



Iowa Department of Revenue

16-Session
Renewable Chemical Tax Credit

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This letter provides a fiscal estimate of proposed legislative language provided October 27, 2015 which would create the Renewable Chemical Production Tax Credit Program administered by the Economic Development Authority (EDA). The proposal would allocate up to \$10 million of the EDA tax credit cap to this tax credit program. For FY 2017 through FY 2021, the proposal would reduce the allocation to the High Quality Jobs Program by \$25 million; it was assumed for FY 2022 through FY 2028, the High Quality Jobs Program allocation would be reduced by the \$10 million allocated to the new tax credit program. The amount of the tax credit is equal to \$0.05 per pound of renewable chemicals produced in Iowa from biomass feedstock by the eligible business during the calendar year. Eligible production must be in excess of any production by the business prior to the enactment of the language. The maximum amount of tax credit that may be issued to an eligible business in any one calendar year shall not exceed \$1 million or \$500,000, depending on whether the eligible business has been operating in Iowa at the time of application for five or fewer years, or more than five years, respectively. An eligible business shall not receive more than five tax credits under the program. The tax credit is refundable. The tax credit can be claimed against individual income tax and corporation income tax.

To be eligible to receive the Renewable Chemical Production Tax Credit (RCPTC), a business shall meet all of the following requirements:

- The business is physically located in the state.
- The business is operated for profit and under single management.
- The business is not an entity providing professional services, health care services, or medical treatments or an entity engaged primarily in retail operations.
- The business organized, expanded, or located in the state on or after the effective date of this bill. The business shall not be relocating or reducing operations.
- The business is in compliance with all agreements entered into under this program or other programs administered by the authority.

The Renewable Chemical Production Tax Credit would be available for chemicals produced after January 1, 2017 and before December 31, 2027; however, the first tax credits cannot be awarded until July 1, 2018 and no credits can be claimed prior to September 1, 2018.

The following assumptions were used to calculate this estimate:

- Information available from Iowa State University suggests that there are at least five companies already producing renewable chemicals with an interest in expanding that production or considering a new product line that would qualify under the proposed language. It is assumed that in 2017, those five companies would make the investment to start or expand production with additional companies also expanding into this market over the next 11 years reaching 25 companies by 2023. This assumes 70 percent of existing companies operating ethanol plants (23) and biodiesel plants (8) would expand into qualifying production, based on information which suggests Iowa already has an advantage with the availability of byproducts and underutilized facilities, as well as expected growth in this industry. Because companies are only eligible for tax credit awards for five years, the count of eligible producers falls in 2022 and again in 2024 and later (see Table 1). All

companies with biofuel facilities in Iowa have been in the state for more than five years, it is assumed that all existing entities will be limited to \$0.5 million in awards per year.

- It was assumed that awards would be made on a company level and not a facility level; that is, one company can receive only five Renewable Chemical Production Tax Credit awards over the life of the program even if production is occurring at multiple locations within Iowa.

Table 1. Assumed Number of Participating Producers

	Existing Entities - Iowa Operation for More than Five Years		New Entities - Assumed New to Iowa	
	Producers	Eligible for Awards	Producers	Eligible for Awards
2017	5	5	1	1
2018	8	8	2	2
2019	11	11	2	2
2020	14	14	3	3
2021	17	17	3	3
2022	20	15	4	3
2023	25	17	6	4
2024	25	14	6	4
2025	25	11	6	3
2026	25	8	6	3
2027	25	5	6	2

- It is assumed that one new entity will begin production in Iowa in 2017, with a second entity starting in 2018. Every second year following, an additional entity is assumed to start production, but will increase to six entities in 2023, allowing all entities to maximize credit awards under the program (see Table 1). Because the new entities are all assumed to be new to Iowa at the time production begins, all would be eligible for the \$1 million annual cap during the first five years of production.
- Information available from Iowa State University suggests that all companies involved in the production of eligible chemicals would meet and exceed the production levels to maximize tax credit awards each year, with existing entities receiving a \$0.5 million Renewable Chemical Production Tax Credit award annually for five years and new entities receiving a \$1 million Renewable Chemical Production Tax Credit award annually for five years under the program (see Table 2). Estimated requested awards would exceed the \$10 million limit for production in 2021 through 2024, with those awards waitlisted and issued in later years.

Table 2. Estimated Renewable Chemical Production Tax Credit Awards

Production Year	Existing Entities	New Entities	Requested Awards	Award Fiscal Year	Awards Under the Cap
2017	\$2,500,000	\$1,000,000	\$3,500,000	2018	\$0
2018	\$4,000,000	\$2,000,000	\$6,000,000	2019	\$9,500,000
2019	\$5,500,000	\$2,000,000	\$7,500,000	2020	\$7,500,000
2020	\$7,000,000	\$3,000,000	\$10,000,000	2021	\$10,000,000
2021	\$8,500,000	\$3,000,000	\$11,500,000	2022	\$10,000,000
2022	\$7,500,000	\$3,000,000	\$10,500,000	2023	\$10,000,000
2023	\$8,500,000	\$4,000,000	\$12,500,000	2024	\$10,000,000
2024	\$7,000,000	\$4,000,000	\$11,000,000	2025	\$10,000,000
2025	\$5,500,000	\$3,000,000	\$8,500,000	2026	\$10,000,000
2026	\$4,000,000	\$3,000,000	\$7,000,000	2027	\$10,000,000
2027	\$2,500,000	\$2,000,000	\$4,500,000	2028	\$5,500,000

- The tax credits can be claimed for the tax year during which the business was issued the Renewable Chemical Production Tax Credit award which is the year following production. The tax credit is available for production after January 1, 2017, but the first credits cannot be issued until July 1, 2018 and claims cannot be made until September 1, 2018. It is assumed that the timing of Renewable Chemical Production Tax Credits claims would be similar to the filing of returns on which Research Activities Tax Credit claims were made between tax years 2006 and 2012. All awarded tax credits are assumed to be claimed because they are refundable.

