

Multiple Agency Fiscal Note Summary

Bill Number: 5447 E S SB AMH ENVI H1698.1	Title: Alternative jet fuel
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Estimated Cash Receipts

Agency Name	2023-25			2025-27			2027-29		
	GF-State	NGF-Outlook	Total	GF-State	NGF-Outlook	Total	GF-State	NGF-Outlook	Total
Department of Revenue	0	0	0	(340,000)	(340,000)	(340,000)	(9,290,000)	(9,290,000)	(9,294,000)
Department of Ecology	0	0	1,252,452	0	0	975,526	0	0	975,526
Total \$	0	0	1,252,452	(340,000)	(340,000)	635,526	(9,290,000)	(9,290,000)	(8,318,474)

Estimated Operating Expenditures

Agency Name	2023-25				2025-27				2027-29			
	FTEs	GF-State	NGF-Outlook	Total	FTEs	GF-State	NGF-Outlook	Total	FTEs	GF-State	NGF-Outlook	Total
Joint Legislative Audit and Review Committee	.2	0	0	44,200	.0	0	0	17,600	.0	0	0	17,600
Office of State Treasurer	.0	0	0	0	.0	0	0	0	.0	0	0	0
Department of Commerce	1.4	599,839	599,839	599,839	1.2	556,822	556,822	556,822	1.2	559,222	559,222	559,222
Department of Revenue	1.7	1,118,200	1,118,200	1,118,200	.7	157,700	157,700	157,700	.6	125,900	125,900	125,900
University of Washington	1.3	402,359	402,359	402,359	1.1	285,434	285,434	285,434	1.1	285,434	285,434	285,434
Washington State University	.3	139,990	139,990	139,990	.1	40,006	40,006	40,006	.1	40,006	40,006	40,006
Department of Ecology	4.7	0	0	1,252,452	3.7	0	0	975,526	3.7	0	0	975,526
Total \$	9.6	2,260,388	2,260,388	3,557,040	6.8	1,039,962	1,039,962	2,033,088	6.7	1,010,562	1,010,562	2,003,688

Estimated Capital Budget Expenditures

Agency Name	2023-25			2025-27			2027-29		
	FTEs	Bonds	Total	FTEs	Bonds	Total	FTEs	Bonds	Total
Joint Legislative Audit and Review Committee	.0	0	0	.0	0	0	.0	0	0
Office of State Treasurer	.0	0	0	.0	0	0	.0	0	0
Department of Commerce	.0	0	0	.0	0	0	.0	0	0
Department of Revenue	.0	0	0	.0	0	0	.0	0	0
University of Washington	.0	0	0	.0	0	0	.0	0	0
Washington State University	.0	0	0	.0	0	0	.0	0	0
Department of Ecology	.0	0	0	.0	0	0	.0	0	0
Total \$	0.0	0	0	0.0	0	0	0.0	0	0

Estimated Capital Budget Breakout

Prepared by: Lisa Borkowski, OFM	Phone: (360) 742-2239	Date Published: Final 4/ 4/2023
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Individual State Agency Fiscal Note

Bill Number: 5447 E S SB AMI ENVI H1698.1	Title: Alternative jet fuel	Agency: 014-Joint Legislative Audit and Review Committee
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Part I: Estimates

No Fiscal Impact

Estimated Cash Receipts to:

NONE

Estimated Operating Expenditures from:

	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years	0.3	0.0	0.2	0.0	0.0
Account					
Performance Audits of Government Account-State 553-1	39,700	4,500	44,200	17,600	17,600
Total \$	39,700	4,500	44,200	17,600	17,600

Estimated Capital Budget Impact:

NONE

The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.

Check applicable boxes and follow corresponding instructions:

- If fiscal impact is greater than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.
- If fiscal impact is less than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).
- Capital budget impact, complete Part IV.
- Requires new rule making, complete Part V.

Legislative Contact:	Phone:	Date: 03/27/2023
Agency Preparation: Dana Lynn	Phone: 360-786-5177	Date: 03/30/2023
Agency Approval: Eric Thomas	Phone: 360 786-5182	Date: 03/30/2023
OFM Review: Gaius Horton	Phone: (360) 819-3112	Date: 04/03/2023

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Significant provisions of the bill and any related workload or policy assumptions that have revenue or expenditure impact on the responding agency by section number.

The bill creates four new tax preferences intended to support development of the alternative jet fuel industry in Washington. All preferences are included in Part II.

TAX PERFORMANCE STATEMENT DETAILS

Section 8 is the tax preference performance statement that categorizes the preferences in section 9-12 as intended to improve industry competitiveness, as indicated in RCW 82.32.808(2)(b). The Legislature's specific public policy objective is to encourage production and use of alternative jet fuels and to support development of the alternative jet fuels industry in the state by providing targeted tax relief.

The Legislature intends to extend the expiration dates for the preference if a review finds that:

- There has been an increase in the production and use of alternative jet fuels by persons claiming the tax preferences.
- The production and use of alternative jet fuels in the state does not result in additional pollution including, but not limited to, pollution from per-and polyfluoroalkyl substances, noxious gases, ultrafine particles, lead, or other metals.
- The alternative jet fuel industry has created measurable economic growth in Washington.

JLARC is directed to include a racial equity analysis on air travel-related pollution in communities near an international airport owned by a port district in a county with a population greater than 1.5 million.

To obtain the data necessary for its review, JLARC may access and use data from an international airport owned by a port district in a county with a population greater than 1.5 million, the University of Washington (UW), reports compiled by the Washington State University (WSU) pursuant to section 7 of the act, and other data collected by the state as it deems necessary.

SECTION 7 – UNIVERSITY ENVIRONMENTAL REPORTS

Section 7 adds a new section to chapter 28B.30 RCW, requiring UW's department of environmental and occupational health, in collaboration with WSU, to calculate emissions of ultrafine and fine particulate matter and sulfur oxides in communities surrounding an international airport owned by a port district in a county with population greater than 1.5 million. This information must be reported to JLARC by December 1, 2024, and every December 1st after until JLARC has completed its final report on the preferences. The bill details what data must be included in the reports. An international airport meeting the criteria above must report to UW the total annual volume of conventional and alternative jet fuel used for flights departing the airport by July 1, 2024 and each July 1st thereafter until JLARC has completed its final report.

TAX PREFERENCE DETAILS

Section 9 adds a new section to chapter 82.04 RCW, applying a 0.275% B&O tax rate to businesses that manufacture, or make retail or wholesale sales of, manufactured alternative jet fuel in Washington. Users of this rate must file an annual tax preference performance report with the Department of Revenue (DOR). The preferential rate takes effect the first day of the first calendar quarter following the month when DOR receives notice from the Department of Ecology (DOE) that a facility capable of producing at least 20 million gallons of alternative jet fuel is operating in the state. The 0.275 rate expires nine calendar years after the close of the calendar year when the preferential rate takes effect.

Section 10 adds a new section to chapter 82.04 RCW, creating a B&O tax credit for alternative jet fuel manufacturers equal to \$1 for each gallon of alternative jet fuel that has at least 50% less carbon dioxide equivalent emissions than conventional jet fuel and is sold during the prior calendar year by either a business producing alternative jet fuel and located

in a qualifying county or a business's designated alternative jet fuel blender located in Washington.

The credit amount must increase by 2 cents for each additional 1% reduction in carbon dioxide equivalent emissions beyond 50%, not to exceed \$2/gallon of alternative jet fuel. The credit is calculated only on the portion of jet fuel considered alternative jet fuel when such fuels are blended or used in a jet fuel mixture. Credit cannot be claimed until the DOE verifies there is at least one facility operating in the state capable of producing at least 20 million gallons of alternative jet fuel per year and provides such notice to DOR.

Businesses must apply to DOR to claim the credit and provide specific documentation detailed in the bill. Terms are defined, including "qualifying county" - a county with a population of less than 650,000 at the time of application for the credit. Credits may be earned must be claimed the year earned or the following year. Users of this credit must file an annual tax preference performance report with DOR.

Section 11 adds a new section to chapter 82.04 RCW, establishing a B&O tax credit against any B&O tax for persons using alternative jet fuel. The credit is equal to \$1/gallon of alternative jet fuel that has at least 50% less carbon dioxide equivalent emissions than conventional jet fuel and is purchased in the prior calendar year by a business for use as alternative jet fuel for flights originating in Washington. The same credit increase provision and credit calculation details as in section 10 apply to this credit, as well as the requirement that the credit cannot be claimed until DOR verifies a facility capable of producing at least 20 million gallons of alternative jet fuel is operating in the state. Businesses must apply to DOR to claim the credit and provide specific documentation detailed in the bill. Credits may be earned must be claimed the year earned or the year thereafter. Users of this rate must file an annual tax preference performance report with DOR.

Section 12 adds a new section to chapter 82.16 RCW, establishing a public utility tax credit for persons that use alternative jet fuel. The credit is equal to \$1/gallon of alternative jet fuel that has at least 50% less carbon dioxide equivalent emissions than conventional jet fuel and is purchased in the prior calendar year by a business for use as alternative jet fuel for flights originating in Washington. The same credit increase provision and credit calculation details as in section 11 apply to this credit, as well as the requirement that the credit cannot be claimed until DOR verifies a facility capable of producing at least 20 million gallons of alternative jet fuel is operating in the state. Businesses must apply to DOR to claim the credit and provide specific documentation detailed in the bill. Credits may be earned and claimed in the year they are earned or the year thereafter. Users of this rate must file an annual tax preference performance report with DOR.

Section 14 notes RCW 82.32.805 does not apply to the act.

Section 15 notes that sections 9 through 12 take effect July 1, 2024.

Section 16 is an emergency clause noting sections 1 through 7 take effect July 1, 2023.

II. B - Cash receipts Impact

Cash receipts impact of the legislation on the responding agency with the cash receipts provisions identified by section number and when appropriate, the detail of the revenue sources. Description of the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explanation of how workload assumptions translate into estimates. Distinguished between one time and ongoing functions.

II. C - Expenditures

Agency expenditures necessary to implement this legislation (or savings resulting from this legislation), with the provisions of the legislation that result in the expenditures (or savings) identified by section number. Description of the factual basis of the assumptions and the method by which the expenditure impact is derived. Explanation of how workload assumptions translate into cost estimates. Distinguished between one time and ongoing functions.

JLARC staff would contact and work with the Department of Revenue, the Port of Seattle, UW, and WSU immediately after passage of the bill to ensure project contacts are established and all necessary data for JLARC staff's future evaluation needs are identified and collected. JLARC will likely review these preferences in 2031.

The expenditure detail reflects work conducted to prepare for the future review of the preferences. Costs associated with the review are not included in this fiscal note. This fiscal note reflects only the costs associated with establishing data

collection.

