



---

[HF 2128](#) – Renewable Fuels Incentives (LSB5021HV.3)  
Staff Contact: Jeff Robinson (515.281.4614) [jeff.robinson@legis.iowa.gov](mailto:jeff.robinson@legis.iowa.gov)  
Fiscal Note Version – Final Action

---

**Description**

[House File 2128](#) relates to ethanol and biodiesel blended motor fuels by establishing retail dealer requirements related to fuel products advertised and offered for sale, enhancing and extending State tax credits, modifying motor fuel infrastructure grant eligibility requirements, extending the motor fuel tax differential for ethanol and biodiesel blends, and requiring State vehicles to be able to use and to use certain types of biofuel blends.

**Division I** establishes a new requirement that retail motor fuel sites that sell gasoline products must advertise and offer for sale an E-15 ethanol blend. If the motor fuel site has more than one functioning gasoline dispenser, the motor fuel site may also sell unblended gasoline and/or blended ethanol below E-15. The requirement is effective January 1, 2023. The requirement applies to all retail motor fuel sites that install, replace, or convert a motor fuel storage tank located at the site on or after January 1, 2023, and to every motor fuel site on or after January 1, 2026.

The Secretary of Agriculture is granted authority to refuse to issue or renew a commercial weighing and measuring device license issued to a retail motor fuel dealer if the dealer does not comply with the new E-15 advertising and sales requirements. The Secretary may also suspend or revoke an existing license for noncompliance with the requirement.

Several potential exceptions to the new advertising and sales requirements are provided:

- Motor fuel dispensers at a retail motor fuel site that dispense aviation fuel, diesel fuel, or kerosene.
- Motor fuel dispensers that are located at a commercial marina or are attached to a mobile tank vehicle used for off-site dispensing of motor fuel.
- During periods associated with installation or repair of the fuel dispensing infrastructure at the motor fuel site.
- During periods in which the requirement is suspended through an Executive Order issued by the Governor. Suspensions by the Governor may apply on a statewide or regional basis.
- During periods of E-15 unavailability in which the Secretary of Agriculture has temporarily waived the requirement for a specific motor fuel site through an administrative order.
- During periods in which the Secretary of Agriculture has temporarily waived the requirement for a specific motor fuel site through an administrative order based on a finding by the Secretary that the motor fuel dispensing infrastructure at the motor fuel site is incompatible with E-15 blends. Waivers of the requirement are based on an application by the retail site owner and one of the following findings by the Department of Agriculture and Land Stewardship (DALs):
  - Class 1 waiver — A finding that all motor fuel storage tanks at the retail site were installed prior to specified years. All tanks installed prior to 1986, as well as double walled fiberglass tanks installed prior to 1992 and single walled fiberglass tanks installed prior to 1997, are eligible for the waiver.

- Class 2 waiver — A finding by the DALs that some portion of the motor fuel dispensing infrastructure at the site is not compatible with E-15 blends, and additionally, that the portion of the cost of assessing and replacing the incompatible infrastructure that is the responsibility of the motor fuel site owner exceeds a calculated amount.
- Retail locations where gasoline sales averaged 300,000 gallons or less over a qualifying period.

**Division II** prohibits a retail motor fuel dealer from installing, replacing, or converting gasoline storage and dispensing infrastructure at a motor fuel site unless the resulting infrastructure is compatible with E-85 ethanol blends. The Division also prohibits a retail motor fuel dealer from installing, replacing, or converting diesel storage and dispensing infrastructure unless the resulting infrastructure is compatible with B-20 or higher biodiesel blends. Both prohibitions are effective beginning January 1, 2023.

**Division III** establishes new requirements for motor fuel and motor vehicles purchased by the State of Iowa. Furthermore, it requires the Department of Administrative Services to compile a State Fleet Qualified Renewable Fuels Compliance Report that includes information from the Commission for the Blind, Board of Regents institutions, Department of Transportation, and Department of Corrections, with the report due to the Governor and General Assembly by March 1 of each year. The Bill requires the Director of the Department of Administrative Services, as part of any competitive bidding procedure for the purchase of a motor vehicle using diesel fuel, to require the bidder to certify that the vehicle's manufacturer expressly states that the vehicle is able to use B-20 or higher blends. Division III takes effect on July 1, 2022.

