergency use of E15 during the summer of 2022.[14] Now, an additional push is currently underway to allow E15 sales year-round, but its outlook is uncertain as the policy was previously not approved by the Administration due to air quality concerns.

Indirect Subsidies for E15

The federal government provides numerous indirect, market-distorting subsidies for higher ethanol blends such as E15, including the following:

Ethanol Mandates

- **Renewable Fuel Standard (RFS) mandate:** Biofuels consumption in the U.S. is already mandated through the federal RFS mandate. The RFS was first enacted in 2005 and subsequently expanded in the 2007 Energy Independence and Security Act (EISA). The RFS required 36 billion gallons of biofuels to be blended with U.S. gasoline and diesel by 2022, but these volumes failed to be met. Significant GHG emission reductions also failed to be realized, let alone the RFS's goal of spurring the next generation of biofuels from non-food sources.[15] The majority of RFS gallons consumed in the U.S. to date have been from ethanol, which is largely derived from corn, and biomass-based diesel, which is largely produced from soybeans. The roughly 15 billion gallons of ethanol consumption each year under the RFS translates into roughly an E10 blend, thus why the industry advocates for E15

use year-round—to increase its production and sales. The ethanol industry has also lobbied, so far unsuccessfully, to allow corn ethanol to qualify as an "advanced" biofuel in the RFS, which would allow the industry to fill other pots of the RFS that were meant for second generation, "advanced" biofuels derived from non-food crops.

Biofuel Production Subsidies

- **Bioenergy Program for Advanced Biofuels (BPAP):** Despite a statutory prohibition on corn ethanol receiving any farm bill energy title funding, corn ethanol facilities continued to receive subsidies for the expansion of ethanol production through BPAB. More than $60 million in taxpayer dollars were wasted on corn-based biofuels projects from 2009-2020 even though the program was aimed at spurring the next generation of "advanced" biofuels—as the program's title suggests—not conventional, first-generation biofuels such as corn ethanol.[16]

- **Clean Fuel Production Credit (45Z):** The IRA brought ethanol subsidies back from the dead in part through the new 45Z tax credit. But OBBBA expanded 45Z further, potentially reinstating tens of billions of dollars in biofuel tax credits for first-generation fuel that is already mandated and subsidized. OBBBA also watered down carbon intensity eligibility requirements, meaning corn ethanol facilities that increase GHG emissions, as compared to gasoline, may still qualify for 45Z tax breaks, The U.S. Department of the Treasury estimates that the 45Z credit, as recently as amended, will cost taxpayers $53.1 billion from FY2026 to FY2035.[17]

- **Rural Energy for America Program (REAP):** Even though REAP, a farm bill energy title program, was intended to promote rural wind, solar, and hydropower projects, USDA continues to subsidize corn ethanol facilities. At least 17 ethanol facilities have received a combined $30.5 million in REAP subsidies from 2011-2023, primarily in the name of "energy efficiency".[18] Similar to BPAB, this is yet another example of corn ethanol having its hand in programs not meant for the mature industry.

Feedstock Subsidies

- **Corn subsidies:** Through a maze of commodity and crop insurance supports, the U.S. props up corn ethanol and E15 indirectly by subsidizing the very corn that later is converted into ethanol. More than 30 percent of the U.S. corn crop is used as a feedstock for ethanol production.[19] Through the 2018 farm bill and OBBBA, farmers receive corn subsidies through programs like Price Loss Coverage (PLC), Agriculture Risk Coverage (ARC), and the federal crop insurance, as well as increasingly through disaster aid, economic aid, and trade war-related bailouts. Corn subsidies such as ARC and PLC are expected to cost taxpayers billions of dollars each year, without factoring in additional payments.[20] In addition, the highly subsidized crop insurance program, in which corn receives more subsidies than any other crop,[21] is expected to cost taxpayers approximately $15 to $16

billion annually over the next decade.[22]

Biofuels Infrastructure Subsidies – Ethanol Blender Pumps

- **Rural Energy for America Program (REAP):** In addition to the direct subsidies for ethanol facilities mentioned above, from 2011 to 2014, USDA unilaterally—without Congressional approval—allowed an additional $5.2 million in REAP funding to subsidize ethanol blender pumps dispensing blends such as E15, in addition to other biofuels infrastructure projects.[23] One of the largest REAP awards for biofuels infrastructure—$448,500—went to "United Cooperative, a full-service co-op that services south-central Wisconsin farmers and consumers… [for the] installation of 33 ethanol blender pumps and 17 biodiesel dispensers" in 2011.[24]
- **Biofuels Infrastructure Partnership (BIP):** After Congress prohibited ethanol blender pumps from receiving REAP funding in the 2014 farm bill, USDA circumvented Congressional intent again in 2015 by providing $100 million in subsidies for ethanol blender pumps and storage tanks through a new program—entitled the Biofuels Infrastructure Partnership.[25] The program was funded through USDA's Commodity Credit Corporation (CCC), which is normally reserved for dispensing farm subsidies to agricultural producers. Former USDA Secretary Tom Vilsack was awarded TCS's Golden Fleece award for not only failing to heed Congressional intent but also for forcing taxpayers to spend money on these special interest projects.[26]
- **Higher Blends Infrastructure Incentive Program (HBIIP):** Adding more insult to injury, in 2020 and 2021, USDA announced an additional $200 million in subsidies for ethanol infrastructure projects through the CCC. Another $500 million was added in 2022 by Congressional appropriators in the IRA.[27]