This tax preference review may require additional resources. The audit will be conducted and presented to JLARC consistent with the processes used for other tax preference reviews. Based on all tax preference legislation that is passed, JLARC may subsequently determine that it can absorb the costs for this proposed bill in its base budget, if the workload of other enacted tax preference legislation does not exceed current staffing. JLARC will assess all of the tax preference reviews mandated in the 2023 legislative session.

This audit will require an estimated 4 audit months.

JLARC Audit Months: JLARC calculates its staff resources in "Audit Months" to estimate the time and effort to undertake and complete its studies. An "Audit Month" reflects a JLARC analyst's time for a month, together with related administrative, support, and goods/services costs. JLARC's anticipated 2023-25 costs are calculated at approximately \$22,100 per audit month.

Part III: Expenditure Detail

III. A - Operating Budget Expenditures

Account	Account Title	Type	FY 2024	FY 2025	2023-25	2025-27	2027-29
553-1	Performance Audits of Government Account	State	39,700	4,500	44,200	17,600	17,600
Total \$			39,700	4,500	44,200	17,600	17,600

III. B - Expenditures by Object Or Purpose

	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years	0.3		0.2		
A-Salaries and Wages	25,700	2,900	28,600	11,400	11,400
B-Employee Benefits	8,100	900	9,000	3,600	3,600
C-Professional Service Contracts					
E-Goods and Other Services	5,400	600	6,000	2,400	2,400
G-Travel	500	100	600	200	200
J-Capital Outlays					
M-Inter Agency/Fund Transfers					
N-Grants, Benefits & Client Services					
P-Debt Service					
S-Interagency Reimbursements					
T-Intra-Agency Reimbursements					
9-					
Total \$	39,700	4,500	44,200	17,600	17,600

III. C - Operating FTE Detail: *List FTEs by classification and corresponding annual compensation. Totals need to agree with total FTEs in Part I and Part IIIA*

Job Classification	Salary	FY 2024	FY 2025	2023-25	2025-27	2027-29
Research Analyst	126,694	0.2		0.1		
Support staff	89,671	0.1		0.1		
Total FTEs		0.3		0.2		0.0

III. D - Expenditures By Program (optional)

NONE

Part IV: Capital Budget Impact

IV. A - Capital Budget Expenditures

NONE

IV. B - Expenditures by Object Or Purpose

NONE

IV. C - Capital Budget Breakout

Acquisition and construction costs not reflected elsewhere on the fiscal note and description of potential financing methods.

NONE

IV. D - Capital FTE Detail: *FTEs listed by classification and corresponding annual compensation. Totals agree with total FTEs in Part IVB.*

NONE

Part V: New Rule Making Required

Provisions of the bill that require the agency to adopt new administrative rules or repeal/revise existing rules.

Individual State Agency Fiscal Note

Bill Number: 5447 E S SB AMI ENVI H1698.1	Title: Alternative jet fuel	Agency: 090-Office of State Treasurer
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Part I: Estimates

No Fiscal Impact

Estimated Cash Receipts to:

NONE

Estimated Operating Expenditures from:

NONE

Estimated Capital Budget Impact:

NONE

The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.

Check applicable boxes and follow corresponding instructions:

- If fiscal impact is greater than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.
- If fiscal impact is less than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).
- Capital budget impact, complete Part IV.
- Requires new rule making, complete Part V.

Legislative Contact:	Phone:	Date: 03/27/2023
Agency Preparation: Dan Mason	Phone: (360) 902-8990	Date: 03/29/2023
Agency Approval: Dan Mason	Phone: (360) 902-8990	Date: 03/29/2023
OFM Review: Amy Hatfield	Phone: (360) 280-7584	Date: 03/30/2023

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Significant provisions of the bill and any related workload or policy assumptions that have revenue or expenditure impact on the responding agency by section number.

ESSB 5447 AMH ENVI H1698.1 removes the climate commitment account transfer to the general fund which was included in the previous version of the bill.

Therefore, no fiscal impact.

II. B - Cash receipts Impact

Cash receipts impact of the legislation on the responding agency with the cash receipts provisions identified by section number and when appropriate, the detail of the revenue sources. Description of the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explanation of how workload assumptions translate into estimates. Distinguished between one time and ongoing functions.

II. C - Expenditures

Agency expenditures necessary to implement this legislation (or savings resulting from this legislation), with the provisions of the legislation that result in the expenditures (or savings) identified by section number. Description of the factual basis of the assumptions and the method by which the expenditure impact is derived. Explanation of how workload assumptions translate into cost estimates. Distinguished between one time and ongoing functions.

Part III: Expenditure Detail

III. A - Operating Budget Expenditures

NONE

III. B - Expenditures by Object Or Purpose

NONE

III. C - Operating FTE Detail: *FTEs listed by classification and corresponding annual compensation. Totals agree with total FTEs in Part I and Part IIIA.*

NONE

III. D - Expenditures By Program (optional)

NONE

Part IV: Capital Budget Impact

IV. A - Capital Budget Expenditures

NONE

IV. B - Expenditures by Object Or Purpose

NONE

IV. C - Capital Budget Breakout

Acquisition and construction costs not reflected elsewhere on the fiscal note and description of potential financing methods.

NONE

IV. D - Capital FTE Detail: *FTEs listed by classification and corresponding annual compensation. Totals agree with total FTEs in Part IVB.*

NONE

Part V: New Rule Making Required

Provisions of the bill that require the agency to adopt new administrative rules or repeal/revise existing rules.

Individual State Agency Fiscal Note

Bill Number: 5447 E S SB AMI ENVI H1698.1	Title: Alternative jet fuel	Agency: 103-Department of Commerce
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Part I: Estimates

No Fiscal Impact

Estimated Cash Receipts to:

NONE

Estimated Operating Expenditures from:

	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years	1.4	1.4	1.4	1.2	1.2
Account					
General Fund-State 001-1	298,585	301,254	599,839	556,822	559,222
Total \$	298,585	301,254	599,839	556,822	559,222

Estimated Capital Budget Impact:

NONE

The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.

Check applicable boxes and follow corresponding instructions:

- If fiscal impact is greater than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.
- If fiscal impact is less than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).
- Capital budget impact, complete Part IV.
- Requires new rule making, complete Part V.

Legislative Contact:	Phone:	Date: 03/27/2023
Agency Preparation: Marla Page	Phone: 360-725-3129	Date: 03/30/2023
Agency Approval: Jason Davidson	Phone: 360-725-5080	Date: 03/30/2023
OFM Review: Gwen Stamey	Phone: (360) 790-1166	Date: 04/03/2023

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Significant provisions of the bill and any related workload or policy assumptions that have revenue or expenditure impact on the responding agency by section number.

Differences between ESSB 5447 AMH ENVI H1698.1 and ESSB 5447-S.E AMH ENVI H1698.1:

There are no differences between ESSB 5447 AMH ENVI H1698.1 and ESSB 5447-S.E AMH ENVI H1698.1 that affect the fiscal impact to the Department of Commerce (department).

Summary of ESSB 5447 AMH ENVI H1698.1:

Section 4 a new section added to chapter 28B.30 RCW that requires the Washington State University (WSU) to convene an Alternative Jet Fuels work group to further the development of alternative jet fuels as a productive industry in the state. The work group must include legislators and sectors involved in alternative jet fuel research, development, production, and utilization. The work group must provide a report including pertinent recommendations to the governor and the appropriate committees of the legislature by December 1, 2024, and December 1st of every even-numbered year until December 1, 2028. The work group expires January 1, 2029.

Section 5 amends RCW 43.330.565 to require the office of renewable fuels (office) within the department to further the development and use of alternative jet fuels as a productive industry in the Washington state.

Section 6 amends RCW 43.330.570 to require the office to review existing renewable fuels, alternative jet fuels, and green electrolytic hydrogen initiatives, policies, and public and private investments, and tax and regulatory incentives, including assessment of adequacy of feedstock supply and in-state feedstock, renewable fuels, and alternative jet fuels production.

Effective date is assumed to be 90 days after adjournment of the session in which this bill is passed.

II. B - Cash receipts Impact

Cash receipts impact of the legislation on the responding agency with the cash receipts provisions identified by section number and when appropriate, the detail of the revenue sources. Description of the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explanation of how workload assumptions translate into estimates. Distinguished between one time and ongoing functions.

II. C - Expenditures

Agency expenditures necessary to implement this legislation (or savings resulting from this legislation), with the provisions of the legislation that result in the expenditures (or savings) identified by section number. Description of the factual basis of the assumptions and the method by which the expenditure impact is derived. Explanation of how workload assumptions translate into cost estimates. Distinguished between one time and ongoing functions.

General Assumptions

The bill would require the office of renewable fuels to further the development and use of alternative jet fuels (AJF) and would require the department to collaborate with a new alternative jet fuels work group to be convened by Washington State University that will report annually.

The department assumes the need for staff to participate in or track the activity of the new alternative jet fuels work group, conduct research, engage with stakeholders, and be involved with related activities regarding alternative jet fuels. This would include new staff capacity within the office of renewable fuels. The department also assumes it would still be conducting policy analysis on a regular basis and will likely need to hire a contractor for consultation work on this new subject area to further the development and use of alternative fuels estimated costs of \$50,000 per year ongoing.

To accomplish this work the department estimates:

1.0 FTE Senior Energy Policy Specialist (EMS2) (2,088 hours) in FY24-FY29 to engage with the listed stakeholder types on alternative jet fuels (there may be some but limited overlap with the stakeholders already to be coordinated with regarding hydrogen and renewable fuels). Review initiatives specific to AJF. Review and provide input on funding specific to AJF as well as to assess overlap/alignment with funding opportunities related to hydrogen and renewable fuels. Conduct research and analysis of barriers and opportunities specifically related to AJF. There will be some but limited overlap to the barriers and opportunities already in the broader scope of the office. Review tax and regulatory incentives, including assessment of adequacy of feedstock supply and in-state feedstock, renewable fuels, and alternative jet fuels production. Hire and work with contractors as needed to provide specific analysis regarding AJF.

0.10 FTE Senior Energy Policy Specialist (EMS2) (209 hours) in FY24-FY25 to provide expert consultation and work with contractor in furthering the development of alternative fuels research and analytical products.

Salaries and Benefits

FY24: \$175,270

FY25: \$181,033

FY26-FY29: \$164,575 per fiscal year

Professional Service Contract:

One professional service contract (200 hours) in FY24-FY29 for consultation work to consultant industry expert to further the development and use of alternative fuels. The department assumes a rate of \$250 per hour for the professional services contracts

FY24-FY29: \$50,000 per fiscal year

Goods and Services:

FY24: \$10,651

FY25: \$10,661

FY26-FY29: \$9,691 per fiscal year

Equipment:

In addition to the standard goods and services estimates, the department assumes the purchase of standard workstations for the new staff in FY24 and the purchase of replacement laptops /tablets in FY28 based on the department's replacement cycle.