**Division IV** modifies the existing [E-85 Gasoline Promotion Tax Credit](#), [Biodiesel Blended Fuel Tax Credit](#), and [E-15 Plus Gasoline Promotion Tax Credit](#). The changes extend the availability of the tax credits beyond current sunset dates by one to three calendar years. The changes also:

- E-85 — Repeal a provision that allows a retail motor fuel dealer to claim both E-15 and E-85 Gasoline Promotion Tax Credits for the sale of the same gallons. This change is effective after CY 2025.
- Biodiesel — Replace the current 3.5 cent and 5.5 cent per gallon tax credit for B-5 and higher biodiesel blends with a tax credit equal to 5.0 cents, 7.0 cents, or 10.0 cents for B-11 and higher blends.
- E-15 — Modifies the tax credit rate from 3.0 cents or 10.0 cents per gallon, depending on the time of year of the sale, to a tax credit of 9.0 cents regardless of the date of the sale.

**Division V** extends the preferential motor fuel tax schedule for E-15 and higher blends for four years, to June 30, 2030. The preferential motor fuel tax schedule for biodiesel blends is also extended to June 30, 2030, but the threshold blend needed to receive the reduced tax rate is increased from the current B-11 level to B-20. Both changes are effective beginning July 1, 2024. Division V also amends retail dealer motor fuel reporting requirements retroactively to January 1, 2022.

**Division VI** extends the existing [Biodiesel Production Credit](#) through CY 2027 (three years) and doubles the tax credit rate to 4.0 cents per gallon of biodiesel produced. Both changes are effective beginning CY 2023.

**Division VII** makes changes to the Renewable Fuel Infrastructure Program (RFIP) created in Iowa Code section [159A.14](#). The RFIP provides cost share grants to install, replace, or convert motor fuel infrastructure at motor fuel sites. Under current law, to be eligible for grants through

the RFIP, the new motor fuel infrastructure must be compatible with E-15 or biodiesel as applicable.

Under the Bill, the new motor fuel infrastructure must be compatible with E-85 or B-20 fuels as applicable. The maximum infrastructure grant available for a single site ranges from 90.0% of eligible costs or \$63,900, whichever is lower, to 70.0% or \$50,000, whichever is lower. Further supplemental grants are available for additional sites owned by the same retail dealer. The Bill gives grant prioritization to applications for existing motor fuel sites and for sites where the owner's portion of the required cost is not high enough for a Class 2 E-15 advertising and selling requirement waiver to be granted by the Secretary of Agriculture.

During a five-year compliance period, ethanol infrastructure grant beneficiaries are required to sell E-15 fuel. Biodiesel infrastructure grant beneficiaries are required to sell B-5 fuel during the November through March period and B-11 fuel for the remainder of the year.

Current Iowa Code section [159A.17](#) provides a \$5.0 million annual General Fund standing appropriation to the RFIP. For FY 2023 only, [HF 2579](#) (Rebuild Iowa Infrastructure Appropriations Bill) replaces the General Fund appropriation to the RFIP with a \$10.0 million appropriation from the Rebuild Iowa Infrastructure Fund.

**Criminal Penalty** — Section 20 of the Bill creates a new action that is subject to a criminal penalty. An application by a retail dealer, or an inspection report by an installer, for a Class 1 or Class 2 waiver that the dealer or installer knows contains information that is not true and correct is defined as perjury. Perjury is a Class D felony that upon conviction is punishable by confinement for no more than five years and a fine of at least \$1,025 but not more than \$10,245. This Section takes effect January 1, 2023.

**Civil Penalty** — Section 71 of the Bill creates a new action that is subject to a civil penalty. A retail dealer who does not submit a required annual fuel gallons report to the Department of Revenue, or fails to maintain records related to the report, may incur a \$100 civil penalty for each occurrence.