Table 3. Estimated Claim Timing

Fiscal Year	Percent of Returns Filed
Tax Year +1	16.37%
Tax Year +2	74.54%
Tax Year +3	9.09%

- Historical data suggests that over the life of a High Quality Jobs (HQJ) contract, on average 50% of awards are actually claimed. The program includes awards for three types of tax incentives: nonrefundable Investment Tax Credits, refundable Supplemental Research Activities Tax Credits, and sales and use refunds of taxes paid during construction.
 - It is assumed that on average 41% of ITC awards will be claimed, based on the observed claims under the HQJ and EZ programs between 2006 and 2013, reflecting that some taxpayers will not have sufficient tax liability to claim the entire credit amount.
 - It is assumed that on average 89% of Supplemental RAC awards will be claimed, based on the observed claims under the HQJ and EZ programs between 2006 and 2013, reflecting that the awarded amounts are based on estimated research expenditures at the time the contract is signed.
 - It is assumed that on average 50% of sales and use refunds awarded will be claimed, based on the observed claims under the HQJ program between 2006 and

2013, reflecting that the awarded amounts are based on assumed taxable construction expenditures at the time the contract is signed.

- It is likely that the new companies locating in Iowa and receiving RCPTC awards would also receive HQJ awards for the new investment and jobs created. It is also possible that new jobs and significant capital investments at existing facilities for the production of renewable chemicals would result in HQJ awards for those companies. All of these awards are assumed to be made under the reduced HQJ cap during FY 2017 through FY 2023.
- With Renewable Chemical Production Tax Credit awards limited to FY 2019 through FY 2028, all claims are expected to be made over the FY 2019 through FY 2031 period. The claim window under HQJ is much longer because the ITC awards must be amortized over five years and have a seven year carryforward period. Table 3 presents the estimated fiscal impact over the full RCPTC program window.

Table 3. Estimated Fiscal Impact of the EDA Award Cap Shifts for the Renewable Chemical Production Tax Credit

Fiscal Year	HQJ	Millions \$	
		RCPTC	Net Impact
2017	\$0.03	\$0.00	\$0.03
2018	\$0.36	\$0.00	\$0.36
2019	\$2.31	-\$0.57	\$1.74
2020	\$4.09	-\$3.59	\$0.50
2021	\$6.30	-\$6.02	\$0.29
2022	\$8.64	-\$7.77	\$0.86
2023	\$10.39	-\$9.77	\$0.61
2024	\$9.69	-\$10.00	-\$0.31
2025	\$8.82	-\$10.00	-\$1.18
2026	\$7.78	-\$10.00	-\$2.22
2027	\$6.49	-\$10.00	-\$3.51
2028	\$5.48	-\$10.00	-\$4.52
2029	\$5.35	-\$9.26	-\$3.92
2030	\$5.09	-\$5.01	\$0.08
2031	\$4.03	-\$0.50	\$3.53

The enactment of the Renewable Chemical Production Tax Credit would require the development of a new component within the Tax Credit Award, Claim & Transfer Administration System (CACTAS). The estimated cost to the Iowa Department of Revenue of developing the application and award administration component, working with the Iowa Economic Development Authority, is estimated to cost between \$70,000 and \$120,000, assuming that the program could leverage the application and award component currently under development for the High Quality Jobs Program.

If you have any questions regarding this estimate, please contact me at 281-0196.

Sincerely,

Amy Rehder Harris
 Administrator
 Tax Research and Program Analysis Section

Renewable Chemical Production Tax Credit Program

Iowa is uniquely positioned to foster growth in the bio-based chemical sector. Many of the industrial facilities around the state currently producing food and fuel products from corn, soybeans, and other renewable products also produced certain co-products that can be further processed into higher value products such as biochemicals. In order to incentivize new startup companies and other ventures to take the biobased feedstocks currently produced in Iowa and manufacture these new, “building block” chemicals, IEDA proposes the creation of a renewable chemical tax credit.

The credit would have the following structural features:

- Placed under IEDA’s business tax credit cap. No increase to that cap is proposed.
- Credit would be refundable but NOT transferrable.
- Only available to a company for 5 years.
- Not available for the production of ethanol, biodiesel, or animal feed. Must create higher value products from the feedstocks.

Goal: This proposal is designed to further the goal of creating 200,000 private sector jobs and the goal of raising family incomes.

Fiscal Impact: There is some cost to the refundable credit because of higher claim rates, which we propose to offset with reductions in the maximum aggregate tax credit cap. This proposal should not carry any additional fiscal impact with the offset.