FY24: \$5,000

FY28: \$2,400

Intra-Agency Reimbursements:

FY24: \$57,664

FY25: \$59,560

FY26-FY29: \$54,145 fiscal year

Note: Standard goods and services costs include supplies and materials, employee development and training, Attorney General costs, central services charges and agency administration. Agency administration costs (e.g., payroll, HR, IT) are funded under a federally approved cost allocation plan.

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Total Estimated Costs

FY24: \$298,585

FY25: \$301,254
 FY26-FY27: \$278,411 per fiscal year
 FY28: \$280,811
 FY29: \$278,411

Part III: Expenditure Detail

III. A - Operating Budget Expenditures

Account	Account Title	Type	FY 2024	FY 2025	2023-25	2025-27	2027-29
001-1	General Fund	State	298,585	301,254	599,839	556,822	559,222
Total \$			298,585	301,254	599,839	556,822	559,222

III. B - Expenditures by Object Or Purpose

	FY 2024	FY 2025	2023-25	2025-27	2027-29	
FTE Staff Years	1.4	1.4	1.4	1.2	1.2	
A-Salaries and Wages	135,125	139,179	274,304	253,052	253,052	
B-Employee Benefits	40,145	41,854	81,999	76,098	76,098	
C-Professional Service Contracts	50,000	50,000	100,000	100,000	100,000	
E-Goods and Other Services	10,651	10,661	21,312	19,382	19,382	
G-Travel						
J-Capital Outlays	5,000		5,000		2,400	
M-Inter Agency/Fund Transfers						
N-Grants, Benefits & Client Services						
P-Debt Service						
S-Interagency Reimbursements						
T-Intra-Agency Reimbursements	57,664	59,560	117,224	108,290	108,290	
9-						
Total \$		298,585	301,254	599,839	556,822	559,222

III. C - Operating FTE Detail: *List FTEs by classification and corresponding annual compensation. Totals need to agree with total FTEs in Part I and Part IIIA*

Job Classification	Salary	FY 2024	FY 2025	2023-25	2025-27	2027-29
Administrative Services - Indirect	11,168	0.3	0.3	0.3	0.2	0.2
EMS Band 2	122,841	1.1	1.1	1.1	1.0	1.0
Total FTEs		1.4	1.4	1.4	1.2	1.2

III. D - Expenditures By Program (optional)

NONE

Part IV: Capital Budget Impact

IV. A - Capital Budget Expenditures

NONE

IV. B - Expenditures by Object Or Purpose

NONE

IV. C - Capital Budget Breakout

Acquisition and construction costs not reflected elsewhere on the fiscal note and description of potential financing methods.

NONE

IV. D - Capital FTE Detail: *FTEs listed by classification and corresponding annual compensation. Totals agree with total FTEs in Part IVB.*

NONE

Part V: New Rule Making Required

Provisions of the bill that require the agency to adopt new administrative rules or repeal/revise existing rules.

Department of Revenue Fiscal Note

Bill Number: 5447 E S SB AMI ENVI H1698.1	Title: Alternative jet fuel	Agency: 140-Department of Revenue
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Part I: Estimates

No Fiscal Impact

Estimated Cash Receipts to:

Account	FY 2024	FY 2025	2023-25	2025-27	2027-29
GF-STATE-State 01 - Taxes 05 - Bus and Occup Tax				(300,000)	(1,500,000)
GF-STATE-State 01 - Taxes 06 - Tax Credits - B & O					(3,850,000)
GF-STATE-State 01 - Taxes 10 - Compensating Tax				(40,000)	(2,540,000)
GF-STATE-State 01 - Taxes 34 - Tx Cr-Pub Utilities					(1,400,000)
Performance Audits of Government Account-State 01 - Taxes 10 - Compensating Tax					(4,000)
Total \$				(340,000)	(9,294,000)

Estimated Expenditures from:

Account	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years	1.3	2.2	1.7	0.7	0.6
GF-STATE-State 001-1	518,500	599,700	1,118,200	157,700	125,900
Total \$	518,500	599,700	1,118,200	157,700	125,900

Estimated Capital Budget Impact:

NONE

The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.

Check applicable boxes and follow corresponding instructions:

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- Capital budget impact, complete Part IV.
- Requires new rule making, complete Part V.

Legislative Contact:	Phone:	Date: 03/27/2023
Agency Preparation: Anna Yamada	Phone: 60-534-1519	Date: 03/28/2023
Agency Approval: Valerie Torres	Phone: 60-534-1521	Date: 03/28/2023
OFM Review: Cheri Keller	Phone: (360) 584-2207	Date: 03/28/2023

Request # 5447-4-1

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Significant provisions of the bill and any related workload or policy assumptions that have revenue or expenditure impact on the responding agency by section number.

Note: This fiscal note reflects House amendment H1698.1 to 5447 ESSB, 2023 Legislative Session.

This fiscal note only addresses sections 8 through 12 of the bill, which impact the Department of Revenue (department).

COMPARISON OF THE PROPOSED AMENDMENT WITH THE ENGROSSED SUBSTITUTE BILL:

The proposed amendment eliminates the transfer of funds from the climate commitment account to the general fund for the reduction in the state revenue due to (1) the preferential business and occupation (B&O) tax rates for manufacturing, retailing, and wholesaling of alternative jet fuels, and (2) the credits taken for manufacturing and/or using alternative jet fuels. The department will no longer need to determine the amount of transfer annually for the prior calendar year.

CURRENT LAW:

PRODUCERS OF JET FUELS:

Currently no manufacturers of alternative jet fuel exist in Washington.

Oil refineries, who produce and sell conventional petroleum products (jet fuels), pay B&O tax at a rate of 0.484% on their manufacturing and wholesaling activities, and 0.471% on retailing activities.

Processors for hire pay B&O tax at a rate of 0.484%.

USERS OF JET FUELS:

Air transportation businesses consume most jet fuels. These passenger carriers and air freighters have direct pay permits. They file and pay use tax directly to the department in lieu of retail sales tax for the fuel physically consumed in Washington (which includes fuel purchased in Washington as well as fuel brought in from outside Washington).

All other consumers of jet fuels pay retail sales tax at the time of purchase.

PROPOSAL:

TAX PREFERENCE PERFORMANCE STATEMENT (Section 8):

This section provides the tax preference performance statement for the preferences contained in sections 9 through 12. This bill intends to improve industry competitiveness. Any taxpayer claiming these new tax preferences must file an annual tax performance report.

PREFERENTIAL BUSINESS AND OCCUPATION TAX RATE (Section 9):

This section provides a preferential B&O tax rate for those manufacturing, wholesaling, and retailing alternative jet fuel.

For manufacturers, the amount of tax equals the value of the product manufactured multiplied by the rate of 0.275%.

For processors for hire, the amount of tax equals the gross income of the business multiplied by the rate of 0.275%.

For those making sales at retail or wholesale, the amount of tax equals the gross proceeds of sales multiplied by the rate of 0.275%.

Alternative jet fuel means fuel made from petroleum or nonpetroleum sources that can be blended and used with conventional petroleum jet fuels without the need to modify aircraft engines. It also has a lower carbon intensity than the annual carbon intensity standard (found in WAC 173-424-900).

The preferential rates become effective first day of the quarter immediately following the month when the Department of Ecology notifies the department that one or more facilities with cumulative production capacity of at least 20 million gallons of alternative jet fuel each year are operating in Washington. The preferential rates expire nine calendar years after the close of the calendar year in which the tax rates take effect.

BUSINESS AND OCCUPATION TAX CREDIT FOR MANUFACTURERS (Section 10):

This section provides a B&O tax credit to those manufacturing alternative jet fuel. The credit equals \$1 per gallon of alternative jet fuel having at least 50% less carbon dioxide (CO₂) equivalent emissions than conventional jet fuel and is sold by:

- A business manufacturing alternative jet fuel located in a qualifying county with a population less than 650,000 at the time of an application.
- The business's designated fuel blender located in Washington (but not for both activities).

The credit amount must increase by 2 cents for each additional 1% reduction in CO₂ equivalent emissions beyond 50%, not to exceed \$2 per gallon.

The credit is calculated only on the portion of jet fuel that is considered alternative jet fuel and does not include conventional jet fuel when such fuels are blended or otherwise used in a jet fuel mixture.

The credit may be earned from the first day of the quarter immediately following the quarter when the Department of Ecology notifies the department that one or more facilities with cumulative production capacity of at least 20 million gallons of alternative jet fuel each year are operating in Washington. No credit may be earned beginning nine calendar years after the close of the calendar year in which the contingency occurs.

Manufacturers claiming this credit must reduce the wholesale price of alternative jet fuel by the amount of the claimed credit.

To claim this credit the taxpayer must file all returns, forms, and other required information, including contract pricing for sales of alternative jet fuel, electronically with the department and complete an application for the credit. The taxpayer claiming the credit provided in this section must file a complete annual tax performance report with the department.

The bill allows credits for either manufacturing or using alternative jet fuels, but not both.

The department must notify those applying for the credit within 60 days of acceptance of their documentation.

The credit earned during one calendar year may be carried over and claimed against taxes incurred only for the next subsequent calendar year. The department cannot grant refunds.

BUSINESS AND OCCUPATION TAX CREDIT FOR USERS (Section 11) and PUBLIC UTILITY (PU) TAX CREDIT FOR USERS (Section 12):

Section 11 provides a B&O tax credit, and section 12 provides a PU tax credit to those using alternative jet fuel. The rules to apply for credits against B&O and PU taxes are the same; however, credits cannot be claimed for both public utility tax and B&O tax for the same fuel purchased.

The credit equals \$1 per gallon of alternative jet fuel that has at least 50% less CO2 equivalent emissions than conventional jet fuel that a business purchased in the prior calendar year for use in flights departing in Washington.

The credit amount must increase by 2 cents for each additional 1% reduction in CO2 equivalent emissions beyond 50%, not to exceed \$2 per gallon.

The credit is calculated only on the portion of jet fuel considered alternative jet fuel and does not include conventional jet fuel when such fuels are blended or otherwise used in a jet fuel mixture.

The credit may be earned from the first day of the quarter immediately following the quarter when the Department of Ecology notifies the department that one or more facilities with cumulative production capacity of at least 20 million gallons of alternative jet fuel each year are operating in Washington. No credit may be earned beginning nine calendar years after the close of the calendar year in which the contingency occurs.

To claim this credit, the taxpayer must file all returns, forms, and other required information electronically with the department and complete an application for the credit. The taxpayer claiming the credit provided in this section must file a complete annual tax performance report with the department.

The department must notify those applying for the credit within 60 days of acceptance of their documentation.

This credit earned during one calendar year may be carried over and claimed against taxes incurred only for the next subsequent calendar year. The department cannot grant refunds.

EFFECTIVE DATE:

Part II contains sections 9 through 12 and takes effect July 1, 2024.