These subsidies and programs fail to require minimum environmental standards to be met or provide any real emission reduction benefits in exchange for taxpayer supports. While the RFS technically requires corn ethanol facilities to reduce GHG emissions by at least 20 percent, most facilities were grandfathered into the program—hence, GHG reductions are not required in practice. Other land use protections in the RFS have not been properly implemented by EPA, resulting in native grasslands, wetlands, and other sensitive land being converted into biofuels feedstock production. Thus, the majority of biofuels produced to meet the RFS—and meet demand for higher ethanol blends such as E15—fail to benefit the climate. This is unlikely to change in the future.[28] Similarly, while the 45Z technically set the fuel carbon intensity ceiling at 50 kg CO2e per mmBTU, these calculations were watered down significantly from 2022 to 2025, including the explicit exclusion of any emissions attributed to indirect land use change. Other ethanol subsidy programs in the farm bill energy title, such as REAP and BPAB, do not require any GHG emissions reductions to be met in exchange for taxpayer subsidies.

In effect, ethanol and corn subsidies benefiting E15 end up working at cross-purposes with other federal programs aimed at clean air and water, land conservation, climate protection, or restoration of wildlife habitat, wasting taxpayer dollars in the process.

How We Got Here

For 50 years, the corn and ethanol lobbies have advocated for support from the federal government. While the specific asks of federal taxpayers have changed over time, the underlying request is always the same—more federal subsidies and government-led expansion of corn and ethanol markets. This continues today despite the mature state of the industry.

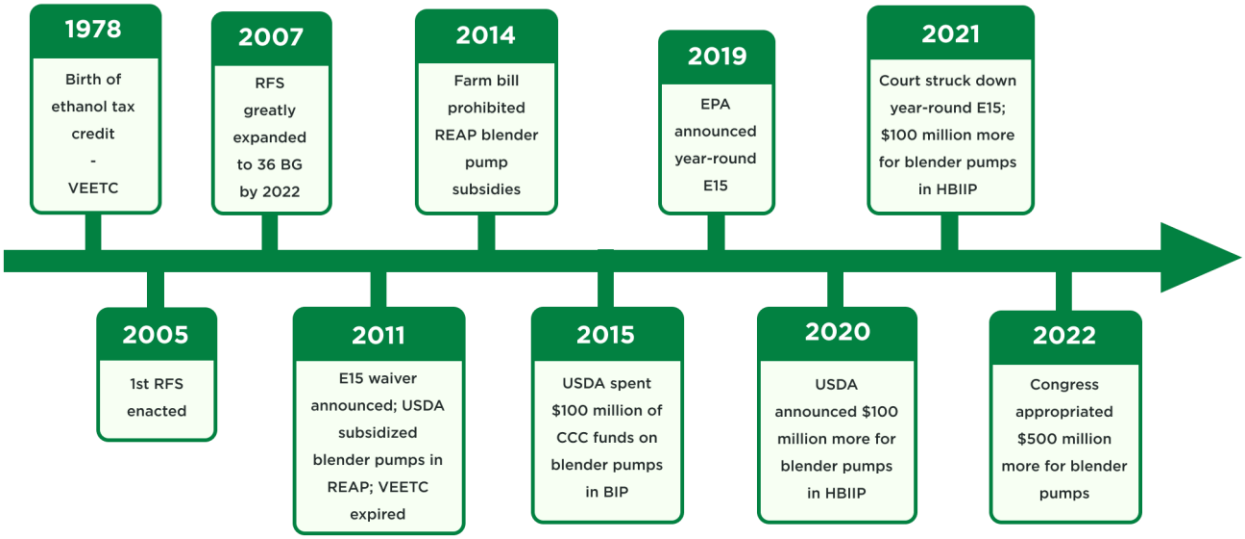
In 1978, the corn ethanol industry received what later became the ethanol tax credit—known as the Volumetric Ethanol Excise Tax Credit, or VEETC. Prior to 2005, the industry lobbied hard for the first RFS and in 2007 for the RFS2—expansion of the initial RFS biofuels mandate. At the time, corn prices were low, and the corn lobby sought greater demand for corn to prop up prices. The combination of VEETC, the RFS, and the ethanol tariff did just this; corn prices doubled through 2012 when a drought also contributed to record $8-per-bushel corn prices.[29]

Farm income reached all-time highs, and farmers were satisfied for the time being. But as ethanol approached the E10 blend wall and reached its 15-billion-gallon mandate in the RFS, the industry began to seek E15 approval and lobby for ethanol infrastructure subsidies to dispense higher ethanol blends. By moving from E10 to E15, the ethanol industry projected production would increase, but this was limited by the slow uptake of E15.