### **Assumptions**

#### **Blended and Unblended Gasoline Sales, Tax Credits, and Motor Fuel Tax Revenue**

- The projected annual retail sales of blended and unblended gasoline are based on the [Retailers Fuel Gallons Annual Reports](#) filed by Iowa fuel retailers with the State. The Department of Revenue produces an [annual summary](#) that provides the number of gallons sold in Iowa, both in total and by specific blend (E-0, E-10, E-15, E-20, and E-85). The [CY 2019 report](#) concludes that 1,565 million gallons of blended and unblended gasoline motor fuel were sold by retailers who filed 2019 reports with the Department. Due to the impact of COVID-19 on CY 2020 travel and therefore fuel purchases, the CY 2020 version of the report is not used for this projection.
- The Department's [Fuel Tax Monthly Report](#) for the 12 months that represent CY 2019 indicates that fuel tax was paid on 1,657.6 million gallons of gasoline fuel for the year. Therefore, the number of gallons represented in the annual retailers' report is 94.4% of the gallons sold at retail over the period. To adjust for the missing gallons, the gallons of each blend category are divided by 94.4% so that total retail gallons equal taxed gallons for the year. The CY 2019 gasoline gallons reported by retailers and the adjusted gallons are presented in **Table 1**.

**Table 1**  
**2019 Iowa Gasoline Retail Sales — Reported and Adjusted**  
 Fuel Gallons in Millions

	<u>E-0</u>	<u>E-10</u>	<u>E-15</u>	<u>E-20</u>	<u>E-85</u>	<u>Total</u>
CY 2019	211.5	1,284.3	49.0	1.1	19.0	1,564.9
Adjusted CY 2019 *	224.0	1,360.4	51.9	1.2	20.1	1,657.6

\* Adjusted so total retail gallons match annual taxable gallons.

- Gasoline (E-0) and pure ethanol (E-100) have different energy content by volume. Gasoline contains 115,400 BTU (British Thermal Units) per gallon, while E-100 contains 75,670 BTU per gallon. A vehicle that travels a given distance on E-0 will require a greater volume of fuel to travel the same distance on an ethanol blend. This estimate assumes the same number of miles driven by Iowa retail fuel purchasers under the Bill as is assumed under current law. In order to account for the miles per gallon difference between blends, this projection adjusts the overall fuel volume using the following energy content factors:
  - E-0 = 1.000
  - E-10 = 1.036
  - E-15 = 1.054
  - E-20 = 1.074
  - E-85 (calculated as E-79) = 1.374
- Using the adjusted fuel gallons sold by ethanol content as provided in the Retailers Fuel Gallons Annual Reports for CY 2016 through CY 2019 and the per-gallon energy content factors listed for each blend in the previous assumption, it is calculated for this projection that the miles traveled using taxed gasoline gallons purchased at Iowa retail locations decreased at an average annual rate of 2.2% over the period. For this projection, this same annual rate of decline in miles driven using gasoline as the fuel is assumed for CY 2020 through CY 2030.
- In recent years, the mix of blended and unblended gasoline purchased at Iowa retail locations has been changing modestly, with unblended and E-10 blend gallons decreasing and E-15 and E85 blends increasing. For this projection, the fuel mix trends for unblended (decreasing), E-15, and E-85 (both increasing) are assumed to continue through CY 2030 at the same average annual gallon change experienced from CY 2016 to CY 2019. To incorporate this assumption and maintain the miles-driven assumption, the gallons of E-10 are reduced by a factor that results in an overall calculated decline in miles driven of 2.2% each year.
- Motor fuel tax is deposited in the Road Use Tax Fund, where it is used for road purposes. The motor fuel tax rate for unblended and E-10 is \$0.300 per gallon and E-15 and higher blends are currently taxed at \$0.240 per gallon. The tax rate for E-15 is designed to change as E-15 and above gallons increase as a percent of total gasoline gallons sold. Current law ends the preferential tax rates for higher blend ethanol starting FY 2027. The assumptions concerning the mix of gasoline blends result in projected E-15 and above motor fuel tax rates of \$0.240 per gallon through FY 2025 and \$0.245 per gallon for FY 2026.
- The Bill has several provisions that are designed to increase the amount of ethanol consumed as a component of gasoline motor fuel and thereby alter the mix of fuel blends sold in Iowa when compared to current law. The Bill:
  - Requires, beginning January 1, 2023, that any gasoline retail site that installs, replaces, or converts a motor fuel storage tank must advertise for sale and sell E-15. In addition,

beginning January 1, 2026, all gasoline retail sites are required to advertise for sale and sell E-15 unless granted a temporary waiver from the requirement.