II. B - Cash receipts Impact

Cash receipts impact of the legislation on the responding agency with the cash receipts provisions identified by section number and when appropriate, the detail of the revenue sources. Description of the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explanation of how workload assumptions translate into estimates. Distinguished between one time and ongoing functions.

ASSUMPTIONS:

ALTERNATIVE FUEL PRODUCTION IN WASHINGTON:

- Alternative jet fuel production facilities begin operations by July 1, 2026, producing a total of 10 million gallons of alternative jet fuel but with a capability of producing a cumulative 20 million gallons of alternative jet fuel per year statewide.
- The Department of Ecology will verify the 20 million gallon capacity requirement during the third quarter of calendar year 2026, and the preferential B&O rate becomes effective October 1, 2026, the start of the fourth quarter. This leads to eight months of impacted cash collections in fiscal year 2027.
- Producers and users of alternative fuel will claim credits beginning in fiscal year 2028.
- In fiscal year 2028, SeaTac International Airport (SeaTac) provides alternative jet fuel for 10% of the total jet fuel used.
- Beginning in fiscal year 2029, alternative jet fuel production will grow at the rate projected for worldwide production capacity, reported by Statista.
- B&O tax and PU tax growth rates are as forecasted by the Economic and Revenue Forecast Council.
- When alternative jet fuel is manufactured in the state, it will be consumed by in-state users before being exported during the period of this fiscal note.

- Airlines/carriers will replace fossil-based jet fuels with alternative fuels as the in-state production begins.
- Washington oil refineries will continue to produce fossil-based jet fuel at current levels.
- Alternative jet fuel production in the state will not change current refinery activities; therefore, alternative jet fuel will be available in addition to the current production of fossil-based jet fuel in the state.
- It may be possible that the proposed incentives may accelerate either the in-state production quantity of alternative jet fuel and/or demand for it; however, in this estimate the in-state production of alternative jet fuel will occur regardless of the proposed bill.

ALTERNATIVE JET FUEL:

- The carbon dioxide (CO₂) emission quality will improve overtime. During the period of this fiscal note, a CO₂ emission certification rating (i.e., carbon intensity) of 67% will be expected for Washington's production facilities, which is an average level currently certified for California's producers.
- The amount of credit for the 67% reduction in CO₂ emissions will be \$1.34 per gallon.
- The price of alternative jet fuel is, on average, two and a half times more expensive than the conventional jet fuel. In fiscal year 2027, the retail price of conventional jet fuel is projected to be \$2.07 per gallon, while the price of alternative jet fuel will be two and a half times, or \$5.17 per gallon.
- The contract price by an in-state producer, after applying the amount of producer credit of \$1.34, will be \$3.83 per gallon.

USERS OF ALTERNATIVE JET FUEL:

- Most of the alternative jet fuel produced in the state will be wholesaled to commercial airlines/carriers with direct pay permits.
- The local retail sales tax rate for SeaTac would apply as the main location of jet fuel sales, and any differences in local retail sales tax rates from other locations would be minimal.
- Airline usage of jet fuel in fiscal year 2022 will approximate the jet fuel usage for the post-pandemic trend for fiscal year 2023.
- Non-commercial persons (general aviation) will purchase alternative jet fuel and pay retail sales tax at retail price; however, the amount of retail consumption will be negligible.
- Commercial airlines/carriers will claim credits for all the alternative jet fuel they purchased within the state from in-state producers, regardless of where the fuel was consumed.
- Last year Alaska Airlines announced a contract to purchase a total of 185 million gallons of alternative jet fuel for a 5-year period, starting in 2026, from a producer located outside Washington. One-fifth of 75% of the contract amount will be delivered in Washington each year between 2026 and 2030.

OUT-OF-STATE (OOS) PRODUCERS:

- Producers of alternative jet fuel located outside Washington, that sell into Washington, will also qualify for the preferential rate of 0.275% for wholesaling and retailing; however, the OOS producers will not qualify for credits under this bill.
- OOS distributors will not qualify for the incentives.
- Currently various airlines and carriers are using approximately 20 million gallons of imported alternative fuels (or 2.5% of total jet fuels annually) through various distributions, which include fuel distributors and OOS producers.
- Of the total imported amount, less than 5 million gallons (less than 1%) is directly imported from OOS producers, and airlines will continue to import throughout this fiscal note period.

COMMERCE CLAUSE

Because the B&O tax credit for manufacturers or fuel blenders applies only to businesses that manufacture or blend alternative jet fuel in Washington, there is a possibility the legislation could be challenged as violating the Commerce Clause

of the United State Constitution on the grounds that it discriminates against interstate commerce. This is because a business must manufacture in Washington to receive the incentive. See *Tyler Pipe Industries v. Dep't of Revenue*, 483 U.S. 232 (1987) (holding that a B&O tax exemption provided an exemption from manufacturing B&O tax for manufacturers selling products at wholesale within Washington but not for products sold outside of Washington discriminated against interstate commerce in violation of the Commerce Clause). This risk is not reflected in the estimates for this fiscal note.

DATA SOURCES:

- Washington State University Office of National Partnerships, Sustainable Aviation Biofuels Work Group, December 2022 Final Report
- Transportation Economic & Revenue Forecast, Summary Vol. I November 2022 Forecast
- U.S. Energy Information Administration, Prices, Sales Volume and Stocks by State
- U.S. Energy Information Administration, PADD 5 Refinery and Blender Net Production
- California Air Resources Board, LCFS Pathway Certified Carbon Intensities
- Washington Research Council, Economic contribution of Washington State's petroleum refining Industry in 2019, Appendix A.2 Quantity and Value of Output, June 2021
- Congressional Research Service, Sustainable Aviation Fuel (SAF)
- Air passenger Numbers to Recover in 2024, JETA, March 1, 2022, <https://www.iata.org/en/pressroom/2022-releases/2022-03-01-01/>
- Alaska Airlines makes significant investment in Sustainable Aviation Fuel, Alaska Airlines, August 3, 2022, <https://news.alaskaair.com/newsroom/alaska-airlines-makes-significant-investment-in-sustainable-aviation-fuel/>
- Statista, SAF World production capacity 2020-2025 trend
- Statista, U.S. price outlook of select fuels 2018-2050
- Department of Revenue, Excise tax return data
- Economic and Revenue Forecast Council, November 2022 forecast

REVENUE ESTIMATES:

This bill decreases state revenues by an estimated \$340,000 in the 2025-27 Biennium and by \$9.3 million in the 2027-29 Biennium.

This bill also decreases local revenues by an estimated \$24,000 in the 2025-27 Biennium and by \$1.4 million in the 2027-29 Biennium.

TOTAL REVENUE IMPACT:

State Government (cash basis, \$000):

FY 2024 -	\$ 0
FY 2025 -	\$ 0
FY 2026 -	\$ 0
FY 2027 -	\$ (340)
FY 2028 -	\$ (4,242)
FY 2029 -	\$ (5,052)

Local Government, if applicable (cash basis, \$000):

FY 2024 -	\$ 0
FY 2025 -	\$ 0
FY 2026 -	\$ 0
FY 2027 -	\$ (24)
FY 2028 -	\$ (608)
FY 2029 -	\$ (798)

II. C - Expenditures

Agency expenditures necessary to implement this legislation (or savings resulting from this legislation), with the provisions of the legislation that result in the expenditures (or savings) identified by section number. Description of the factual basis of the assumptions and the method by which the expenditure impact is derived. Explanation of how workload assumptions translate into cost estimates. Distinguished between one time and ongoing functions.

ASSUMPTIONS:

- This bill affects 50 users and six manufacturers of alternative jet fuel.
- Washington will not have a facility capable of producing 20 million gallons of alternative jet fuel by July 1, 2024; therefore, updates to our systems to allow taxpayers to claim these new preferences do not need to be in place as of July 1, 2024. The department will require up to 18 months to fully implement all the required system changes and anticipates full implementation by January 1, 2025.

FIRST YEAR COSTS:

The department will incur total costs of \$518,500 in fiscal year 2024. These costs include:

Labor Costs – Time and effort equate to 1.3 FTEs.

- Update web pages, publications, and forms for the reporting changes.
- Create special notice and update relevant information on the department’s website.
- Collaborate on an implementation plan, implementation meetings, documentation, and testing of system changes due to new line codes and credits.
 - Set up, program, and test computer system changes to the combined excise tax return and e-file system, as well as implementing four new annual tax performance reports.
 - Develop and maintain annual tax performance report questions.

Object Costs - \$356,400.

- Computer system changes, including contract programming.

SECOND YEAR COSTS:

The department will incur total costs of \$599,700 in fiscal year 2025. These costs include:

Labor Costs – Time and effort equate to 2.16 FTEs.

- Adopt one administrative rule.
- Amend one administrative rule.
- Respond to additional telephone questions, email, and letter correspondence.
- Continued implementation meetings, documentation, and testing of system changes due to new line codes and credits.
- Update and maintain annual tax performance report questions.
 - Review annual tax performance report submissions, work to verify submission accuracy, and compile statistics and reports.
 - Prepare and calculate funds to be transferred annually to the general fund.

Object Costs - \$330,000.

- Computer system changes, including contract programming.

ONGOING COSTS:

Ongoing costs for the 2025-27 biennium equal \$157,700 and include similar activities described in the second-year costs. Time and effort equate to 0.7 FTEs.

Part III: Expenditure Detail

III. A - Expenditures by Object Or Purpose

	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years	1.3	2.2	1.7	0.7	0.6
A-Salaries and Wages	100,100	174,100	274,200	104,100	83,100
B-Employee Benefits	33,000	57,500	90,500	34,400	27,500
C-Professional Service Contracts	356,400	330,000	686,400		
E-Goods and Other Services	19,900	27,400	47,300	15,000	12,000
J-Capital Outlays	9,100	10,700	19,800	4,200	3,300
Total \$	\$518,500	\$599,700	\$1,118,200	\$157,700	\$125,900

III. B - Detail: *FTEs listed by classification and corresponding annual compensation. Totals agree with total FTEs in Part I and Part IIIA.*

Job Classification	Salary	FY 2024	FY 2025	2023-25	2025-27	2027-29
EMS BAND 4	126,619		0.0	0.0		
EMS BAND 5	147,919		0.0	0.0		
EXCISE TAX EX 3	61,632	0.1	0.3	0.2	0.3	0.2
IT SYS ADM-JOURNEY	92,844	0.1	0.8	0.5		
MGMT ANALYST4	73,260	0.5	0.5	0.5	0.1	
TAX POLICY SP 2	75,120	0.3	0.1	0.2	0.1	0.1
TAX POLICY SP 3	85,020	0.3	0.4	0.3	0.3	0.3
TAX POLICY SP 4	91,524		0.0	0.0		
WMS BAND 3	107,685		0.0	0.0		
Total FTEs		1.3	2.2	1.8	0.7	0.6

III. C - Expenditures By Program (optional)

NONE

Part IV: Capital Budget Impact

IV. A - Capital Budget Expenditures

NONE

IV. B - Expenditures by Object Or Purpose

NONE

IV. C - Capital Budget Breakout

Acquisition and construction costs not reflected elsewhere on the fiscal note and description of potential financing methods.