Ethanol blender pump subsidies—to dispense E15 and other higher ethanol blends—and new 45Z tax breaks for ethanol are layered on top of a government mandate for biofuels use. With the addition of COVID-19 subsidies for both the biofuels[30] and corn industries,[31] among other federal supports, government subsidies to first-generation biofuels industries continue.

Photo by engin akyurt via Unsplash

Timeline of E15 Approval & Other Ethanol Subsidies



Subsidies Cost Taxpayers and Consumers

Increased subsidies for E15 and other corn ethanol blends bring a range of costs for both consumers and taxpayers.

Higher Food and Feed Costs

Today, 33% of U.S. corn is diverted to biofuel production.[32] That shift inflates commodity prices, especially in years with supply shocks.[33] As demand for corn increases, other crops like sorghum, barley, and oats—grown on competing farmland—also see price bumps. These cost hikes hit livestock producers especially hard, since corn and soy make up more than half the cost of raising many animals, and "have a ripple impact on food prices and the many other products produced from these commodities."[34]

Higher Costs and Limited Choices for Consumers

Higher blends of ethanol are more corrosive than alternative fuels—like traditional gasoline—passing the costs of new infrastructure onto taxpayers. Because the cost of major retrofits to accommodate the higher blended fuels, including new underground storage tanks and fuel dispensers, are untenable for many, taxpayers and consumers are regularly made to foot the bill for E15 and E85 blender pump installation.

Higher blends of ethanol are not suitable for boats, motorcycles, and other small engines.[35] In fact, many vehicles still on the road today are incompatible with E15, exposing car owners to costly

repairs and voided warranties. Boat owners have already felt these costs, having to make expensive repairs or replacements due to higher blends of ethanol like E15.

Environmental Impacts

EPA's own analyses have found that corn ethanol production may fail to deliver climate benefits.[36] Independent experts warn that corn ethanol may actually increase—instead of decrease—GHG emissions.[37] Ethanol expansion has also resulted in the conversion of millions of acres of sensitive land into input-intensive corn production even though the RFS prohibited new land from being plowed to grow biofuels feedstocks such as corn. [38] EPA's triennial reports on the environmental impacts of the RFS agreed, finding that corn ethanol worsens air, soil, and water quality, in addition to negatively impacting water quantity and wildlife habitat. [39]

In addition, the ethanol industry once argued that the need for E15 and blender pump subsidies was to leave room in the fuel market for cellulosic ethanol,[40] a second-generation biofuel derived from non-food biomass feedstocks such as perennial grasses or agricultural residues. However, the industry no longer uses this talking point since it has become clear that the cellulosic industry is far away from achieving its lofty RFS targets.

In recent years, for instance, actual cellulosic blending volumes have been reduced by approximately 95 percent from statutory biofuels volume mandates set by Congress in 2007.[41] The National Academies of Sciences predicted in 2011 that the RFS would unlikely achieve its goals of lower GHG emissions, improved energy security, and rapid development of the advanced biofuels industry, and 15 years later, this prediction proved correct.[42]

> *"Absent major technological innovation or policy changes, the RFS mandated consumption of 16 billion gallons of ethanol equivalent cellulosic biofuels is unlikely to be met in 2022."* [3]
> *National Academies of Sciences, 2011*

Conclusion

Nearly a half century of government-set mandates and subsidies for the corn ethanol industry have distorted markets, picked winners and losers, and worked at cross purposes with other federal programs aimed at protecting consumers, taxpayers, water, and our land. Expanding the use of E15 beyond summer sales would likely have limited effects due to its lower fuel efficiency, cost, and limited distribution. Expanding E15 use long-term through legislative action—or worse yet, specifically subsidizing it—would only further distort energy and crop markets.

Farmers are currently crying wolf about low commodity prices. Continuing to bail corn producers out and create government-subsidized industries will not result in long-term prosperity for farmers and ranchers. Instead of wasting more taxpayer dollars on ethanol infrastructure and production, plus favored policies for E15, policymakers should end market distortions and allow agricultural producers to invest in practices that result in long-term agricultural prosperity and financial

success. Forcing taxpayers to subsidize a fuel that has been mandated and subsidized for nearly 50 years, plus adding other policy carveouts for higher ethanol blends, is not fiscal responsibility. It is fiscal insanity.

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[19] Reflects the percentage of total U.S. supply of corn, including imports and existing stock, in 2024/25 used for domestic biofuels production. Corn-based ethanol production includes processing by-products such as distillers' grain, corn gluten feed/meal, and corn oil. Source: U.S. Department of Agriculture, "World Agricultural Supply and Demand Estimates," January 2026 https://www.usda.gov/oce/commodity/wasde/wasde0126.pdf

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