- Requires that any time a retail motor fuel dealer installs, replaces, or converts motor fuel storage and dispensing infrastructure, the resulting infrastructure must be capable of storing and dispensing fuel classified as E-85 or higher.
- Extends existing retail tax incentives for the sale of E-15 and E-85, set to expire at the conclusion of CY 2024, by one and three calendar years respectively.
- Increases the tax credit for E-15 blends to 9.0 cents per gallon, starting with CY 2023.
- Extends the current motor fuel tax schedule that taxes E-15 and higher blends at a rate of up to 6.0 cents per gallon below that of unblended gasoline and E-10 for four fiscal years.
- The current income tax credit for E-15 sales equals 10.0 cents per gallon for the summer period and 3.0 cents for the winter period. The Department of Revenue reports that 39.4% of E-15 gallons are sold during the summer period and 60.6% are sold during the winter period. This equates to an average tax credit of 5.8 cents per gallon across a full year. The Bill changes the E-15 credit to 9.0 cents per gallon for all sales, beginning January 1, 2023. Therefore, the estimated average change in the credit across an entire year is an increase of 3.2 cents per gallon. In addition to this change, the E-15 tax credit is extended for one year.
- The current income tax credit for E-85 sales equals 16.0 cents per gallon, and the credit remains at that level under the Bill. The Bill extends the credit for an additional three years beyond its current sunset date of December 31, 2024.
- E-15 and E-85 tax credits are refundable, and therefore 100.0% of earned credits are assumed to be redeemed. It is further assumed that tax credits earned for a calendar year are redeemed in the fiscal year that follows the end of the calendar year in which the tax credits were earned.

### **Blended and Unblended Diesel Sales, Tax Credits, and Motor Fuel Tax Revenue**

- Projected annual retail sales of blended and unblended diesel fuel are based on the [Retailers Fuel Gallons Annual Reports](#) filed by Iowa motor fuel retailers with the State. The Department of Revenue produces an [annual summary](#) that provides the number of gallons sold in Iowa, both in total and by specific blend (B-0, B-01 to B-04, B-5 to B-10, B-11 to B-19, B-20 to B-49, and B-50 to B-100). The [CY 2019 report](#) concludes that 636.9 million gallons (blended and unblended) of taxed diesel fuel and 200.7 million gallons of tax-exempt diesel fuel were sold by retailers who filed 2019 reports with the Department. Due to the impact of COVID-19 on CY 2020 travel and therefore fuel purchases, the CY 2020 version of the report is not used for this projection.
- The Department of Revenue's [Fuel Tax Monthly Report](#) for the 12 months that represent CY 2019 indicates that fuel tax was paid on 756.2 million gallons of taxed diesel fuel for the year. Therefore, the number of taxed gallons represented in the annual retailers' report is 84.2% of the taxed gallons sold at retail over the period. To adjust for the missing gallons, each blend category of diesel fuel is divided by 84.2% so that total retail gallons equals taxed gallons for the year. Since tax-exempt diesel gallons sold are not included in the Fuel Tax Monthly Report, the number of tax-exempt gallons cannot be accurately adjusted for gallons missing from the retailer report. The CY 2019 diesel gallons reported by retailers and the adjusted gallons are presented in **Table 2**.

**Table 2**  
**2019 Iowa Diesel Retail Sales — Reported and Adjusted**  
Fuel Gallons in Millions

	B-0	B-1 to B-4	B-5 to B-10	B-11 to B-19	B-20 to B-49	B-50 to B-100	Total
CY 2019, Taxed	191.7	7.0	69.5	291.2	76.9	0.5	636.8
CY 2019, Tax Exempt	150.8	0.7	40.7	7.0	1.5	0.0	200.7
CY 2019, Adjusted *	227.7	8.3	82.5	345.8	91.3	0.6	756.2
CY 2019, Tax Exempt	150.8	0.7	40.7	7.0	1.5	0.0	200.7

\* Adjusted so total retail gallons match annual taxable gallons.