NONE

Part V: New Rule Making Required

Provisions of the bill that require the agency to adopt new administrative rules or repeal/revise existing rules.

Should this legislation become law, the department will use the expedited process to amend WAC 458-20-126, titled: "Sales of motor vehicle fuel, special fuel, and nonpolluting fuel." The department will also use the standard process to adopt one new rule under chapter 458-20 WAC. Persons affected by this rulemaking would include manufacturers and sellers of alternative jet fuel.

Request # 5447-4-1

Individual State Agency Fiscal Note

Bill Number: 5447 E S SB AMI ENVI H1698.1	Title: Alternative jet fuel	Agency: 360-University of Washington
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Part I: Estimates

No Fiscal Impact

Estimated Cash Receipts to:

NONE

Estimated Operating Expenditures from:

	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years	1.4	1.2	1.3	1.1	1.1
Account					
General Fund-State 001-1	238,082	164,277	402,359	285,434	285,434
Total \$	238,082	164,277	402,359	285,434	285,434

Estimated Capital Budget Impact:

NONE

The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.

Check applicable boxes and follow corresponding instructions:

- If fiscal impact is greater than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.
- If fiscal impact is less than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).
- Capital budget impact, complete Part IV.
- Requires new rule making, complete Part V.

Legislative Contact:	Phone:	Date: 03/27/2023
Agency Preparation: Lauren Hatchett	Phone: 2066167203	Date: 03/28/2023
Agency Approval: Charlotte Shannon	Phone: 2066858868	Date: 03/28/2023
OFM Review: Ramona Nabors	Phone: (360) 742-8948	Date: 03/29/2023

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Significant provisions of the bill and any related workload or policy assumptions that have revenue or expenditure impact on the responding agency by section number.

ES SB 5447 intends to use funds from the Climate Commitment Act to promote the production and use of sustainable aviation fuels.

The striking amendment modifies certain aspects of the air quality study in Section 7 of the bill. We have updated our fiscal analysis accordingly.

Section 7 requires the University of Washington's Department of Environmental and Occupational Health Sciences (UW DEOHS), in collaboration with Washington State University, to calculate and report on certain emissions found around the Seattle-Tacoma International Airport by December 1, 2024 and each year thereafter until the Joint Legislative Audit and Review Committee has completed its final report on the tax preferences contained in Sections 9 through 12 of the bill.

II. B - Cash receipts Impact

Cash receipts impact of the legislation on the responding agency with the cash receipts provisions identified by section number and when appropriate, the detail of the revenue sources. Description of the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explanation of how workload assumptions translate into estimates. Distinguished between one time and ongoing functions.

II. C - Expenditures

Agency expenditures necessary to implement this legislation (or savings resulting from this legislation), with the provisions of the legislation that result in the expenditures (or savings) identified by section number. Description of the factual basis of the assumptions and the method by which the expenditure impact is derived. Explanation of how workload assumptions translate into cost estimates. Distinguished between one time and ongoing functions.

The UW DEOHS would be required to work in collaboration with WSU to calculate emissions of ultrafine and fine particulate matter and sulfur oxides found in communities around the Seattle-Tacoma International Airport. UW DEOHS and WSU must report their findings to the Joint Legislative Audit and Review Committee by December 1, 2024. The report must also include an analysis of any reduction in emissions relative to the amount of alternative jet fuel used for flights departing the airport.

In order to meet the reporting requirements, an emissions inventory analysis would be conducted by the UW, which would include:

1. Review of existing literature and available data on aircraft emission rates of ultrafine particles, fine particulate matter, and sulfur oxide emissions of different aircraft, fuels, and operating characteristics, and to the extent that high-quality emissions data exist, proceed with the following tasks:
2. Timely access to flight data from an international airport owned by a port district in a county with a population greater than 1,500,000 as specified in Section 7(2) of the bill, so that flight traffic utilizing conventional and alternative fuels is quantified.
3. Calculating an initial estimate of total emissions by multiplying emissions rates for different flight conditions to the corresponding number of flights based on analyses (1) and (2) above, and summing these emissions for the different flight conditions into a total emission estimate.
4. Using standard emissions inventory approaches, refine the initial estimates for ultrafine particles and SO₂. This task will make use of ground-level monitoring data near the airport, and fuel-based emissions inventory calculations, which estimate pollutant emissions per kg-fuel through CO₂ measurements. To the extent that additional data is required, plume sampling will be conducted by UW air quality engineers.
5. With the refined emissions inventory estimates, assess reductions in emissions for scenarios involving varying amounts of alternative jet fuels for anticipated flight traffic departing the airport.
6. Preparing a report that summarizes the findings of the analysis.

PERSONNEL

For FY24, the FTE required to conduct this analysis consists of one Graduate Student Research Assistant to conduct tasks 1, 2, and 3, and 5. 50% FTE for a Research Staff member is required for task 4. 30% FTE is required for faculty to oversee and verify the work, and to prepare the report in Task 6.

For subsequent years, maintaining the emissions inventory would require updating of the calculations, but not additional ground-truthing unless major changes in alternative fuels and aviation technology occur. Thus, in FY25-29 and later years, only modest support for a Graduate Student Research Assistant and faculty are required to update the calculations and amend the summary report.

SALARIES, WAGES, AND EMPLOYEE BENEFITS

A detailed breakdown of FTE includes:

- Assistant Professor of Environmental & Occupational Health Sciences (annual salary \$135,651 and benefits rate at 24.1% for 0.1 FTE in FY24, 0.08 FTE in FY25, and 0.05 FTE in FY26-29: \$63,973 Total) This faculty member will lead overall study design, data analyses, and manuscript preparation. They will also lead any monitoring activities.
- Associate Professor of Environmental & Occupational Health Sciences (annual salary \$172,212 and benefits rate at 24.1% for 0.1 FTE in FY24, 0.08 FTE in FY25 and 0.05 FTE in FY26-29: \$81,212 Total). This faculty member will oversee the development and evaluation of scenarios incorporating varying levels of use of alternative jet fuel in flights from the airport to estimate potential reductions in emissions, and will contribute to data analyses and preparation of the summary report.
- Professor of Environmental & Occupational Health Sciences and Civil and Environmental Engineering (annual salary \$215,076 and benefits rate at 24.1% for 0.1 FTE in FY24, 0.08 FTE in FY25 and 0.05 FTE in FY26-29: \$101,428 Total) This faculty member will work closely with the Assistant and Associate Professors described above and will oversee the development of the dispersion modeling approaches used in this project.
- Research Scientist I (annual salary \$80,056 and benefits rate at 31.8% for 0.5 FTE in FY24-29: \$316,542 Total) The Research Scientist will obtain and organize existing ground-level monitoring data related to aircraft ground-level impacts and identify gaps in monitoring.
- Research Scientist II (annual salary \$89,857 and benefits rate at 31.8% for 0.1 FTE in FY24-29: \$71,064 Total) The Research Scientist will coordinate the exchange of information and manage the overall project timeline. This position will ensure project success through developing and maintaining project budgets, developing timelines, and managing deliverables.
- Graduate Student Research Assistant (annual salary \$77,000 and benefits rate at 21.5% for 2 academic quarters at 50%, equaling 0.25 FTE for the duration of FY24: \$23,350 Total). This Graduate Student Research Assistant will conduct a literature review and survey of existing emission factor estimates for SO₂, UFP and PM_{2.5} under varying engine loads. Identify current sources of emissions and air traffic data from the Port of Seattle and other stakeholders.
- Graduate Student Research Assistant (annual salary \$77,000 and benefits rate at 21.5% for 2 academic quarters at 50%, equaling 0.25 FTE for the duration of FY24: \$23,350 Total) – develop dispersion scenarios for aircraft emissions based on current fuel use and current flight patterns.
- Graduate Student Research Assistant (annual salary \$77,000 and benefits rate at 21.5% for 2 academic quarters at 50%, equaling 0.25 FTE for the duration of FY25-29: \$116,750 Total). This Graduate Student Research Assistant will support the writing and summary of project findings under the supervision of faculty.
- Web Graphics Specialist (annual salary \$91,835 and benefits rate at 31.8% for 0.05 FTE in FY25 and 0.04 FTE in FY26-29: \$25,416 Total). As part of the DEOHS communications team, the Web Graphics Specialist will help develop project-specific policy briefs and updates to the legislature. Additionally, they will refine and edit the final report returned to WSU and the legislature. Prepare communication briefs to share findings in more broad language.
- Communications Director (annual salary \$133,884 and benefits rate at 31.8% for 0.015 FTE in FY25 and 0.01 FTE in FY26-29: \$9,707 Total). As part of the DEOHS communications team, the Communications Director will help develop project-specific policy briefs and updates to the legislature. Additionally, they will refine and edit the final report returned to WSU and the legislature. Prepare communication briefs to share findings in more broad language.

GOODS AND SERVICES

For FY24, the goods and services expenses are as follows:

- FAA AEDT software license (One office and 3 additional seats) for emissions calculations (\$1,710)
- FAA AEDT training for Grad RA (\$850)
- Air quality modeling software AERMOD License (\$680)
- Dedicated computer for emissions modeling (\$2,000)
- Miscellaneous sampling supplies such as tubing, tees, and valves (\$2,500)
- Instrument (re)calibration costs (\$5,000)
- UW DEOHS has existing instruments needed for ground-level UFP and CO2 measurements to refine emissions estimates. We have budgeted for an SO2 analyzer to refine emissions for that pollutant. (\$20,000)

For FY25-29 the goods and services expenses are as follows:

- FAA AEDT software license (One office and 3 additional seats) for emissions calculations (\$1,710 each year)

TRAVEL

- In FY24 a UW fleet vehicle will be rented for field sampling (\$1,145 for 30 days of rental)

GRANTS, BENEFITS, & SERVICES

- Required tuition payments for Graduate Student Research Assistants (\$28,000; 4 quarters at \$7,000 per quarter in FY24 and \$14,000; 2 quarters at \$7,000 per quarter in FY25-29)

OVERALL TOTALS

FY24: \$238,082
 FY25: \$164,277
 FY26: \$142,717
 FY27: \$142,717
 FY28: \$142,717
 FY29: \$142,717

Part III: Expenditure Detail

III. A - Operating Budget Expenditures

Account	Account Title	Type	FY 2024	FY 2025	2023-25	2025-27	2027-29
001-1	General Fund	State	238,082	164,277	402,359	285,434	285,434
Total \$			238,082	164,277	402,359	285,434	285,434