- Retail diesel fuel sales increased between CY 2016 and CY 2019, and the mix of fuel sold increased in average biodiesel content. The current-law projection of gallons sold by biodiesel blend level assumes a continuation of this trend towards higher biodiesel blends, with the annual growth or contraction in each blend equal to 50.0% of the annual gallon change over the CY 2016 through CY 2019 period.
- The Bill has several provisions that are expected to alter the mix of diesel fuel blends sold in Iowa when compared to current law, including additional equipment and higher blend requirements that must be met to receive grant funding from the RFIP. The Bill also focuses the Biodiesel Blended Fuel Tax Credit on higher biodiesel blends. These new provisions are assumed to increase the sale of higher blend biodiesel categories by 1.0 percentage point each year above the levels assumed under current law (8.0% above current law by CY 2030).
- Diesel (B-0) and pure biodiesel (B-100) have different energy contents by volume. Diesel contains 128,700 BTU per gallon, while B-100 contains 117,093 BTU per gallon. A vehicle that travels a given distance on B-0 will require a greater volume of fuel to travel the same distance on a biodiesel blend. This estimate assumes the same number of miles driven by Iowa retail fuel purchasers under the Bill as is assumed under current law. In order to account for the miles per gallon difference between fuel blends, this projection adjusts the overall fuel volume using the following energy factors listed below.
  - B-0 = 1.000
  - B-5 = 1.005
  - B-11 = 1.010
  - B-20 = 1.018
  - B-30 = 1.067
  - B-100 = 1.099
- Tax-Exempt (Dyed) Gallons — Tax-exempt gallons are assumed to remain at the CY 2019 level for all blends for all years, and the dyed gallons are not included in the tax credit change calculations.
- Biodiesel tax credits are refundable, and therefore 100.0% of earned credits are assumed to be redeemed. It is further assumed that tax credits earned for a calendar year are redeemed in the fiscal year that follows the end of the calendar year in which the tax credits were earned.
- Current Iowa law provides a [Biodiesel Production Credit](#) equal to 2.0 cents for every gallon of biodiesel produced in the State. A single production facility is limited to no more than \$500,000 (25.0 million gallons) in credits each calendar year. The credit sunsets at the end of CY 2024 under current law. At 2.0 cents per gallon, credit redemptions equal a projected \$4.2 million each year. This Bill doubles the tax credit rate to 4.0 cents and also extends the availability of the credit three calendar years.
- The projected change in the mix of diesel fuel blends has a modest impact on diesel motor fuel tax receipts. Positive impacts are projected to result from excluding B-20 gallons from

the preferential tax schedule beginning with CY 2025. The provision that extends the preferential schedule by four fiscal years is projected to decrease motor fuel tax receipts collected in FY 2027 through FY 2029.

**Correctional Impact**

The Bill establishes a new Class D criminal offense for perjury. The correctional impact for this offense cannot be estimated due to the lack of existing conviction data, but the average State cost for one Class D felony conviction ranges from \$9,100 to \$16,600. **Table 3** below shows estimates for sentencing to State prison, parole, probation, or Community-Based Corrections (CBC) residential facilities; length of stay (LOS) under those supervisions, and supervision marginal costs per day for all convictions of aggravated misdemeanors for sex offenses. Please refer to the Legislative Services Agency (LSA) memo addressed to the General Assembly, [Cost Estimates Used for Correctional Impact Statements](#), dated January 18, 2022, for information related to the correctional system.

**Table 3 — Sentencing Estimates and Length of Stay (LOS)**

Conviction Offense Class	Percent Ordered to State Prison	FY 21 Avg LOS in Prison (All Releases)	FY 21 Marginal Cost Per Day Prison	Percent Ordered to Probation	Avg LOS on Probation	FY 21 Avg Cost Per Day on Probation	Percent Sentenced to CBC Residential Facility	FY 21 Marginal Cost CBC Per Day	Percent Ordered to County Jail	Marginal Cost Per Day Jail	Avg LOS on Parole	FY 21 Marginal Cost Per Day Parole
D Felony Non-Persons	82.0%	13.7	\$23.33	64.5%	33.3	\$7.01	12.3%	\$17.78	34.0%	\$50.00	13.4	\$7.01

**Minority Impact**

The Bill establishes a new criminal offense. As a result, the Criminal and Juvenile Justice Planning Division (CJJP) of the Department of Human Rights cannot use prior existing data to estimate the minority impact. Refer to the LSA memo addressed to the General Assembly, [Minority Impact Statement](#), dated January 18, 2022, for information related to minorities in the criminal justice system.