III. B - Expenditures by Object Or Purpose

	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years	1.4	1.2	1.3	1.1	1.1
A-Salaries and Wages	139,808	116,699	256,507	198,848	198,848
B-Employee Benefits	36,389	31,868	68,257	55,166	55,166
C-Professional Service Contracts					
E-Goods and Other Services	32,740	1,710	34,450	3,420	3,420
G-Travel	1,145		1,145		
J-Capital Outlays					
M-Inter Agency/Fund Transfers					
N-Grants, Benefits & Client Services	28,000	14,000	42,000	28,000	28,000
P-Debt Service					
S-Interagency Reimbursements					
T-Intra-Agency Reimbursements					
9-					
Total \$	238,082	164,277	402,359	285,434	285,434

III. C - Operating FTE Detail: *List FTEs by classification and corresponding annual compensation. Totals need to agree with total FTEs in Part I and Part IIIA*

Job Classification	Salary	FY 2024	FY 2025	2023-25	2025-27	2027-29
Assistant Professor	135,651	0.1	0.1	0.1	0.1	0.1
Associate Professor	172,212	0.1	0.1	0.1	0.1	0.1
Communications Director	133,844		0.0	0.0	0.0	0.0
Graduate Student Research Assistant	77,000	0.5	0.3	0.4	0.3	0.3
Professor	215,076	0.1	0.1	0.1	0.1	0.1
Research Scientist I	80,056	0.5	0.5	0.5	0.5	0.5
Research Scientist II	89,857	0.1	0.1	0.1	0.1	0.1
Web Graphics Specialist	91,835		0.1	0.0	0.0	0.0
Total FTEs		1.4	1.2	1.3	1.1	1.1

III. D - Expenditures By Program (optional)

NONE

Part IV: Capital Budget Impact

IV. A - Capital Budget Expenditures

NONE

IV. B - Expenditures by Object Or Purpose

NONE

IV. C - Capital Budget Breakout

Acquisition and construction costs not reflected elsewhere on the fiscal note and description of potential financing methods.

NONE

IV. D - Capital FTE Detail: *FTEs listed by classification and corresponding annual compensation. Totals agree with total FTEs in Part IVB.*

NONE

Part V: New Rule Making Required

Provisions of the bill that require the agency to adopt new administrative rules or repeal/revise existing rules.

Individual State Agency Fiscal Note

Bill Number: 5447 E S SB AMI ENVI H1698.1	Title: Alternative jet fuel	Agency: 365-Washington State University
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Part I: Estimates

No Fiscal Impact

Estimated Cash Receipts to:

NONE

Estimated Operating Expenditures from:

	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years	0.3	0.3	0.3	0.1	0.1
Account					
General Fund-State 001-1	69,995	69,995	139,990	40,006	40,006
Total \$	69,995	69,995	139,990	40,006	40,006

Estimated Capital Budget Impact:

NONE

The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.

Check applicable boxes and follow corresponding instructions:

- If fiscal impact is greater than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.
- If fiscal impact is less than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).
- Capital budget impact, complete Part IV.
- Requires new rule making, complete Part V.

Legislative Contact:	Phone:	Date: 03/27/2023
Agency Preparation: Anne-Lise Brooks	Phone: 509-335-8815	Date: 03/31/2023
Agency Approval: Chris Jones	Phone: 509-335-9682	Date: 03/31/2023
OFM Review: Ramona Nabors	Phone: (360) 742-8948	Date: 04/03/2023

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Significant provisions of the bill and any related workload or policy assumptions that have revenue or expenditure impact on the responding agency by section number.

The charge to WSU within Section 7 of 5447 ESSB AMH ENVI H1698.1 involves collaborating with the UW to "calculate emissions of ultrafine and fine particulate matter and sulfur oxides in communities surrounding an international airport owned by a port district in a county with a population greater than 1,500,000 and report that information to the joint legislative audit and review committee".

Section 4 requires the WSU Office of Clean Technology to convene a sustainable aviation biofuels work group and WSU estimates the costs associated would be approximately \$20,000 a year.

II. B - Cash receipts Impact

Cash receipts impact of the legislation on the responding agency with the cash receipts provisions identified by section number and when appropriate, the detail of the revenue sources. Description of the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explanation of how workload assumptions translate into estimates. Distinguished between one time and ongoing functions.

II. C - Expenditures

Agency expenditures necessary to implement this legislation (or savings resulting from this legislation), with the provisions of the legislation that result in the expenditures (or savings) identified by section number. Description of the factual basis of the assumptions and the method by which the expenditure impact is derived. Explanation of how workload assumptions translate into cost estimates. Distinguished between one time and ongoing functions.

The cost estimates for Section 7 involve administrative personnel time and travel expenses to coordinate with the UW on the analysis of alternative jet fuel emissions.

Costs for Section 2 include salaries and benefits of approximately \$12,845 and operating and travel costs of \$7,155. For purposes of this fiscal note lead agency assumptions include the following: There would be three meetings per year and we assume that meetings would be held in the Seattle area (WSU downtown offices or Port of Seattle offices at SeaTac) without costs. These facilities would need to accommodate video conferencing to allow members to attend if not able to travel. It is assumed that travel will be required for WSU personnel into the meeting site. We assume that one travel per year would be needed for an expertise in the field. Personnel requirements for meeting planning, logistics, facilitation, records, and full bi-annual (odd years) reports. We assume a level engagement with stakeholders and legislature between meeting intervals. This role will be filled by personnel from the Office of Clean Technology.

Part III: Expenditure Detail

III. A - Operating Budget Expenditures

Account	Account Title	Type	FY 2024	FY 2025	2023-25	2025-27	2027-29
001-1	General Fund	State	69,995	69,995	139,990	40,006	40,006
Total \$			69,995	69,995	139,990	40,006	40,006

III. B - Expenditures by Object Or Purpose

	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years	0.3	0.3	0.3	0.1	0.1
A-Salaries and Wages	44,443	44,443	88,886	18,972	18,972
B-Employee Benefits	15,397	15,397	30,794	6,734	6,734
C-Professional Service Contracts					
E-Goods and Other Services	3,855	3,855	7,710	7,700	7,700
G-Travel	6,300	6,300	12,600	6,600	6,600
J-Capital Outlays					
M-Inter Agency/Fund Transfers					
N-Grants, Benefits & Client Services					
P-Debt Service					
S-Interagency Reimbursements					
T-Intra-Agency Reimbursements					
9-					
Total \$	69,995	69,995	139,990	40,006	40,006

III. C - Operating FTE Detail: *List FTEs by classification and corresponding annual compensation. Totals need to agree with total FTEs in Part I and Part IIIA*

Job Classification	Salary	FY 2024	FY 2025	2023-25	2025-27	2027-29
Assistant Vice Chancellor	230,000	0.1	0.1	0.1		
Asst Director of ASCENT	113,873	0.1	0.1	0.1	0.1	0.1
Regents Professor, Director	297,789					
Research operations Engineer	65,478	0.1	0.1	0.1		
Total FTEs		0.3	0.3	0.3	0.1	0.1

III. D - Expenditures By Program (optional)

NONE

Part IV: Capital Budget Impact

IV. A - Capital Budget Expenditures

NONE

IV. B - Expenditures by Object Or Purpose

NONE

IV. C - Capital Budget Breakout

Acquisition and construction costs not reflected elsewhere on the fiscal note and description of potential financing methods.

NONE

IV. D - Capital FTE Detail: *FTEs listed by classification and corresponding annual compensation. Totals agree with total FTEs in Part IVB.*

NONE

Part V: New Rule Making Required

Provisions of the bill that require the agency to adopt new administrative rules or repeal/revise existing rules.

Individual State Agency Fiscal Note

Bill Number: 5447 E S SB AMI ENVI H1698.1	Title: Alternative jet fuel	Agency: 461-Department of Ecology
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Part I: Estimates

No Fiscal Impact

Estimated Cash Receipts to:

ACCOUNT	FY 2024	FY 2025	2023-25	2025-27	2027-29
Clean Fuels Program Account-State 25Q-1	615,561	636,891	1,252,452	975,526	975,526
Total \$	615,561	636,891	1,252,452	975,526	975,526

Estimated Operating Expenditures from:

	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years	4.6	4.8	4.7	3.7	3.7
Account					
Clean Fuels Program Account-State 25Q-1	615,561	636,891	1,252,452	975,526	975,526
Total \$	615,561	636,891	1,252,452	975,526	975,526

Estimated Capital Budget Impact:

NONE

The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.

Check applicable boxes and follow corresponding instructions:

- If fiscal impact is greater than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.
- If fiscal impact is less than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).
- Capital budget impact, complete Part IV.
- Requires new rule making, complete Part V.

Legislative Contact:	Phone:	Date: 03/27/2023
Agency Preparation: Pete Siefer	Phone: 360-485-7648	Date: 03/28/2023
Agency Approval: Erik Fairchild	Phone: 360-407-7005	Date: 03/28/2023
OFM Review: Lisa Borkowski	Phone: (360) 742-2239	Date: 04/04/2023

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Significant provisions of the bill and any related workload or policy assumptions that have revenue or expenditure impact on the responding agency by section number.

Compared to ESSB 5447, ESSB 5447 AMH ENVI H1698.1 makes the following changes related to the Department of Ecology (Ecology):

- Section 2 modifies the definition of "alternative jet fuel" to remove references to "petroleum or nonpetroleum sources."
- Section 3 adds the requirement that the Clean Fuels Program (CFP) report produced by Ecology must include the amount, generation date, and geographic origin of renewable thermal certificates representing the biomethane environmental attributes claimed by certain alternative fuels.
- Section 7 modifies certain aspects of the air quality study required in this section, including that the emissions calculation must be conducted for alternative jet fuel (AJF) used from an international airport owned by a port district in a county with a population greater than 1,500,000, and that the University of Washington must produce the report in collaboration with Washington State University.
- Section 13 is removed, no longer allowing the State Treasurer to transfer funds from the Climate Commitment Account to the state General Fund in an amount equal to any reduction in state revenue from the tax preferences in sections 9 through 12, as determined annually by DOR.

The changes to section 3 change the fiscal impact to Ecology.

Currently, Ecology administers the CFP, authorized in statute under chapter 70A.535 RCW. Under the Clean Fuel Standard (CFS), fuels are assessed to determine their carbon intensity. Cleaner fuels – those with carbon intensities below the standard – generate credits that can be kept or sold to producers of high-carbon fuels. Fuels with a carbon intensity above the standard generate deficits. Those producers must then buy enough credits to meet the carbon intensity reduction for that year. The requirement to reduce carbon intensity increases over time, making sure aggregate emissions from transportation fuels decrease. In Washington, the CFS works beside the Climate Commitment Act to target the largest source of emissions in Washington.

Currently, RCW 70A.535.090(1) requires that Ecology posts a report on the website that includes information regarding the previous calendar year of CFP activities. The information that the report is required to include is: The program-wide number of credits and deficits generated by entities participating in the CFP, the volumes of each transportation fuel and average price per credit used to comply with the requirements of the CFP, the best estimate or range in probable costs or cost savings attributable to the CFP per gallon of gasoline and per gallon of diesel, the total greenhouse gas (GHG) emissions reductions attributable to the CFP, and the range in the probable cost per ton of GHG emissions reductions attributable to fuels support by the CFP.

This bill would provide opportunities for financial incentives for alternative jet fuel (AJF), also called sustainable aviation fuel (SAF).

Section 1 would add a new section identifying the intent to use Climate Commitment Act (CCA) funds to promote the production and use of SAF.

Section 2 would add a definition for “alternative jet fuel” to RCW 70A.535.010, the Clean Fuel Standard (CFS) statute.

Section 3 would amend chapter 70A.535 RCW to require the Department of Ecology to: Allow one or more carbon

intensity pathways for AJF no later than December 31, 2023; to allow biomethane to be claimed as a feedstock for renewable diesel and AJF; and, to notify the Department of Revenue (DOR) within 30 days when one or more AJF facilities capable of producing a cumulative production capacity of at least 20,000,000 gallons of an AJF each year is operating in the state. Ecology would be required to include in the report required by RCW 70A.535.090(1) information that includes the amount, generation date, and geographic origin of renewable thermal certificates representing the biomethane environmental attributes claimed by certain alternative fuels.

Section 10 would establish the eligibility and process for applying for the tax credit within chapter 82.04 RCW (B&O Tax) for manufacturers of AJF.

Section 11 would establish the credit per gallon of AJF and the process for claiming that credit, adding a section to chapter 82.04 RCW (B&O Tax) to require that the person applying to claim a credit under this section must complete an application for the credit that includes documentation sufficient for Ecology to verify that the AJF for which the credit is being claimed meets the carbon intensity reduction benchmarks required under this section, as certified in Section 3 of this act.

Section 12 would establish the credit per gallon of AJF and the process for claiming that credit, adding a section to chapter 82.16 RCW (Public Utility Tax) to require that the person applying to claim a credit under this section must complete an application for the credit that includes documentation sufficient for Ecology to verify that the AJF for which the credit is being claimed meets the carbon intensity reduction benchmarks required under this section, as certified in Section 3 of this act.

Section 15 would make sections 9 through 13 effective July 1, 2024.

Section 16 would make sections 1 through 7 effective July 1, 2023.

II. B - Cash receipts Impact

Cash receipts impact of the legislation on the responding agency with the cash receipts provisions identified by section number and when appropriate, the detail of the revenue sources. Description of the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explanation of how workload assumptions translate into estimates. Distinguished between one time and ongoing functions.

The cash receipts impact to Ecology under this bill is greater than \$50,000 in Fiscal Year (FY) 2024 and ongoing to implement the requirements of section 3.

Section 3 – Fees for Rulemaking, Implementation, and IT Impacts

Under current law, RCW 70A.535.130 of the CFS, Ecology may require that persons that are required or elect to register or report under the program pay a fee. The fee must be set equal to the projected direct and indirect costs for developing and implementing the program, as well as the projected direct and indirect costs to the Department of Commerce to carry out the responsibilities under RCW 70A.535.100. All fees and penalties received through the program must be deposited into the Clean Fuels Program Account.

Section 3 of this bill would increase the cost of developing and implementing the program, and would therefore increase the fee and the associated revenue collected for this purpose.

The revenue impact to Ecology under this bill is:

FY 2024: \$615,561

FY 2025: \$636,891

FY 2026 and ongoing: \$487,763

II. C - Expenditures

Agency expenditures necessary to implement this legislation (or savings resulting from this legislation), with the provisions of the legislation that result in the expenditures (or savings) identified by section number. Description of the factual basis of the assumptions and the method by which the expenditure impact is derived. Explanation of how workload assumptions translate into cost estimates. Distinguished between one time and ongoing functions.

The expenditure impact to Ecology under this bill is estimated to be greater than \$50,000 in FY 2024 and ongoing to implement the requirements of section 3.

Section 3(2) – Rulemaking

Section 3(2) would require Ecology to allow biomethane to be claimed as the feedstock for renewable diesel and AJF consistent with that allowable for compressed natural gas, liquified natural gas, liquified compressed natural gas, or hydrogen production.

Ecology assumes rulemaking would be required to update the CFS rule (chapter 173-424 WAC) to implement the changes in section 3(2). Ecology estimates that rulemaking would be moderately complex and generate substantial public interest and input. It would require nineteen months, from July 1, 2023 to February 1, 2025. The rulemaking would include two preproposal meetings to gather input from stakeholders and two public hearings to accept comments on the rule proposal.

0.5 FTE Environmental Planner 3 in FY 2024 and 0.25 FTE in FY 2025 – this position would be the rulemaking lead, coordinating the rulemaking effort.

0.25 FTE Environmental Engineer 6 in FY 2024 and 0.13 FTE in FY 2025 – this position would be the technical lead, advising on rule language and driving the overall policy change of the program.

The following positions would complete an economic and regulatory analysis of the rule: 0.2 FTE Economic Analyst 3 in FY 2025; 0.05 FTE Regulatory Analyst 2 in FY 2025. Ecology would hold one public hearing in FY 2024 and one public hearing in FY 2025 for rulemaking. Goods and services estimates include facility rental costs estimated at \$1,000 per hearing (\$1,000 FY 2024 and \$1,000 FY 2025). The Attorney General’s Office assumes no additional fiscal impact for rulemaking support.

Section 3 – Implementation

Section 3(1) would require Ecology to allow one or more carbon intensity pathways for AJF no later than December 31, 2023. Ecology assumes this could be implemented by December 31, 2023, based on the updated statutory language, without the need for updating the CFS rule. Ecology would also include the update in the CFS rule as part of the rulemaking described above to ensure alignment with the statute.

Currently, Ecology is accepting Tier 1 pathways and fuels pathways certified in Oregon and California. Section 3(1) of this bill would require Ecology to begin accepting Tier 2 pathway applications by December 31, 2023 as opposed to in late CY 2024 as required in current statute. This would require significantly more staff time than the current, already certified pathways.

Adding SAF as a fuel pathway would be complex in nature and add a significant amount of new and ongoing work to the CFS program, as AJF requires using carbon intensity calculators that are not commonly used. We assume Ecology would create and maintain the SAF fuel pathway throughout the length of the CFS program.

Feedback from external stakeholders who have experience in Oregon and California’s programs is that approval of fuel pathways in these markets takes a significant amount of time. Ecology assumes the intent of this bill would be to provide a robust infrastructure in Washington to assess and approve fuel pathways in a timely manner. Section 3 would require Ecology to hire additional staff to accommodate the work of allowing biomethane to be claimed as a feedstock. This staffing need would be ongoing in order to allow Ecology to assess and approve Tier 2 fuel pathways in a timely manner

throughout the length of the CFS program. Verifying when a facility is capable of producing at least 20,000,000 gallons of AJF and then notifying DOR of this would also require additional Ecology staff time as this is new work that we are not currently performing.

Section 3(2) would require the CFP report produced by Ecology to include the amount, generation date, and geographic origin of renewable thermal certificates representing the biomethane environmental attributes claimed by certain alternative fuels.

Currently, Ecology has existing contract resources of \$75,467 each year in FY 2024 and ongoing to contract with an independent consultant to determine fuel costs or cost savings attributable to the CFP. The change in this section would create additional staff time necessary to extract the required data on renewable thermal certificates from the clean fuels database, analyze the data, and write the new section of the report.

Ecology would require the following staff time in order to implement the proposed changes:

1.0 FTE Natural Resource Scientist (NRS) 4 in FY 2024 and ongoing – this position would be needed to research and update GHG emissions for transportation fuel pathways, and review and approve innovative fuel pathways based on the updated implementation date associated with the changes in this section. Ecology estimates that the workload associated with complex transportation fuel pathways would significantly increase due to the changes, and this NRS 4 would update carbon intensity lifecycle analysis modeling tools, provide technical support for the development, and provide analysis of verification program and criteria.

1.0 FTE Environmental Specialist (ES) 4 in FY 2024 and ongoing – this position would serve as a senior environmental section specialist to provide guidance and technical assistance to the increased number of program participants, review and process the additional quarterly and annual reports, implement routine program audits and compliance monitoring, and assist with routine review of the increase in complex verifier reports. This position would also undertake market monitoring to maintain a stable credit price by monitoring the market impacts of this increase in SAF credits.

1.0 FTE ES 5 in FY 2024 and ongoing – this position would serve as an expert program analyst to implement actions, including a study on the policy implications on adding renewable natural gas as a feedstock for AJF and renewable diesel production. Additionally, this position would engage with and provide outreach support for the stakeholder community around the approval of fuel pathways.

0.25 FTE ES 4 in FY 2024 and ongoing – this position would extract the required renewable thermal certificate data from the clean fuels database, analyze the data, and write the new section of the report required in subsection 3(2).

Section 3(2) – IT Impacts

Adding biomethane as a feedstock for AJF would require changes to our Alternative Fuel Portal (AFP) IT application. Ecology's existing IT application currently allows biomethane to be used as a fuel, but would need to be updated to include the use of feedstock to other fuels. Ecology assumes staff time would be required to make this update to the existing tool.

0.25 FTE IT Application Developer – Journey in FY 2025 to update the existing AFP IT application to align with the updated requirements.

Sections 9, 10, and 11 would be completed per and with the resources requested in Section 3.

SUMMARY: The expenditure impact to Ecology under this bill is:

RULEMAKING is estimated to require:
FY 2024: \$127,798 and 0.9 FTEs

FY 2025: \$103,384 and 0.7 FTEs

IMPLEMENTATION is estimated to require:
 FY 2024 and ongoing: \$487,763 and 3.7 FTEs

IT IMPACTS is estimated to require:
 FY 2025: \$45,744 and 0.3 FTEs

THE TOTAL EXPENDITURE IMPACT to Ecology under this bill is estimated to be:
 FY 2024: \$615,561 and 4.6 FTEs
 FY 2025: \$636,891 and 4.8 FTEs
 FY 2026 and ongoing: \$487,763 and 3.7 FTEs.

Notes on costs by object:

Salary estimates are current biennium actual rates at Step L.

Benefits are the agency average of 36% of salaries.

Goods and Services are the agency average of \$5,224 per direct program FTE. Additional Goods and Services costs include rulemaking public hearing costs of \$1,000 in FY 2024 and \$1,000 in FY 2025.

Travel is the agency average of \$1,563 per direct program FTE.

Equipment is the agency average of \$1,031 per direct program FTE.

Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 28.75% of direct program salaries and benefits, and is shown as object 9. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development - Journey.