**Fiscal Impact**

The Bill has direct General Fund and Road Use Tax Fund revenue impacts through the enhancement and extension of ethanol and biodiesel tax credits and the extension of the motor fuel tax schedule, which grants a tax rate preference to ethanol and biodiesel fuel blends. The provisions of the Bill that require retailers to advertise and offer for sale E-15 ethanol and biodiesel blended fuels also impact General Fund and Road Use Tax Fund revenue by altering the mix of gasoline and diesel blends sold which in turn changes the amount of gas tax collected and the level of income tax credits earned.

**Table 4** shows the estimated increase in tax credit redemptions when comparing projections under current law to projections under the Bill. The tax credit redemptions shown also represent the negative impact on State General Fund revenue. A synopsis of each item includes:

- **E-15 Plus Promotion Tax Credit** — The credit is increased to 9.0 cents per gallon beginning with CY 2023, and the credit is extended one year past its current-law sunset date.
- **E-85 Gasoline Promotion Tax Credit** — The credit is extended three years past its current-law sunset date.
- **Biodiesel Blended Fuel Tax Credit** — The credit is altered starting CY 2023 in a manner that removes tax credits for B-11 sales and enhances credits for higher blends. The tax credit is also extended three years past its current-law sunset date.
- **Biodiesel Production Tax Credit** — The credit is doubled to 4.0 cents per gallon starting with CY 2023, and the credit is extended three years past its current-law sunset date.

**Table 4**  
**Projected Change in Tax Credit Redemptions \***  
In Millions

	E-15	E-85	Biodiesel	Biodiesel Production	Total
FY 2024	\$ 0.0	\$ 0.0	\$ 0.0	\$ 4.2	\$ 4.2
FY 2025	3.8	0.0	-1.0	4.2	7.0
FY 2026	4.6	4.9	-0.4	8.4	17.5
FY 2027	13.8	5.2	35.4	8.4	62.8
FY 2028	0.0	5.4	37.4	8.4	51.2
FY 2029	0.0	0.0	39.5	0.0	39.5
	\$ 22.2	\$ 15.5	\$ 110.9	\$ 33.6	\$ 182.2

\* Negative impact on General Fund revenues.

**Table 5** shows the estimated decrease in motor fuel tax receipts when comparing gasoline and diesel sales projections under current law to projections under the Bill. A synopsis of each item includes:

- **Gasoline Motor Fuel Tax** — For FY 2023 through FY 2026, the minor negative amounts represent the Bill's impact on the mix between gasoline blends that are taxed at the full \$0.300 per gallon and gallons taxed at the preferential rate for higher-blend ethanol. The larger negative amounts for FY 2027 through FY 2030 represent the impact of extending the preferential ethanol tax schedule for four fiscal years.
- **Diesel Motor Fuel Tax** — Minor changes shown for FY 2023 and FY 2024 are the result of shifts to higher blends and automatic increases to the preferential tax rate for higher-blend biodiesel. The positive impacts shown for FY 2025 and FY 2026 are the result of the exclusion, effective FY 2025, of blends below B-20 from the preferential tax rate. The decrease projected for FY 2027 through FY 2030 is due to the extension of the preferential schedule for four fiscal years.

**Table 5**  
**Projected Change in Motor Fuel Tax Receipts**  
In Millions

	Gasoline	Diesel	Total
FY 2023	\$ -0.1	\$ -0.2	\$ -0.3
FY 2024	-0.2	1.4	1.2
FY 2025	-0.4	4.5	4.1
FY 2026	-1.0	4.6	3.6
FY 2027	-11.8	-4.9	-16.7
FY 2028	-12.2	-5.2	-17.4
FY 2029	-10.7	-5.4	-16.1
FY 2030	-8.4	-5.7	-14.1
	\$ -44.8	\$ -10.9	\$ -55.7

**Sources**

Monthly Fuel Tax Reports  
Retailers Fuel Gallons Annual Report  
Legislative Services Agency analysis  
Iowa State University Extension (energy content of fuels)  
Department of Revenue  
Iowa Code section [452A.3](#) (fuel tax rates)  
CJJP, Department of Human Rights

/s/ Holly M. Lyons

---

June 24, 2022

Doc ID 1292091

---

The fiscal note for this Bill was prepared pursuant to [Joint Rule 17](#) and the Iowa Code. Data used in developing this fiscal note is available from the Fiscal Services Division of the Legislative Services Agency upon request.

---

[www.legis.iowa.gov](http://www.legis.iowa.gov)