Part III: Expenditure Detail

III. A - Operating Budget Expenditures

Account	Account Title	Type	FY 2024	FY 2025	2023-25	2025-27	2027-29
25Q-1	Clean Fuels Program Account	State	615,561	636,891	1,252,452	975,526	975,526
Total \$			615,561	636,891	1,252,452	975,526	975,526

III. B - Expenditures by Object Or Purpose

	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years	4.6	4.8	4.7	3.7	3.7
A-Salaries and Wages	333,117	344,741	677,858	528,102	528,102
B-Employee Benefits	119,922	124,107	244,029	190,118	190,118
E-Goods and Other Services	21,896	22,549	44,445	33,956	33,956
G-Travel	6,253	6,448	12,701	10,160	10,160
J-Capital Outlays	4,125	4,254	8,379	6,702	6,702
9-Agency Administrative Overhead	130,248	134,792	265,040	206,488	206,488
Total \$	615,561	636,891	1,252,452	975,526	975,526

III. C - Operating FTE Detail: *List FTEs by classification and corresponding annual compensation. Totals need to agree with total FTEs in Part I and Part IIIA*

Job Classification	Salary	FY 2024	FY 2025	2023-25	2025-27	2027-29
ECONOMIC ANALYST 3	85,020		0.2	0.1		
ENVIRONMENTAL ENGINEER 6	114,360	0.3	0.1	0.2		
ENVIRONMENTAL PLANNER 3	80,952	0.5	0.3	0.4		
ENVIRONMENTAL SPEC 4	73,260	1.3	1.3	1.3	1.3	1.3
ENVIRONMENTAL SPEC 5	80,952	1.0	1.0	1.0	1.0	1.0
FISCAL ANALYST 2		0.4	0.4	0.4	0.3	0.3
IT APP DEV-JOURNEY	100,032		0.3	0.1		
IT APP DEV-JOURNEY (Admin)		0.2	0.2	0.2	0.2	0.2
NAT RESOURCE SCIENTIST 4	91,524	1.0	1.0	1.0	1.0	1.0
REGULATORY ANALYST 2	82,896		0.1	0.0		
Total FTEs		4.6	4.8	4.7	3.7	3.7

III. D - Expenditures By Program (optional)

NONE

Part IV: Capital Budget Impact

IV. A - Capital Budget Expenditures

NONE

IV. B - Expenditures by Object Or Purpose

NONE

IV. C - Capital Budget Breakout

Acquisition and construction costs not reflected elsewhere on the fiscal note and description of potential financing methods.

NONE

IV. D - Capital FTE Detail: *FTEs listed by classification and corresponding annual compensation. Totals agree with total FTEs in Part IVB.*

NONE

Part V: New Rule Making Required

Provisions of the bill that require the agency to adopt new administrative rules or repeal/revise existing rules.

Rulemaking would be required to implement the changes in section 3. The current Clean Fuels Program Rule (chapter 173-424 WAC) would need to be amended to allow for the use of biomethane as a feedstock for AJF and renewable diesel production.



Multiple Agency Ten-Year Analysis Summary

Bill Number 5447 E S SB AMH ENVI H1698.1	Title Alternative jet fuel
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This ten-year analysis is limited to the estimated cash receipts associated with the proposed tax or fee increases.

Estimated Cash Receipts

	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027	Fiscal Year 2028	Fiscal Year 2029	Fiscal Year 2030	Fiscal Year 2031	Fiscal Year 2032	Fiscal Year 2033	2024-33 TOTAL
Joint Legislative Audit and Review Committee	0	0	0	0	0	0	0	0	0	0	0
Office of State Treasurer	0	0	0	0	0	0	0	0	0	0	0
Department of Commerce	0	0	0	0	0	0	0	0	0	0	0
Department of Revenue	0	0	0	0	0	0	0	0	0	0	0
University of Washington	0	0	0	0	0	0	0	0	0	0	0
Washington State University	0	0	0	0	0	0	0	0	0	0	0
Department of Ecology	615,561	636,891	487,763	487,763	487,763	487,763	487,763	487,763	487,763	487,763	5,154,556
Total	615,561	636,891	487,763	487,763	487,763	487,763	487,763	487,763	487,763	487,763	5,154,556



Ten-Year Analysis

Bill Number 5447 E S SB AMH ENVI H1698.1	Title Alternative jet fuel	Agency 014 Joint Legislative Audit and Review Committee
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This ten-year analysis is limited to agency estimated cash receipts associated with the proposed tax or fee increases. The Office of Financial Management ten-year projection can be found at <http://www.ofm.wa.gov/tax/default.asp>.

Estimates

No Cash Receipts **Partially Indeterminate Cash Receipts** **Indeterminate Cash Receipts**

Name of Tax or Fee	Acct Code												
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Agency Preparation: Dana Lynn	Phone: 360-786-5177	Date: 3/30/2023 10:11:13 an
Agency Approval: Eric Thomas	Phone: 360 786-5182	Date: 3/30/2023 10:11:13 an
OFM Review:	Phone:	Date:



Ten-Year Analysis

Bill Number 5447 E S SB AMH ENVI H1698.1	Title Alternative jet fuel	Agency 090 Office of State Treasurer
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This ten-year analysis is limited to agency estimated cash receipts associated with the proposed tax or fee increases. The Office of Financial Management ten-year projection can be found at <http://www.ofm.wa.gov/tax/default.asp>.

Estimates

No Cash Receipts

 Partially Indeterminate Cash Receipts

 Indeterminate Cash Receipts

Name of Tax or Fee	Acct Code												
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Agency Preparation: Dan Mason	Phone: (360) 902-8990	Date: 3/29/2023 10:12:53 an
Agency Approval: Dan Mason	Phone: (360) 902-8990	Date: 3/29/2023 10:12:53 an
OFM Review:	Phone:	Date:



Ten-Year Analysis

Bill Number 5447 E S SB AMH ENVI H1698.1	Title Alternative jet fuel	Agency 103 Department of Commerce
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This ten-year analysis is limited to agency estimated cash receipts associated with the proposed tax or fee increases. The Office of Financial Management ten-year projection can be found at <http://www.ofm.wa.gov/tax/default.asp>.

Estimates

No Cash Receipts

 Partially Indeterminate Cash Receipts

 Indeterminate Cash Receipts

Name of Tax or Fee	Acct Code											

Agency Preparation: Marla Page	Phone: 360-725-3129	Date: 3/30/2023 9:01:23 am
Agency Approval: Jason Davidson	Phone: 360-725-5080	Date: 3/30/2023 9:01:23 am
OFM Review:	Phone:	Date:



Ten-Year Analysis

Bill Number 5447 E S SB AMH ENVI H1698.1	Title Alternative jet fuel	Agency 140 Department of Revenue
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This ten-year analysis is limited to agency estimated cash receipts associated with the proposed tax or fee increases. The Office of Financial Management ten-year projection can be found at <http://www.ofm.wa.gov/tax/default.asp>.

Estimates

No Cash Receipts **Partially Indeterminate Cash Receipts** **Indeterminate Cash Receipts**

Name of Tax or Fee	Acct Code												
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Agency Preparation: Anna Yamada	Phone: 360-534-1519	Date: 3/28/2023 2:23:10 pm
Agency Approval: Valerie Torres	Phone: 360-534-1521	Date: 3/28/2023 2:23:10 pm
OFM Review:	Phone:	Date:



Ten-Year Analysis

Bill Number 5447 E S SB AMH ENVI H1698.1	Title Alternative jet fuel	Agency 360 University of Washington
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This ten-year analysis is limited to agency estimated cash receipts associated with the proposed tax or fee increases. The Office of Financial Management ten-year projection can be found at <http://www.ofm.wa.gov/tax/default.asp>.

Estimates

No Cash Receipts **Partially Indeterminate Cash Receipts** **Indeterminate Cash Receipts**

Name of Tax or Fee	Acct Code												
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Agency Preparation: Lauren Hatchett	Phone: 2066167203	Date: 3/28/2023 11:29:51 an
Agency Approval: Charlotte Shannon	Phone: 2066858868	Date: 3/28/2023 11:29:51 an
OFM Review:	Phone:	Date:



Ten-Year Analysis

Bill Number 5447 E S SB AMH ENVI H1698.1	Title Alternative jet fuel	Agency 365 Washington State University
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This ten-year analysis is limited to agency estimated cash receipts associated with the proposed tax or fee increases. The Office of Financial Management ten-year projection can be found at <http://www.ofm.wa.gov/tax/default.asp>.

Estimates

No Cash Receipts

 Partially Indeterminate Cash Receipts

 Indeterminate Cash Receipts

Name of Tax or Fee	Acct Code												
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Agency Preparation: Anne-Lise Brooks	Phone: 509-335-8815	Date: 3/31/2023 3:27:23 pm
Agency Approval: Chris Jones	Phone: 509-335-9682	Date: 3/31/2023 3:27:23 pm
OFM Review:	Phone:	Date:



Ten-Year Analysis

Bill Number 5447 E S SB AMH ENVI H1698.1	Title Alternative jet fuel	Agency 461 Department of Ecology
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This ten-year analysis is limited to agency estimated cash receipts associated with the proposed tax or fee increases. The Office of Financial Management ten-year projection can be found at <http://www.ofm.wa.gov/tax/default.asp>.

Estimates

No Cash Receipts

 Partially Indeterminate Cash Receipts

 Indeterminate Cash Receipts

Estimated Cash Receipts

Name of Tax or Fee	Acct Code	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027	Fiscal Year 2028	Fiscal Year 2029	Fiscal Year 2030	Fiscal Year 2031	Fiscal Year 2032	Fiscal Year 2033	2024-33 TOTAL
Clean Fuels Program Fee	25Q	615,561	636,891	487,763	487,763	487,763	487,763	487,763	487,763	487,763	487,763	5,154,556
Total		615,561	636,891	487,763	487,763	487,763	487,763	487,763	487,763	487,763	487,763	5,154,556
Biennial Totals		1,252,452		975,526		975,526		975,526		975,526		5,154,556

Narrative Explanation (Required for Indeterminate Cash Receipts)

Section 3 – Fees for implementation

Under current law, RCW 70A.535.130 of the CFS, Ecology may require that persons that are required or elect to register or report under the program pay a fee. The fee r be set equal to the projected direct and indirect costs for developing and implementing the program, as well as the projected direct and indirect costs to the Department o Commerce to carry out the responsibilities under RCW 70A.535.100. All fees and penalties received through the program must be deposited into the Clean Fuels Progra Account.

Section 3 of this bill would increase the cost of developing and implementing the program, and would therefore increase the fee and the associated revenue collected for purpose.

The revenue impact to Ecology under this bill is:

FY 2024: \$615,561
 FY 2025: \$636,891
 FY 2026 and ongoing: \$487,763



Ten-Year Analysis

Bill Number 5447 E S SB AMH ENVI H1698.1	Title Alternative jet fuel	Agency 461 Department of Ecology
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Agency Preparation: Pete Siefer	Phone: 360-485-7648	Date: 3/28/2023 9:28:22 am
Agency Approval: Erik Fairchild	Phone: 360-407-7005	Date: 3/28/2023 9:28:22 am
OFM Review:	Phone:	Date: