Review of Income and Financial Institutions Tax Credits Pursuant to Section 23-92, Hawai‘i Revised Statutes

A Report to the Legislature
of the State of Hawai‘i

Report No. 21-06
March 2021

OFFICE OF THE AUDITOR
STATE OF HAWAI‘I

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Constitutional Mandate

Pursuant to Article VII, Section 10 of the Hawai‘i State Constitution, the Office of the Auditor shall conduct post-audits of the transactions, accounts, programs and performance of all departments, offices and agencies of the State and its political subdivisions.

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To improve government through independent and objective analyses.

We provide independent, objective, and meaningful answers to questions about government performance. Our aim is to hold agencies accountable for their policy implementation, program management, and expenditure of public funds.

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We report our findings and make recommendations to the governor and the Legislature to help them make informed decisions.

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Foreword

This report assesses the Motion Picture, Digital Media, and Film Production Income Tax Credit and the Renewable Energy Technologies Income Tax Credit. Section 23-91 et seq., Hawai‘i Revised Statutes, requires the Auditor to annually review different tax credits, exclusions, and deductions on a five-year recurring cycle.

We express our appreciation to the Department of Taxation; Legislative Reference Bureau; Department of Business, Economic Development and Tourism; Hawai‘i Film Office; and Hawai‘i State Energy Office for their assistance in providing data and other information for this report.

Leslie H. Kondo
State Auditor

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Review of Income and Financial Institutions Tax Credits Pursuant to Section 23-92, Hawai‘i Revised Statutes

Introduction

THIS REPORT assesses the Motion Picture, Digital Media, and Film Production Income Tax Credit and the Renewable Energy Technologies Income Tax Credit. Section 23-91 et seq., Hawai‘i Revised Statutes (HRS), requires the Auditor to annually review different tax credits, exclusions, and deductions on a five-year recurring cycle. A complete list of tax provisions to be reviewed is included in Appendix A.

Tax credits are amounts subtracted directly from a filer's tax liability, thereby reducing the amount of taxes due on a dollar-for-dollar basis.

About This Report

This report examines two tax credits that can be applied against Hawai‘i's income tax and financial institutions tax. Tax credits are amounts subtracted directly from a filer's tax liability, thereby reducing the amount of taxes due on a dollar-for-dollar basis and, in some cases, require the State to pay a filer the amount of tax credit that exceeds the filer's tax liability. Lawmakers may choose to reduce tax liability to promote social and economic goals. Since such provisions reduce revenues to the State, the analysis and recommendations in this report aim at better informing policymakers about the purposes, costs, and benefits of various tax credits to allow for improved policymaking.

Section 1 of Act 261, Session Laws of Hawai‘i (SLH) 2016, which established the annual review of tax credits by the Office of the Auditor (Auditor), stated that when certain taxpayers receive special benefits to the detriment of others, it may generate resentment that leads to the loss of the public's confidence in fair treatment by the state government. However, the Legislature also believed that certain tax credits, exclusions, and deductions are needed for equity and efficiency as well as economic and social policy purposes. Accordingly, the Legislature found these reviews are "necessary to promote tax equity and efficiency, adequacy of state revenues, public transparency, and confidence in a fair state government."

This report reviews the following tax credits as set forth under Section 23-92, HRS:

- Section 235-17, HRS – Credit for qualified production costs incurred for a qualified motion picture, digital media, or film production (Motion Picture, Digital Media, and Film Production Income Tax Credit); and
- Sections 235-12.5 and 241-4.6, HRS – Renewable energy technologies; income tax credit (Renewable Energy Technologies Income Tax Credit).

Hawai‘i's income tax law is codified in Chapter 235, HRS. Chapter 241, HRS, governs taxation of banks and other financial corporations (franchise tax). The tax credits provided under Sections 235-12.5 and 241-4.6, HRS, are identical credits that apply to different taxes. The Department of Taxation (DoTax), however, does not separate the amounts claimed under Sections 235-12.5 and 241-4.6 and, accordingly, only reports the combined use of those tax credits. Therefore, this report evaluates these two credits together as one tax credit.

Overall, we found these tax credits appear to be achieving certain aspects of their stated purposes, but concrete conclusions cannot be drawn until the Legislature identifies metrics or benchmarks to be used to measure achievement. We recommend the Legislature clearly articulate purposes and establish specific metrics for measuring effectiveness when reviewing tax credits for extension or amendment.

As noted throughout this report, although we could identify purposes for the provisions reviewed, we had no objective means to assess whether those provisions were achieving their respective purposes. Clearly stated purposes for each tax credit and metrics for us to assess performance against specific targeted outcomes will permit a more thorough and meaningful analysis of the tax credits.

We further recommend that other state agencies be tasked with performing cost-benefit analyses of these credits under Section 23-91, HRS. While independent, objective, and well-suited to conducting performance audits and studies on the effectiveness of agency operations, we do not have ready access to the specialized economic data and resources necessary to conduct a thorough cost-benefit analysis of tax credits.

Hawai‘i’s Taxes

In general, governments generate tax revenue from three major sources: wealth, in the form of property taxes; consumption of goods and services, in the form of sales and excise taxes; and income, via income taxes. In Hawai‘i, the vast majority of state and local government revenue is raised at the state level via a General Excise Tax (GET), which resembles a tax on consumption. The relative percentage of revenue generated by property taxes collected by each of Hawai‘i’s counties is low in comparison to other states. That is largely because in nearly every other state, primary and secondary educational expenses are funded primarily through local government property taxes. However, Hawai‘i is unique in funding nearly all of kindergarten through 12th grade education expenses at the state level. Hawai‘i’s net income tax on corporations and individuals accounted for $2.66 billion, or 39 percent of the State’s general fund tax revenue of $6.89 billion in fiscal year (FY) 2020. That was second only to GET, which generated $3.36 billion, or nearly half of all general fund tax revenue in FY2020.

Hawai‘i’s Income Tax (Chapter 235, HRS)

Hawai‘i enacted an income tax in 1901, which would have made it the first state to adopt such a tax had it been a state at that time. Hawai‘i generally follows federal definitions for determining taxable income, but has created many of its own exemptions, exclusions, credits, and tax rates.

Hawai‘i taxes the income of both individuals and corporations. The Income Tax is levied on individual income, or on joint income for those filing jointly. For taxable years beginning after December 31, 2017, the income tax rates for individuals range from 1.4 percent to 11 percent of taxable income. The income tax rates for corporations range from 4.4 percent to 6.4 percent.

Hawai‘i’s Franchise Tax (Chapter 241, HRS)

The Franchise Tax is in lieu of income and general excise taxes and is imposed on banks, building and loan associations, development companies, financial corporations, financial services loan companies, trust companies, mortgage loan companies, financial holding companies, small business investment companies, and subsidiaries of such entities. The 7.92 percent tax is assessed on net income for the preceding year from all sources as defined by Chapter 235, HRS.

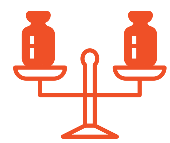
Tax Equity and Efficiency: Finding the Balance

WE ARE REQUIRED to assess tax equity and efficiency as part of our review. However, the Hawai‘i Revised Statutes do not define these terms. Accordingly, our evaluations were guided by criteria developed by the U.S. Joint Committee on Taxation and from the U.S. Government Accountability Office, as detailed in the Association of International Certified Professional Accountants (AICPA) publication *Guiding Principles of Good Tax Policy: A framework for evaluating tax proposals*. The Joint Committee on Taxation is a nonpartisan committee of the United States Congress that, among other things, investigates the administration, operation, and effects of taxes.

Tax *equity* is the principle of taxing similar taxpayers similarly. The concept of horizontal equity provides that two taxpayers with equal abilities to pay should pay the same amount of tax. In contrast, vertical equity provides that a person with the greater ability to pay should pay more tax.

Tax *efficiency* is the principle that a tax system should not unduly impede or reduce the productive capacity of the economy. All taxes have the capacity to change how a taxpayer may behave; for example, a GET exemption for local dairy farmers could stimulate development of the local dairy industry by lowering the industry’s costs, thereby creating a competitive advantage. Under the concept of efficiency, a tax system should avoid hindering economic goals, such as economic growth, capital formation, and competitiveness with other jurisdictions. A separate, but related, concept states that administrative and compliance costs should be kept low to foster effective tax administration. For purposes of this report, we primarily discuss economic efficiency rather than administrative efficiency, but do mention some administrative issues we deemed significant.

Sometimes a tax exemption, designed to increase economic activity in a certain industry or geographic area, will reduce tax equity by providing favorable treatment to these activities. Therefore, lawmakers must carefully balance both principles to optimize tax policy.



The concept of **horizontal equity** provides that two taxpayers with equal abilities to pay should pay the same amount of tax.

In contrast, **vertical equity** provides that a person with the greater ability to pay should pay more tax.

Source: Auditor research

Hawaiʻi Tax Credits

Hawaiʻi's first tax credit was established in 1957 to avoid double taxation of income. Since then, numerous tax credits have been enacted. Most tax credits are designed to promote social welfare or to encourage development of certain industries or economic activities.

Because tax credits are direct reductions from tax liability, they are considered more valuable to taxpayers than ordinary deductions, which reduce the amount of income against which a tax is applied. Tax credits may be refundable or nonrefundable. If a tax credit is nonrefundable, it can provide a tax benefit only to the extent that the taxpayer has a tax liability in the year claimed.[1] In contrast, a taxpayer is assured of receiving the full amount of a refundable tax credit in the year it is claimed because if the tax credit exceeds tax liability, the taxpayer receives a check from the government for the difference. All three tax credits reviewed in this report were refundable if certain conditions are met.

In 2018, the Motion Picture, Digital Media, and Film Production Income Tax Credit was the State's costliest tax credit with $80.23 million in claims, followed by the Renewable Energy Technologies Income Tax Credit with $70.5 million in claims.

In tax year 2018, Hawaiʻi's tax laws contained 21 tax credits, according to a December 2020 DoTax report. There were also six expired tax credits for which excess credits from prior years can be carried forward into tax year 2018. Most nonrefundable credits that cannot be fully claimed in the year the credit is earned, because the amount of the credit exceeds the filer's tax liability, can be carried forward and applied against tax liability in future years.

Overall, there were $341.93 million in tax credits provided in 2018. Forty-four percent of that amount was attributed to the tax credits reviewed in this report. In 2018, the Motion Picture, Digital Media, and Film Production Income Tax Credit was the State's costliest tax credit with $80.23 million in claims, followed by the Renewable Energy Technologies Income Tax Credit with $70.5 million in claims.

[1] For most nonrefundable tax credits, the unused credits can be carried forward to future years, so the full value of the tax credit is usually realized eventually.

Analysis of Reviewed Tax Credits

This report reviews the Motion Picture, Digital Media, and Film Production Income Tax Credit and the Renewable Energy Technologies Income Tax Credit. We found evidence that both tax credits appeared to be achieving elements of their identified purposes.

Assessment Challenges: Lack of Data on Cost, Causation

Many challenges hindered our ability to report information and analyze the tax credits as required under Section 23-91, HRS, most significantly, the lack of available data. For the tax credits, the lack of long-term historical data, recent structural changes to the credits, and changing economic and technology trends precluded us from reasonably estimating use of the credits for the next three calendar years as required by Section 23-91, HRS.

We were further challenged to determine the specific outcomes that were expected to be generated by the credits. As noted throughout this report, although the legislative acts that created the credits articulated certain purposes, none specified metrics for objectively identifying whether such purposes had been achieved. Often, it was not clear what actual outcomes were expected to be achieved.

An analysis of economic or employment benefits compared against forgone tax revenue was hampered by a variety of other factors. Businesses that claimed the tax credits were not required to provide justification for the tax break. We also were unable to share taxpayer names and other confidential filing data with the Department of Labor and Industrial Relations (DLIR) to independently identify and verify employment and payroll data for taxpayers claiming credits.

Further, our analysis could not account for a variety of unintended effects. For example, it is possible some businesses that claimed tax credits aimed at generating employment growth may have received tax breaks for jobs they would have created irrespective of the tax break, while other jobs may have been filled by non-residents. We were likewise unable to assess the disadvantages faced by businesses and industries that were not eligible for the tax breaks. As a result of these challenges, we could not make a causal connection between any potential Hawai‘i employment or economic gains and the use of these tax credits.

For future tax preferences, we recommend that the Legislature include a statement of purpose that identifies the goal or outcome the tax expenditure is meant to achieve, along with objective criteria for us to determine whether the tax preference is meeting that purpose. A similar approach has been taken by the State of Washington which has noted that including this type of additional detail, such as demographics to be used to measure effectiveness, is important to facilitating future reviews.

Finally, we conducted an analysis of the impact of tax credits on "low-income residents" using the formula provided in the statute. However, we question whether the calculations represent the value that repeal of a particular credit would have for low-income residents. Although money generated from repealing a particular credit likely will increase tax revenues, the impact of the additional funds will not automatically accrue a benefit to low-income residents in particular, but to all residents. Therefore, to the extent that the Legislature considers a tax credit or rebate to low-income residents to offset this cost, a more accurate representation of impact may be to divide the amount of cost by all residents, not just low-income residents. Further discussion, as well as our calculations, can be found in Appendix B.

Regarding the Motion Picture, Digital Media, and Film Production Income Tax Credit, to facilitate future reviews, we recommend:

1. Prior to extending the program beyond 2025, the Legislature clearly articulate the outputs or benefits of the tax credit that are to be measured, along with targets or benchmarks for those outputs or benefits.
2. The Legislature direct the Hawai‘i Film Office (Film Office), Department of Business, Economic Development and Tourism (DBEDT), and DoTax to conduct a cost-benefit analysis of the tax credit. The Film Office, with the aid of DBEDT's Research and Economic Analysis Division (READ), is better positioned than the Auditor to conduct such an analysis due to their subject-matter expertise and ready access to relevant economic data and computer software.
3. The Legislature ensure that the Film Office and DBEDT's READ continue their efforts to develop a means of surveying visitors to account for the tax credit's impact on tourism or develop some other means for assessing the value of the tax credit's marketing exposure.
4. The Legislature require the Film Office and DBEDT's READ to annually report on the competitiveness of the tax credit with other jurisdictions in terms of both tax incentive levels (generosity of the credits) and market share (growth of the industry versus peer municipalities).

Regarding the Renewable Energy Technologies Income Tax Credit, to facilitate future reviews, we recommend:

1. The Legislature include clearly articulated outputs or benefits of the tax credits that are to be accomplished in conjunction with any future amendments to the tax credits.
2. The Legislature obtain from the Hawai‘i State Energy Office (Energy Office), DBEDT’s READ, and other relevant agencies specific targets, or benchmarks, for determining whether outcomes are achieved.
3. The Legislature rely on the Energy Office and DBEDT’s READ to conduct a cost-benefit analyses of the tax credits. Those agencies are better positioned than the Auditor to conduct such analysis due to their subject-matter expertise and ready access to relevant economic data and computer software.

Motion Picture, Digital Media, and Film Production Income Tax Credit (Section 235-17, HRS)

Tax Credit at a Glance (2018)*

Total Tax Credits Claimed	Qualified Productions	Tax Credit Qualified Spending**	Cost Per Low-Income Resident	Meeting its Purpose?
$80.23 million	25	$425.53 million	$166.62***	Unable to determine

* As of January 29, 2021, the Film Office had not issued a report on 2019 or 2020 individual production registrations or claims.
** Estimated data based on production registration applications.
*** Cost per low-income resident was calculated using the 2018 figure of 481,524 low-income residents based on data provided by DBEDT.

HAWAI'I'S TAX CREDITS to promote film and TV production have been applied to production of blockbusters filmed in Hawai'i, such as *Jurassic World*, *Pirates of the Caribbean: On Stranger Tides*, *Godzilla,* and *Kong: Skull Island*. From 2015 through 2020 an estimated $312.2 million in such tax credits were generated targeting the high-profile industry, making it the largest of the State's tax credit programs.

DoTax and DBEDT, through its Film Office, are jointly responsible for the administration and implementation of the Motion Picture, Digital Media, and Film Production Income Tax Credit. The Film Office is responsible for reviewing each production's costs and approves tax credit requests via a production registration and reporting process. The Film Office must provide the Legislature annually with a production tax credit cost-benefit analysis. This analysis is done with the help of DBEDT's READ. In January 2019, the Film Office provided the Legislature the *Report to the Thirtieth Legislature Regarding Estimated Motion Picture, Digital Media and Film Production Income Tax Credit for Calendar Year 2018*.

DoTax adopts rules for the credits, processes tax credit claims as certified by the Film Office, and also reports on tax credit costs.

What does this tax credit do?

It provides a qualified production company a 25 percent refundable income tax credit up to $15 million per year per qualified film or TV production on "qualified production costs." Starting in 2019, there is an aggregate cap of $50 million in tax credits in a particular tax year. Tax credits that exceed the cap must be claimed in subsequent years.

History of the Tax Credit

The Motion Picture, Digital Media, and Film Production Income Tax Credit was enacted in 1997. Since 1997, among other changes, the tax credit rate has risen from 4.0 percent of qualified production costs to 25 percent.

1997
Act 107 established the Motion Picture and Film Production Income Tax Credit. The refundable credit provided film and television productions a tax credit of up to 4.0 percent of production costs incurred in the state and 6.0 percent of expenditures for transient accommodations.

1998
Act 156 increased the credit for transient accommodations from 6.0 percent to 7.25 percent of actual expenditures, as of January 1999. The changes were the result of recommendations from the 1997 Economic Revitalization Task Force.

2006
Act 88 increased the tax credit to 15 percent of eligible O‘ahu production expenditures and 20 percent of eligible neighbor island production expenditures and renamed it the Motion Picture, Digital Media, and Film Production Income Tax Credit. The total tax credits eligible to be claimed per qualified production was capped at $8 million. The act was repealed on January 1, 2016, and thereafter the credit reverted to the form in which it read on the day before the effective date of this act.

2013
The Legislature increased the tax credit by another 5 percentage points to 20 percent for production expenditures incurred on O‘ahu and 25 percent for the neighbor islands. The total tax credits that could be claimed per qualified production were increased to $15 million. Act 89 also required DBEDT to submit an annual report to the Legislature detailing non-aggregated qualified production costs. The Film Office also was required to provide the Legislature with an annual cost-benefit analysis of the tax credit.

2017
Act 143 extended the tax credit seven years to January 1, 2026, and amended the qualifications a production must meet in order to claim the credit by requiring a verification review by a qualified Certified Public Accountant using procedures prescribed by DBEDT. The total cumulative tax credits allowed in any particular year was increased to $35 million, however, if the total credits applied for in any year exceeded the credits allowed for such year, the excess could be claimed in a subsequent year, provided that no excess shall be allowed to be claimed after December 31, 2025.

2019
Act 275 increased the total cumulative tax credits allowed in any particular year from $35 million to $50 million.

How does this tax credit work?

The Motion Picture, Digital Media, and Film Production Income Tax Credit reduces the taxpayer's net income tax liability by the amount of the tax credit for the taxable year in which it is claimed. To claim the credit, taxpayers must verify their eligibility using forms provided by DoTax and administered by the Film Office. The tax credit is based on "qualified production costs," which are costs incurred in the state by a production that is subject to the Hawai'i GET or income tax.

To qualify for the credit productions must, among other things, include the phrase "Filmed on location on the Island of ________ in Hawaii with the assistance of Hawaii Production Tax Credits administered by the Film Office and the Department of Taxation" and a logo provided by the Film Office in the end credits of each qualified production.

Typically, the identities and financial details of productions that benefit from the tax credit are confidential. For example, in the *Report to the Thirtieth Legislature Regarding Estimated Motion Picture, Digital Media and Film Production Income Tax Credit for Calendar Year 2018*, a qualified production company that spent $27.07 million in qualified expenditures and hired 1,356 residents while producing a TV series on O'ahu in 2017 was simply described as "Prod 1." Prod 1 was eligible for a $5.41 million tax credit.

What is the purpose of this tax credit?

We determined that the purpose of this credit is to encourage the growth of the State's film and creative media industries by keeping Hawai'i competitive and comparable to other jurisdictions that offer tax breaks in attracting qualified productions, which generate revenue, jobs, and tourism marketing exposure.

The legislative history of the tax credit showed a variety of purpose statements over the years. Among these were:

> **1997**
> According to Senate Committee Report No. 1169 on the bill that became Act 107, the committee "recognizes the need to encourage and support the development of new and diverse types of technologies as a means of generating business ventures in Hawai'i. One area that shows particular promise is the film industry. Your Committee believes that providing financial incentives in this area will help attract more filming and production opportunities to the State."

2006
Act 88 stated "the purpose of this Act to encourage the growth of the film industry by:

1. Providing enhanced incentives that attract more film and television productions to Hawai‘i, thereby generating tax revenues;
2. Providing jobs and income for residents;
3. Supporting tourism and the natural beauty of Hawai‘i; and
4. Enabling the state to compete effectively against other jurisdictions that offer similar incentives."

2017
The objective set forth in Act 143 was to keep Hawai‘i competitive and comparable to other jurisdictions in attracting qualified productions, which generate additional revenue, jobs, and tourism marketing exposure.

Is this tax credit meeting its purpose?

Based on available State and industry data, the credits appear well-utilized. However, it is not clear that all outcomes envisioned for the tax credits are being achieved. Among other things, these outcomes were to keep Hawai‘i competitive and comparable to other jurisdictions in attracting qualified productions, which in turn would generate additional revenue, jobs, and tourism marketing exposure. The tax credit provided for Hawai‘i productions appears to be competitive with other jurisdictions. However, we are unable to determine a causal connection between the credit and the purported benefits to industry-related spending, job growth, and positive exposure. Although there is anecdotal evidence that the State has progressed in the above areas, what is not clear is the extent such progress is attributable to the tax credit.

We are uncertain whether the outcomes that are being achieved are meeting envisioned levels, as there are no performance metrics tied to the tax credit. We also note there likely have been productions that would have been produced in Hawai‘i regardless of the tax credit. Spending, job creation, positive exposure, and other benefits from those productions may skew any cost-benefit analysis.

Qualified Production

Under Section 235-17, HRS, to qualify for the tax credit, a production shall:

1. Meet the definition of a “qualified production;”

2. Have qualified production costs totaling at least $200,000; “qualified production costs” are costs incurred in the state by a production that are subject to Hawai‘i GET or income tax. These include:
   - Costs incurred during preproduction such as location scouting and related services;
   - Costs of set construction and operations, purchases or rentals of wardrobe, props, accessories, food, office supplies, transportation, equipment, and related services;
   - Wages or salaries of cast, crew, and musicians;
   - Costs of photography, sound synchronization, lighting, and related services;
   - Costs of editing, visual effects, music, other post-production, and related services;
   - Rentals and fees for use of local facilities and locations, including rentals and fees for use of state and county facilities and locations that are not subject to GET under Chapter 237 or income tax under this chapter;
   - Rentals of vehicles and lodging for cast and crew;
   - Airfare for flights to or from Hawai‘i, and interisland flights;
   - Insurance and bonding;
   - Shipping of equipment and supplies to or from Hawai‘i, and interisland shipments; and
   - Other direct production costs specified by the department in consultation with DBEDT;

3. Provide the State a qualified Hawai‘i promotion, which shall be at a minimum, a shared-card, end-title screen credit, where applicable;

4. Provide evidence of reasonable efforts to hire local talent and crew;

5. Provide evidence when making any claim for products or services acquired or rendered outside of this state that reasonable efforts were unsuccessful to secure and use comparable products or services within this state; and

6. Provide evidence of financial or in-kind contributions or educational or workforce development efforts, in partnership with related local industry labor organizations, educational institutions, or both.

Competitiveness

Hawai‘i’s Motion Picture, Digital Media, and Film Production Income Tax Credit appears competitive and comparable to other jurisdictions in offering incentives designed to attract qualified productions.

According to a 2018 State Film Production Incentives and Programs report by the National Conference of State Legislatures, 31 states, Washington, D.C., Puerto Rico, and the U.S. Virgin Islands continue to maintain film incentive programs, and several of these states have tightened the requirements for qualifying expenses and reduced per-project and annual program caps.

Based on the report, Hawai‘i’s credit (up to 25 percent of eligible expenditures and up to $15 million per production with a cumulative $50 million annual cap) was comparable to the tax credits offered in Alabama, California, Georgia, Louisiana, Nevada, New Mexico, New York, and Puerto Rico. The Film Office considers three of those states (Georgia, New Mexico, Florida) and Puerto Rico to be Hawai‘i’s direct competitors.

Revenue Generation

According to the *Report to the Thirtieth Legislature Regarding Estimated Motion Picture, Digital Media and Film Production Income Tax Credit for Calendar Year 2018*, productions utilizing the Motion Picture, Digital Media, and Film Production Income Tax Credit incurred an estimated $425.53 million in qualified local production costs that resulted in $90.82 million in tax credit claims for 2018. This direct spending resulted in an estimated $45.96 million in tax revenue, $736.16 million in indirect sales or economic activity, and $170.21 million in Hawai‘i household income.

In 2019, the Film Office estimated the industry spent another $313.67 million in Hawai‘i, resulting in $66.5 million in tax credit claims, which was $16.5 million more than the $50 million annual aggregate cap. Those claims can be carried forward to 2020.

Film and TV Job Creation

Qualified production companies reported 20,109 resident hires and 3,445 non-resident hires in 2017, according to the *Report to the Thirtieth Legislature Regarding Estimated Motion Picture, Digital Media and Film Production Income Tax Credit for Calendar Year 2018*. We note, however, that these figures should not be construed to mean that productions hired 20,109 residents in 2017. Different productions may have hired some of the same residents, which results in those residents being counted more than once. Separately, DBEDT published *Targeted & Emerging Industries 2019,* an update report that tracked a range of economic activities that have been identified as candidates to diversify the State's economy. The term "targeted" was defined as an activity that, at some point in the past, was of interest for its potential contribution to growth and diversification by agencies, organizations, or stakeholders. The report showed:

- Film and TV production varied widely depending on the number of productions filmed during the year. From 2009 to 2019, the number of jobs in film and TV production increased by 1,267 to 2,500. However, overall, during the 2010 to 2019 period, the number of jobs in film and TV production jobs decreased from 2,556 to 2,500;
- Film, TV, and Video Production/Distribution showed the second highest job growth, with a 7.3 percent average annual increase in jobs for the period; and
- Film, TV, and Video Production/Distribution also outperformed their national counterparts from 2009 to 2019.

The Motion Picture Association of America likewise estimated that, in 2018, Hawai'i's motion picture and TV industry was directly responsible for more than 4,410 jobs and $300 million in wages as well as importing 10,030 jobs through its use of local vendors and other businesses.

Marketing Exposure

Productions such as *Hawai'i Five-O* and *Magnum P.I.* clearly increase exposure for the state, which is a primary purpose of the tax credit. However, neither the Film Office nor DBEDT actually attempts to quantify or measure such marketing impacts.

According to DBEDT, its READ worked with the Film Office to design a visitor survey form meant to account for the tax credit's impact on tourism marketing. However, DBEDT did not know the status of the survey. The Film Office acknowledged that tourism marketing exposure is an important ancillary benefit of film and TV production and said it plans to revisit discussions with tourism leadership to measure the impact.

What were the number of claimants, total amount claimed, and tax expenditure for this tax credit from 2015–2018?

The Film Office provided the Legislature the *Report to the Thirtieth Legislature Regarding Estimated Motion Picture, Digital Media and Film Production Income Tax Credit for Calendar Year 2018*. The table below includes data on the amount of credits generated annually from Film Office reports, the most recent of which was issued in January 2019. The Film Office data differs from actual annual tax credit claims data published by DoTax in the subsequent table. The data differs in part because a production may not claim all the refundable tax credits they qualify for in one year or because a taxpayer may have a fiscal year that differs from a calendar year.

Data from Hawai‘i Film Office Production Reports

	2018*	2017	2016	2015
Production Expenditures	$425,527,829	$216,954,022	$199,004,828	$184,374,570
Tax Credit Claims	$90,815,439	$43,804,654	$43,827,784	$37,312,734

Source: *Report to the Thirtieth Legislature Regarding Estimated Motion Picture, Digital Media and Film Production Income Tax Credit for Calendar Year 2018.*

* Estimated data based on production registration applications.

DoTax adopts rules for the credits, processes tax credit claims as certified by the Film Office, and reports on tax credit costs. DoTax is the ultimate arbiter of tax credit disbursements, and credit eligibility is ultimately subject to DoTax's review and in some cases, audit. DoTax annually publishes data on the actual annual cost of the tax credit; however, the most recent data available was contained in a December 2020 report and was for tax year 2018, shown in the table below. Because tax credits operate as a dollar-for-dollar reduction in a taxpayer's tax liability, the "tax expenditure" attributable to these credits essentially can be considered the actual amount claimed on tax returns for that particular year.

Data from DoTax Tax Credit Reports

	2018	2017	2016	2015
Total Tax Credits Claimed	$80,230,000	$61,671,000	$31,900,000	$39,900,000
No. of Claims	25	33	36	34

Source: DoTax *Tax Credits Claimed by Hawai‘i Taxpayers* Tax Years 2018, 2017, 2016, 2015.

Is the tax credit necessary to promote or preserve tax equity or efficiency?

This tax credit provides a tax preference to a certain type of industry and therefore does not promote tax equity.

Is there an economic or employment benefit and if so, does the benefit outweigh the cost of the credit?

The Film Office is responsible for providing the Legislature, annually, with a cost-benefit analysis. This analysis is done with the help of DBEDT's READ.

According to DBEDT's estimates, the benefits of the tax credit appear to outweigh the costs. However, as noted in our *Audit of Hawai'i's Motion Picture, Digital Media, and Film Production Income Tax Credit*, Report No. 16-08, DBEDT's analysis of economic impacts was superficial and overstated as it included an unknown amount of out-of-state expenditures and wages paid to non-residents, as well as inaccurate production expenditure data. Our subsequent report assessing the Film Office's implementation of the audit recommendations (follow-up report) found that recommendations calling for the adoption of Hawai'i Administrative Rules requiring productions to provide detailed data on resident and non-resident hires by category, and director/producer/principal cast hires, had not been implemented.[2] A related reporting recommendation was identified in the follow-up report as partially implemented. We recommended the Film Office collaborate with DBEDT's READ to identify the specific production information needed to prepare a comprehensive cost-benefit analysis.

Both the Film Office and DoTax have since taken steps to address those recommendations. DoTax adopted new administrative rules relating to the Motion Picture, Digital Media, and Film Production Income Tax Credit on November 17, 2019. The rules require that productions disclose expenditures by category. The Film Office also adopted a new Hawai'i Production Report form on February 20, 2020, which requires more detailed data, including the number of resident and non-resident hires and director/producer/principal cast hires. The Film Office appears better positioned to capture data on tax credits that could foster more meaningful evaluations of the costs and benefits of the credit. This means the Film Office's next report should be more robust, at least as related to the deficiencies previously identified in Report No. 19-14, "Follow-Up on Recommendations from Report No. 16-08, *Audit of Hawai'i's Motion Picture, Digital Media, and Film Production Income Tax Credit*." However, the Film Office report was unavailable at the time this report was prepared.

[2] Report No. 19-14, "Follow-Up on Recommendations from Report No. 16-08, *Audit of Hawai'i's Motion Picture, Digital Media, and Film Production Income Tax Credit*."

A challenge in conducting an accurate cost-benefit analysis of the credit is accounting for the impacts of so called "free riders." Free riders are those productions that utilize the tax credit because it is available regardless of whether there is an economic need. In such instances, the credit was utilized when it was not an incentive for filming in Hawaiʻi. In other words, the production would have filmed in Hawaiʻi regardless of the credit. Another challenge exists in identifying the market exposure benefits of the credit, as there is a lack of survey or other data from visitors to determine whether films or TV shows influenced their decision to travel to Hawaiʻi.

Should the credit be retained without modification, amended, or repealed?

Definitive conclusions about whether the credit achieves its purposes cannot be drawn until or unless the Legislature identifies metrics or benchmarks for gauging its impact on Hawaiʻi's film industry competitiveness, job and revenue creation, and tourism exposure. While independent, objective, and well-suited to conducting performance audits and studies on the effectiveness of agency operations, we do not have ready access to the specialized economic data and resources necessary to conduct a thorough cost-benefit analysis of tax credits. Therefore, we are unable to determine whether the credit should be retained or repealed.

However, as discussed above, there are indications that certain targeted tax credit outcomes, such as increased production activity and associated job creation, may be occurring. In the interim, the Legislature should consider amendments that would clearly articulate the purposes of the tax credit, the outcomes that are expected to be generated, and objective criteria for evaluating whether outcomes are being achieved at desired levels. This could foster more comprehensive analysis of how effectively the tax credits achieve their purpose, if at all.

Renewable Energy Technologies Income Tax Credit (Sections 235-12.5 and 241-4.6, HRS)

Tax Credits at a Glance (2018)*

Total Tax Credits Claimed**	Credits Claimed - Individuals	No. of Claimants - Individuals	Cost Per Low-Income Resident	Meeting its Purpose?
	$34.21 million	7,337		
	Credits Claimed - Corporations	No. of Claimants - Corporations		
$70.5 million	$23.97 million	77	$146.41***	Yes

Source: DoTax *Tax Credits Claimed by Hawai'i Taxpayers* Tax Years 2018, 2017, 2016, 2015.
* Data for the energy conservation tax credit that expired on June 30, 2003 are included with the renewable energy technologies tax credit.
** Includes amounts claimed by Financial Corporations and Exempt Organizations in addition to individuals and corporations.
*** Cost per low-income resident was calculated using the 2018 figure of 481,524 low-income residents based on data provided by DBEDT.

HAWAI'I'S DEMAND FOR FOSSIL FUELS has markedly dropped since the 1990s with the proliferation of residential rooftop solar power systems and increased use of other renewable energy sources such as wind, biomass, and geothermal. Fueling this transition, at least in part, was an evolving slate of tax credits dating back to the 1970s. From 2015 through 2017 about $267 million in such tax credits were claimed by corporations and individuals for installing a variety of renewable energy technologies. The following review attempts to identify, among other things, the purposes of the tax credits, whether those purposes are being achieved, and whether the benefits of the credits outweigh the costs.

What do these tax credits do?

They provide tax credits for expenses relating to renewable energy technologies, including solar energy systems and wind-powered energy systems installed by individuals and businesses. The single-family solar thermal (water heater) tax credit cap is $2,250 per system; the wind-powered commercial property tax credit cap is $500,000 per system; the single-family photovoltaic (PV) system tax credit cap is $5,000 per system; and the commercial property photovoltaic systems tax credit cap is $500,000 per system.

How do these tax credits work?

For systems installed and placed in service on or after July 1, 2009, an individual taxpayer may claim this credit as refundable or nonrefundable. In order to claim the credit, taxpayers must include DoTax Form N-342 and Schedule CR with their individual income tax returns. DoTax has promulgated a complex set of administrative rules that explain and govern the various formulas and conditions governing these credits. The following example, taken from the DoTax administrative rules, illustrates some of these complexities:

> A taxpayer installs a 7.5 kilowatt solar power system on a single-family home at a cost of $37,500. In order to calculate the credit, the actual cost per kilowatt must be determined by dividing $37,500 by 7.5 kilowatts. The resulting actual cost per kilowatt is $5,000. Since a single-family residential system must have a total output capacity of at least 5 kilowatts, the actual cost of the first system is $25,000 ($5,000 times 5 kilowatts). Therefore, the credit for the first system is $5,000 because 35 percent of $25,000 exceeds the applicable cap of $5,000.
>
> However, a credit for the second system may also be claimed because the law permits taxpayers to claim the credit for one system per property that fails to meet the total output capacity requirement. Because the actual cost of the second system is $12,500 ($5,000 times 2.5 kilowatts), the credit for the second system is $4,375 or 35 percent of $12,500. The total credit that can be claimed for the two systems, which cost a total of $37,500, is $9,375.

What is the purpose of these tax credits?

Based on the legislative history, we determined that, generally, the purpose of the credits is to reduce the State's dependence on imported oil for electricity generation by encouraging private investment in renewable energy systems. This would also increase the use of renewable energy to protect the environment, reduce pollution, make housing more affordable, and enhance Hawai'i's local economy.

Our review of the legislative history of the tax credits showed that a variety of purposes have been articulated over time. Among these were:

> **1989**
> To ensure that progress will continue toward the State's goal of reducing its dependence on imported oil.
>
> **1990**
> Higher state tax credits are needed to ensure that progress will continue toward the State's goals of reducing its dependence on imported oil and using energy prudently.

2003
Tax credits leverage private investment that helps to sustain existing jobs and add jobs as the net number of systems sold per year increases; and the solar industry is exactly the type of "high-tech" business that Hawai'i needs. However, until a critical mass is reached for its demand, it must be supported by incentives.

2008
To increase the use of renewable energy to protect our environment, reduce pollution, make housing more affordable, and enhance Hawai'i's local economy.

2009
To enable the solar industry in Hawai'i to expand its role as an engine of economic stimulus and job creation in the current recessionary environment and "to provide a first step in aligning Hawai'i's energy policy laws with the State's energy goals."

See Appendix C for a more comprehensive history of renewable energy tax credits in Hawai'i.

Are these tax credits meeting their purpose?

Based on DoTax, DBEDT, the Energy Office, and other relevant data, the State is achieving the purpose of reducing its dependence on imported oil and increasing the use of renewable energy for electricity generation. For example, petroleum used to generate electricity in Hawai'i decreased from about 16 million barrels in 1990 to 11.1 million barrels in 2018. And there are indications that ancillary economic benefits such as industry-related job creation are occurring. Contemporaneously, hundreds of millions of dollars in tax credits have been utilized in private investment in renewable energy systems. A 2017 study published in the *International Journal of Energy Economics and Policy* concluded that there is a correlation between the credits and the number of solar hot water and solar photovoltaic systems in Hawai'i.

However, it is not clear that other targeted outcomes are meeting desired levels, as there are no performance metrics for the tax credits. Among other things, these outcomes aim to protect our environment, reduce pollution, make housing more affordable, and enhance Hawai'i's local economy.

Hawaiʻi Renewable Portfolio Standards

THE STATE OF HAWAIʻI'S energy policy is driven by RPS targets that mandate the percentage of electricity generation from renewable energy sources by the end of benchmark years. The interim RPS targets are:

Year	RPS Requirement
2010	10%
2015	15%
2020	30%
2030	40%
2040	70%
2045	100%

Renewable Energy Generation

According to the Energy Office and DBEDT, the credits play a role in helping to achieve the State's energy and decarbonization goals. Hawaiʻi has made significant strides in reducing consumption of fossil fuels. According to DBEDT's *Hawaiʻi's Electricity Industry: 2018 Analysis and Recent Trends* report, Hawaiʻi's use of renewable energy increased in the following ways:

- In 2018, about 67.6 percent of electric power was generated from petroleum fuel, which represented a 22.4 percentage-point decrease from 1990.
- Also in 2018, 39.6 percent of Hawaiʻi's renewable electricity was generated by customer-sited PV systems, 23.9 percent from wind, 17.4 percent from biomass, 8.6 percent from solar (excluding customer-sited PV systems), 2.5 percent from biofuels, 3.7 percent from hydro, and 4.4 percent from geothermal.
- From 2005 to 2018, the amount of electricity sold by Hawaiʻi electric utilities to residential users decreased 579 gigawatt-hours (GWH), or 1.5 percent per year. The reduced amount of electricity sold to residential users was primarily due to increased electricity generated by customer-sited PV systems, which increased 996 GWH from 2005 to 2018.

The Hawaiʻi Public Utilities Commission, which is responsible for evaluating and reporting on the effectiveness and achievability of the current Renewable Portfolio Standards (RPS) pursuant to Section 269-95(5), HRS, issued a report to the Legislature in 2019 which stated that by the end of 2017, statewide renewable generation of electricity totaled 27.6 percent of utility sales. Furthermore, future renewable projects under construction, or planned, should ensure that the State remains on track for meeting the 2020 and 2030 RPS targets.

Housing Affordability

One of the stated purposes of the credits is to make housing more affordable, however, it is unclear just how the credits are meant to generate such an outcome. Generally, the costs of purchasing and installing a PV system, solar water heater, or other renewable energy technology likely increases the purchase price of a home. However, those types of renewable energy technologies can reduce future energy costs.

Enhancing the Economy

Estimates of the amount of renewable or "green energy" jobs in Hawai'i vary widely from a few thousand to more than 10,000.

DBEDT's *Targeted and Emerging Industries 2019 Update Report* showed:

- For 2009 to 2019, "Alternative Power Generation" had the strongest job growth among Hawai'i technology industry groups. However, it is important to note that the number of total jobs for Alternative Power Generation was still relatively small at 337; and
- The Alternative Power Generation industry group outperformed its national counterparts by 10.1 percentage points.

Among other analyses of economic indicators was a study of Hawai'i's Renewable Energy Technologies Income Tax Credit as applied to solar and PV systems, published in the *International Journal of Energy Economics and Policy* in 2017 that found:

- The credit expenditure generates more in labor income than its cost;
- The average annual life cycle of economic impacts of credit stimulated system installations include: labor income per dollar credit expended of $13.45 for the average solar hot water system; $10.46 per KW capacity for residential PV systems; and $16.82 per KW capacity for commercial PV systems; and
- About one job was created during the average life of a solar hot water system; 3.24 jobs for a 5.27 KW residential PV system; and 81 jobs for a 118 KW commercial PV system.

What were the number of claimants, total amount claimed, and tax expenditures for these tax credits from 2016–2018?

	2018	2017	2016
Solar only	$64.17 million	$75.12 million	$60.63 million
Wind only or breakdown unknown	$5.65 million	$56,000	$23.15 million
Carryover of the tax credit for systems installed and placed in service before July 1, 2009	$681,000	$1.80 million	$2.02 million
Total	$70.5 million	$83.14 million	$85.80 million
Number of claims*	7,436	8,608	11,526
Individual	7,337	8,484	11,375
Corporations and others	77	99	100

Source: DoTax *Tax Credits Claimed by Hawai'i Taxpayers* Tax Years 2016, 2017, 2018.

* Total number of claims includes claims made by financial corporations, fiduciaries, and exempt organizations in addition to individual and corporation claims.

Are the credits necessary to promote or preserve tax equity or efficiency?

The tax credits provide tax preferences to reduce the state's dependence on imported oil for electricity generation by promoting usage of certain forms of energy generation and conservation and, therefore, do not promote tax equity. To receive the credit, a taxpayer must have the financial resources to install a PV or other qualifying system, an outlay that remains out of reach for some homeowners; in this respect, the credit does not promote or preserve tax equity. We note that $28.54 million, or 83.4 percent, of the total $34.21 million in individual claims for the tax credits made in 2018 went to individuals with adjusted gross incomes of $60,000 or more.

Is there an economic or employment benefit and if so, does the benefit outweigh the cost of the credits?

Our office does not have access to the specialized economic data and the expertise needed to conduct a thorough cost-benefit analysis of these tax credits, but we have reviewed and compiled studies from other agencies. We conclude that past efforts by other agencies to conduct a cost-benefit analysis have been limited by a lack of data and clearly defined benchmarks and goals tied to the credits.

According to a 2017 study published in the *International Journal of Energy Economics and Policy*, the State receives full repayment of its solar credit investment in nine years for the average solar hot water system, and 15 years for the average photovoltaic system in the form of added tax revenues derived from economic activity generated by the consumer expenditure. The study of Hawai‘i’s Renewable Energy Technologies Income Tax Credit as applied to solar and PV systems further found a correlation between the credits and the number of installed solar hot water and solar power systems. According to the study, there was a clear, statistically significant relationship between the credit level and the number of systems installed. In other words, the higher the credit, the more systems installed.

Due to a variety of circumstances, including changes in system costs and technological requirements for renewable energy technology installations in Hawai‘i in the past several years, the Energy Office noted that any cost-benefit analyses conducted before 2016 are likely to include assumptions that may be considered outdated or obsolete. The Energy Office believes that a key step in any future cost-benefit analysis would be to determine what desired outcomes are to be measured and what the relative value of those outcomes should be. Several such benefits have been identified over the years, including increased use of renewable energy sources and reduced reliance on imported fossil fuels.

However, the process of agreeing on what benefits are to be measured can be complicated. A report by the National Academies Press, entitled *Hidden Costs of Energy: Unpriced Consequences of Energy Production and Use*, stated that despite the many benefits of energy, most of which are reflected in energy market prices, the production, distribution, and use of energy causes negative effects. Major initiatives to further reduce other emissions, improve energy efficiency, or shift to a cleaner electricity generating mix could substantially reduce negative effects, such as air pollution associated with electricity generation and motor vehicle transportation, and effects of air pollutants such as mercury.

According to the Energy Office, there have been several efforts in Hawai‘i to quantify such costs; however, these efforts have not been successful. Reaching agreement on what other benefits are to be measured is not an easy task. Stated benefits have included increased energy security, reduced risk of oil spills, reduced pollution, increased self-sufficiency and job creation, insulation from volatility of energy costs, reduced use of potable water, and reduced production of greenhouse gases (and the many associated impacts of global climate change), to name a few.

Should the tax credits be retained without modification, amended, or repealed?

Definitive conclusions about whether the credits achieve their purposes cannot be drawn until or unless the Legislature identifies metrics or benchmarks for gauging their impact on Hawai‘i's renewable energy industry, environment, housing costs, and economic growth.

Both the Energy Office and DBEDT's Chief State Economist stated the credits should be retained since they aided in the State's renewable energy transformation. However, the Legislature should, in conjunction with any future amendments to the tax credits, include clearly articulated outputs or benefits of the tax credits that are to be accomplished. The Legislature also should appoint the Energy Office and DBEDT's READ to conduct an annual cost-benefit analysis of the renewable energy tax credits due to their subject-matter expertise and ready access to relevant/necessary data.

Recommendations

Regarding the Motion Picture, Digital Media, and Film Production Income Tax Credit, to facilitate future reviews, we recommend:

1. Prior to extending the program beyond 2025, the Legislature clearly articulate the outputs or benefits of the tax credit that are to be measured, along with targets or benchmarks for those outputs or benefits.

2. The Legislature direct the Hawai‘i Film Office (Film Office), Department of Business, Economic Development and Tourism (DBEDT), and DoTax to conduct a cost-benefit analysis of the tax credit. The Film Office, with the aid of DBEDT’s Research and Economic Analysis Division (READ), is better positioned than the Auditor to conduct such an analysis due to their subject-matter expertise and ready access to relevant economic data and computer software.

3. The Legislature ensure that the Film Office and DBEDT’s READ continue their efforts to develop a means of surveying visitors to account for the tax credit’s impact on tourism or develop some other means for assessing the value of the tax credit’s marketing exposure.

4. The Legislature require the Film Office and DBEDT’s READ to annually report on the competitiveness of the tax credit with other jurisdictions in terms of both tax incentive levels (generosity of the credits) and market share (growth of the industry versus peer municipalities).

Regarding the Renewable Energy Technologies Income Tax Credit, to facilitate future reviews, we recommend:

1. The Legislature include clearly articulated outputs or benefits of the tax credits that are to be accomplished in conjunction with any future amendments to the tax credits.

2. The Legislature obtain from the Hawai‘i State Energy Office (Energy Office), DBEDT’s READ, and other relevant agencies specific targets, or benchmarks, for determining whether outcomes are achieved.

3. The Legislature rely on the Energy Office and DBEDT’s READ to conduct a cost-benefit analysis of the tax credits. Those agencies are better positioned than the Auditor to conduct such analyses due to their subject-matter expertise and ready access to relevant economic data and computer software.

Appendix A
Schedule of Tax Statutes for Review

Sections 71-81, HRS
Sections 91-96, HRS

Deadline	HRS Ref.	Statute to be reviewed	Notes
2021 Sess.	23-73	237-16.5	Gross income of real property lessees from sublessees
		237-16.8	Value or gross income of nonprofit organizations from conventions, conferences, trade shows, and display spaces
		349-10	Proceeds earned from annual senior citizen's fairs
		237-23.5	Amounts received from common payments of related entities
		237-24(13)	Amounts received by blind, deaf, or totally disabled persons from their business
		237-24(14)	Amounts received by independent cane farmers who are sugarcane producers
		237-24(15)	Amounts received by foster parents
		237-24(16)	Reimbursements to cooperative housing corporations for operating and maintenance expenses
		237-24(17)*	Amounts received by TRICARE managed care support contractors
		237-24(18)	Amounts received by Patient-Centered Community Care program contractors
	23-92	235-12.5	Credit for renewable energy technology system installed and placed in service in the State. For the purpose of section 23-91(b)(5), this credit shall be deemed to have been enacted for an economic benefit
		241-4.6	Credit for renewable energy technology system installed and placed in service in the State. For the purpose of section 23-91(b)(5), this credit shall be deemed to have been enacted for an economic benefit
		235-17	Credit for qualified production costs incurred for a qualified motion picture, digital media, or film production

* This exemption was not reviewed because this section was repealed on Dec. 1, 2018 under Act 164, SLH 2013

Report Date	HRS Ref.	Statute to be reviewed	Notes
2022 Sess.	23-74	239-2, paragraph (5)	Definition of "gross income" – Gross income of home service providers of mobile telecommunications services
		239-2	Exclusions under the definition of "gross income" – Dividends paid by one member to another member of an affiliated public service company group or gross income from the sale or transfer of materials and supplies, interest on loans, and provision of services among members of an affiliated public service company group
		237-3(b)	Gross receipts from the sale or transfer of materials and supplies, interest on loans, and provision of services among members of an affiliated public service company group
		239-5.5	Gross income of utilities from monthly surcharges
		239-6.5	Tax credit for lifeline telephone service subsidies
		269-172	Green infrastructure charges received by electric utilities
		237-29.7	Gross income or gross proceeds received by insurance companies
		431:7-207	Tax credit to facilitate regulatory oversight
		432:1-403	Exemption for nonprofit medical indemnity or hospital service associations or societies specifically from the general excise tax, public service company tax, or insurance premium tax
		432:2-503	Exemption for fraternal benefit societies specifically from the general excise tax, public service company tax, or insurance premium tax
	23-93	235-7.3	Exclusion of royalties and other income derived from a patent, copyright, or trade secret of a qualified high technology business
		235-9.5	Exclusion for income and proceeds from stock options or stocks of a qualified high technology business or a holding company for a qualified high technology business
		235-17.5	Credit for capital infrastructure costs
		241-4.4	Credit for capital infrastructure costs
		235-110.7	Credit for capital goods used by a trade or business
		241-4.5	Credit for capital goods used by a trade or business
		235-110.91	Credit for research activity
		235-110.3	Credit for ethanol facility
		241-3.5	Deduction for adjusted eligible net income of an international banking facility

Report Date	HRS Ref.	Statute to be reviewed	Notes
2023 Sess.	23-75	237-24.3(1)	Amounts received from loading, transporting, and unloading agricultural commodities shipped interisland
		237-24.3(3)(A)	Amounts received from cargo loading or unloading
		237-24.3(3)(B)	Amounts received from tugboat and towage services
		237-24.3(3)(C)	Amounts received from the transportation of pilots or government officials and other maritime-related services
		238-1, paragraph (7)	Definition of "use" – The value of oceangoing vehicles for transportation from one point to another in the State
		238-3(g)	The value of imported intoxicating liquor and cigarettes and tobacco products for sale to persons or common carriers in interstate commerce
		238-3(h)	The value of vessels constructed under section 189-25, relating to commercial fishing vessel loans, prior to July 1, 1969
		237-28.1	Gross proceeds from shipbuilding and ship repair
	23-94	235-4.5(a)	Exclusion of intangible income earned by a trust sited in this State
		235-4.5(b)	Exclusion of intangible income of a foreign corporation owned by a trust sited in this State
		235-4.5(c)	Credit to a resident beneficiary of a trust for income taxes paid by the trust to another state
		235-55	Credit for income taxes paid by a resident taxpayer to another jurisdiction
		235-129	Credit for income taxes paid by a resident taxpayer to another jurisdiction
		235-71(c)	Credit for a regulated investment company shareholder for the capital gains tax paid by the company
		235-110.6	Credit for fuel taxes paid by a commercial fisher
		235-110.93	Credit for important agricultural land qualified agricultural cost
		235-110.94	Credit for organically produced agricultural products
		235-129(b)	Credit to a shareholder of an S corporation for the shareholder's pro rata share of the tax credit earned by the S corporation in this State
		209E-10	Credit for a qualified business in an enterprise zone; provided that the review of this credit pursuant to this part shall be limited in scope to income tax credits

Report Date	HRS Ref.	Statute to be reviewed	Notes
2024 Sess.	23-76	237-24.3(4)	Amounts received by employment benefit plans and amounts received by nonprofit organizations or offices for the administration of employee benefit plans
		237-24.3(5)	Amounts received from food coupons under the federal food stamp program or vouchers under the Special Supplemental Foods Program for Women, Infants and Children
		237-24.3(6)	Amounts received from the sale of prescription drugs or prosthetic devices
		237-24.3(8)	Amounts received as dues by unincorporated merchants associations for advertising or promotion
		237-24.3(9)	Amounts received by labor organizations from real property leases
		237-24.75(2)	Reimbursements to the Hawaii convention center operator from the Hawaii Tourism Authority
		237-24.75(3)	Reimbursements to professional employer organizations from client companies for employee wages and fringe benefits
		209E-11	Amounts received by qualified businesses in enterprise zones
	23-95	235-5.5	Deduction for individual housing account deposit
		235-7(f)	Deduction of property loss due to a natural disaster
		235-16.5	Credit for cesspool upgrade, conversion, or connection
		235-19	Deduction for maintenance of an exceptional tree
		235-55.91	Credit for the employment of a vocational rehabilitation referral
		235-110.2	Credit for in-kind services contribution for public school repair and maintenance
		235-110.8	Credit for ownership of a qualified low-income housing building
		241-4.7	Credit for ownership of a qualified low-income housing building
2025 Sess.	23-77	237-24.3(2)	Reimbursements to associations of owners of condominium property regimes or nonprofit homeowners or community associations for common expenses
		237-24.5**	Amounts received by exchanges or exchange members
		237-25(a)(3)	Gross income received from tangible personal property sales to state-chartered credit unions
		237-24.8	Amounts received by financial institutions, trust companies, trust departments, or financial corporations acting as interbank brokers
		237-26	Gross proceeds of scientific contractors and subcontractors
		238-3(j)	The value of property or services exempted by section 237-26, relating to scientific contracts
		237-27	Amounts received by petroleum product refiners from other refiners
	23-96	235-15	Credit for purchase of child passenger restraint system
		235-55.6	Credit for employment-related expenses for household and dependent care services
		235-55.7	Credit for a low-income household renter
		235-55.85	Credit for food and excise tax

** This exemption was reviewed in the report to the 2020 Legislature

Report Date	HRS Ref.	Statute to be reviewed	Notes
2026 Sess.	23-78	237-24.7(1)	Amounts received by hotel operators and hotel suboperators for employee wages and fringe benefits
2026 Sess.	23-78	237-24.7(2)	Amounts received by a county transportation system operator under a contract with the county
2026 Sess.	23-78	237-24.7(4)	Amounts received by orchard property operators for employee wages and fringe benefits
2026 Sess.	23-78	237-24.7(6)	Amounts received from insurers for damage or loss of inventory of businesses located in a natural disaster area
2026 Sess.	23-78	237-24.7(7)	Amounts received by community organizations, school booster clubs, and nonprofit organizations for precinct and other election-related activities
2026 Sess.	23-78	237-24.7(8)	Interest received by persons domiciled outside the State from trust companies acting as payment agents or trustees on behalf of issuers or payees of interest-bearing instruments or obligations
2026 Sess.	23-78	237-24.7(9)	Amounts received by management companies from related entities engaged in interstate or foreign common carrier telecommunications services for employee wages and fringe benefits
2026 Sess.	23-78	237-24.7(10)	Amounts received from high technology research and development grants
2026 Sess.	23-92	235-12.5	Credit for renewable energy technology system installed and placed in service in the State. For the purpose of section 23-91(b)(5), this credit shall be deemed to have been enacted for an economic benefit
2026 Sess.	23-92	241-4.6	Credit for renewable energy technology system installed and placed in service in the State. For the purpose of section 23-91(b)(5), this credit shall be deemed to have been enacted for an economic benefit
2026 Sess.	23-92	235-17	Credit for qualified production costs incurred for a qualified motion picture, digital media, or film production

Report Date	HRS Ref.	Statute to be reviewed	Notes
2027 Sess.	23-79	237-27.5	Gross proceeds from air pollution control facility construction, reconstruction, operation, use, maintenance, or furnishing
		238-3(k)	The value of air pollution control facilities
		237-27.6	Amounts received by solid waste processing, disposal, and electric generating facility operators under sale and leaseback transactions with political subdivisions that involve the facilities
		237-29	Gross income of qualified persons or firms or nonprofits or limited distribution mortgagors for certified or approved low-income housing projects
		238-3(j)	The value of property, services, or contracting exempted by Section 237-29, relating to certified or approved housing projects
		431:7-208	Credit for low-income housing
		46-15.1(a)	Gross income from county low-income housing projects
		346-369	Compensation received by provider agencies for homeless services or homeless facility management
	23-93	235-7.3	Exclusion of royalties and other income derived from a patent, copyright, or trade secret of a qualified high technology business
		235-9.5	Exclusion for income and proceeds from stock options or stocks of a qualified high technology business or a holding company for a qualified high technology business
		235-17.5	Credit for capital infrastructure costs
		241-4.4	Credit for capital infrastructure costs
		235-110.7	Credit for capital goods used by a trade or business
		241-4.5	Credit for capital goods used by a trade or business
		235-110.91	Credit for research activity
		235-110.3	Credit for ethanol facility
		241-3.5	Deduction for adjusted eligible net income of an international banking facility

Report Date	HRS Ref.	Statute to be reviewed	Notes
2028 Sess.	23-80	237-29.5	Value or gross proceeds from tangible personal property shipped out of State
		237-29.53	Value or gross income from contracting or services performed for use outside the State
		238-1, paragraph (9)	Definition of "use" – The value of services or contracting imported for resale, consumption, or use outside the State
		237-29.55	Gross proceeds or gross income from the sale of tangible personal property imported into the State for subsequent resale
	23-94	235-4.5(a)	Exclusion of intangible income earned by a trust sited in this State
		235-4.5(b)	Exclusion of intangible income of a foreign corporation owned by a trust sited in this State
		235-4.5(c)	Credit to a resident beneficiary of a trust for income taxes paid by the trust to another state
		235-55	Credit for income taxes paid by a resident taxpayer to another jurisdiction
		235-129	Credit for income taxes paid by a resident taxpayer to another jurisdiction
		235-71(c)	Credit for a regulated investment company shareholder for the capital gains tax paid by the company
		235-110.6	Credit for fuel taxes paid by a commercial fisher
		235-110.93	Credit for important agricultural land qualified agricultural cost
		235-110.94	Credit for organically produced agricultural products
		235-129(b)	Credit to a shareholder of an S corporation for the shareholder's pro rata share of the tax credit earned by the S corporation in this State
		209E-10	Credit for a qualified business in an enterprise zone; provided that the review of this credit pursuant to this part shall be limited in scope to income tax credits

Report Date	HRS Ref.	Statute to be reviewed	Notes
2029 Sess.	23-81	237-23(a)(3)	Fraternal benefit societies, orders, or associations for the payment of benefits to members
		237-23(a)(4)	Corporations, associations, trusts, or societies: (A) Organized and operated exclusively for religious, charitable, scientific, or educational purposes; (B) Operating senior citizens housing facilities qualifying for loans under the United States Housing Act of 1959, as amended; (C) Operating legal service plans; or (D) Operating or managing homeless facilities or other programs for the homeless
		237-23(a)(5)	Business leagues, chambers of commerce, boards of trade, civic leagues, agricultural and horticultural organizations, and organizations operated exclusively for the benefit of the community or promotion of social welfare, including legal service plans
		237-23(a)(6)	Hospitals, infirmaries, and sanitaria
		237-23(a)(7)	Tax-exempt potable water companies serving residential communities lacking access to public utility water services
		237-23(a)(8)	Agricultural cooperative associations incorporated under state or federal law
		237-23(a)(9)	Persons affected with Hansen's disease and kokuas with respect to business within the county of Kalawao
		237-23(a)(10)	Corporations, companies, associations, or trusts organized for cemeteries
		237-23(a)(11)	Nonprofit shippers
	23-95	235-15	Credit for purchase of child passenger restraint system
		235-55.6	Credit for employment-related expenses for household and dependent care services
		235-55.7	Credit for a low-income household renter
		235-55.85	Credit for food and excise tax

Report Date	HRS Ref.	Statute to be reviewed	Notes
2030 Sess.	23-72	237-3(b)	Gross receipts from the following: (A) Sales of securities; (B) Sales of commodity futures; (C) Sales of evidences of indebtedness; (D) Fee simple sales of improved or unimproved land; (E) Dividends; and (F) Sales or transfers of materials and supplies, interest on loans, and provision of services among members of an affiliated public service company group
		237-13(3)(B)	Gross income of contractors from subcontractors
		237-13(3)(C)	Reimbursements to federal cost-plus contractors
		237-13(6)(D)(i),(ii), (iii), and (iv)	Gross receipts of home service providers acting as service carriers
		237-24.3(11)	Amounts received from aircraft and aircraft engine rental or leasing
		237-24.9	Amounts received from aircraft servicing and maintenance and aircraft service and maintenance facility construction
		238-1, paragraph (6)	Definition of “use” – The value of aircraft leases or rental and acquired or imported aircrafts and aircraft engines
		238-1, paragraph (8)	Definition of “use” – The value of material, parts, or tools for aircraft service and maintenance and aircraft service and maintenance facility construction

Appendix B

Impact on "Low-Income Residents"

Section 23-91, HRS, also requires us to estimate the "annual cost of the credit … per low-income resident of the State." The statute defines "low-income resident" as a state resident who is (1) the only member of a family of one and has an income of not more than 80 percent of the area median income for a family of one; or (2) part of a family with an income of not more than 80 percent of the area median income for a family of the same size. Applying this definition, there were an estimated 481,524 "low-income residents" statewide in 2018, based on data provided by the Department of Business, Economic Development and Tourism.

The results of this evaluation follow.

Cost of Tax Credits per "Low-Income Resident"

Statute	Tax Credit	2018 Cost	Cost per "low-income resident"
Section 235-17, HRS	Motion Picture, Digital Media, and Film Production Income Tax Credit	$80.23 million	$166.62
Sections 235-12.5 and 241-4.6, HRS	Renewable Energy Technologies Income Tax Credit	$70.5 million	$146.41

Source: Office of the Auditor

Although we conducted this analysis using the formula set forth by statute, we question whether the results above represent the value to "low-income residents" of repeal of a particular credit. Although money generated from repealing a particular credit will likely increase tax revenues, the impact of the additional funds will not automatically accrue a benefit to "low-income residents," in particular, but to all residents. Therefore, to the extent that the Legislature considers a tax credit or rebate to low-income residents to offset this cost, a more accurate representation of impact may be to divide the amount of cost by all residents, not just low-income residents. The amount of the cost per resident will impact lower-income residents more than higher-income residents.

The following table contrasts 2018 GET data with Hawai‘i's total 2018 population of 1,420,491 people.

Cost of Tax Credits per Hawai‘i Resident

Statute	Tax Credit	2018 Cost	Cost per "low-income resident"
Section 235-17, HRS	Motion Picture, Digital Media, and Film Production Income Tax Credit	$80.23 million	$56.48
Sections 235-12.5 and 241-4.6, HRS	Renewable Energy Technologies Income Tax Credit	$70.5 million	$49.63

Source: Office of the Auditor

Appendix C

History of the Renewable Energy Technologies Income Tax Credit

The State of Hawai‘i began offering renewable energy tax credits in 1976, starting with an energy-device tax credit that allowed a state resident to claim 10 percent of the cost of a solar water heater against the taxpayer's state income tax. At the time, the state tax credit supplemented a federal tax credit of 30 percent, but the federal solar water heater credit ended in 1985.

The tax credit in Section 235-12.5, HRS, was previously codified in Section 235-12, HRS. Therefore, our summary of the legislative history of this tax credit begins with relevant portions of Section 235-12, HRS.

1976
Act 189 established the Solar Energy Devices Income Tax Credit. The credit could be claimed for a solar energy device in an amount not to exceed ten percent of the total cost of the device against net income tax liability for the year in which the solar energy device was purchased and placed in use; provided the tax credit only applied to solar devices placed in service after December 31, 1974, but before December 31, 1981; and tax credits which exceeded the taxpayer's income liability were allowed to be used as a credit against the taxpayer's income tax liability in subsequent years until exhausted.

1980
Act 177 amended Section 235-12, HRS, to stipulate that the 10 percent tax credit be applied only to the actual cost of the solar energy device, its accessories and installation, and not to the cost of consumer incentive premiums unrelated to the operation of the solar energy device offered with the sale of the solar energy device.

1981
Act 67 amended Section 235-12, HRS, by renaming the credit the Solar or Wind Energy Devices and Heat Pumps Income Tax Credit and expanded the tax credit to include heat pumps. Act 233 also extended the tax credit through December 31, 1985.

1985
Act 232 extended the tax credit to December 31, 1992, and increased the tax credit to fifteen percent of the total cost of the solar or wind energy device or heat pump from the time of expiration of the federal tax credit to December 31, 1992.

1986
Act 66 amended Section 235-12, HRS, to specify that if federal energy tax credits were not extended beyond December 31, 1985, and were not retroactively extended or reenacted, or federal energy tax credits the same as or less in amount than the credits in effect during the 1985 taxable year were not enacted during the taxable year 1986, then the state tax credit would be increased to fifteen percent of the total cost after December 31, 1985, to December 31, 1992.

1989
Act 307 increased the tax credit to 20 percent of total cost of a solar or wind energy device, heat pump, or ice storage system after December 31, 1989, to December 31, 1992.

1990
Act 319 extended the expiration date to December 31, 1998, and established credit ceilings according to the type of renewable energy device and type of dwelling.

1991
Act 99's purpose was to make the Energy Conservation Income Tax Credit provided under Section 235-12, HRS, available under Chapter 241, HRS, effective after December 31, 1990. Chapter 241, HRS, governs taxation of banks and other financial corporations and is generally known as the franchise tax. The franchise tax did not provide for an energy credit similar to the credit for income tax under Section 235-12, HRS. The act recognized that taxpayers interested in utilizing a qualified energy conservation device may choose to finance the equipment under a leasing arrangement and that a majority of equipment lessors in Hawai‘i are subject to the franchise tax under Chapter 241, HRS, rather than income tax.

Act 163 extended the tax credits through July 1, 2003, and specified, if federal energy tax credits similar to any of those provided in Section 235-12 were established after June 30, 1998, but before July 1, 2003, then the state tax credit provided would be reduced by the amount of the applicable federal energy tax credit.

2003
Act 207 added Section 235-12.5, HRS, titled Renewable Energy Technologies; Income Tax Credit, that provided a tax credit for individual or corporate resident taxpayers that file an individual or corporate income tax return for a taxable year for every eligible renewable energy technology system that is installed and placed in service by a taxpayer after June 30, 2003. The dollar amount of any new federal energy tax credit similar to the credit provided in this section that is established after June 30, 2003, and any utility rebate must be deducted from the cost of the qualifying system and its installation before applying the state tax credit.

Act 207 was scheduled to be repealed on January 1, 2008.

2004
Act 97 amended Sections 235-12.5 and 241-4.6, HRS, and clarified that financial institutions, partnerships, S corporations, estates, and trusts eligible to claim a Renewable Energy Technologies Income Tax Credit could carry any excess credit over to subsequent taxable years until exhausted, if the credit exceeded a taxpayer's liability in a given year.

2006
Act 240 increased the single-family solar thermal tax credit cap to thirty-five percent of the actual cost or $2,250, whichever is less; the wind-powered commercial property tax credit cap to twenty percent of the actual cost or $500,000, whichever is less; the single-family photovoltaic systems tax credit cap to thirty-five percent of the actual cost or $5,000, whichever is less; and the commercial property photovoltaic systems tax credit cap to thirty-five percent of the actual cost or $500,000, whichever is less. It also eliminated the tax credit repeal date of January 1, 2008.

2008
Act 204, among other things, prohibited residential home developers from claiming the tax credit for single-family solar thermal, wind-powered energy, and photovoltaic energy systems installed and placed in service in 2009 and restricted solar thermal systems to single-family residences permitted prior to January 1, 2010.

2009
Act 154 amended the tax credit to encourage the use of solar and wind energy systems, made the tax credit refundable for certain low-income taxpayers, and gave other taxpayers the option to claim the tax credit as refundable by accepting a 30 percent reduction in the amount of the tax credits. It also combined solar and photovoltaic systems into the single category of "solar."

Act 155 established the State's energy efficiency goals into an Energy Efficiency Portfolio Standard (EEPS). As specified in Section 269-96, HRS, the statewide EEPS goal is 4,300 gigawatt-hours (GWH) of electricity savings by 2030. Among other things the act required that tax credits for wind-powered and photovoltaic systems fulfill the substitute renewable energy technology requirement in Section 196-6.5(a)(3), HRS (which provides a variance from newly constructed residential solar water heater requirements).
Act 155 also increased the State's Renewable Portfolio Standards goals as a percentage of electricity sales to meet or exceed 25 percent by 2020 and 40 percent by 2030.

Department of Taxation's Response to Draft Copy of Report

ON MARCH 15, 2021, we transmitted a draft of this report to the Department of Taxation and did not receive a response. A copy of the transmittal letter is included as Attachment 1.

STATE OF HAWAIʻI
OFFICE OF THE AUDITOR
465 S. King Street, Room 500
Honolulu, Hawaiʻi 96813-2917

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State Auditor

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March 15, 2021

VIA EMAIL ONLY (Tax.Directors.Office@hawaii.gov)

The Honorable Isaac W. Choy
Interim Director, Department of Taxation
Princess Ruth Keʻelikōlani Building
830 Punchbowl Street, Room 221
Honolulu, Hawaiʻi 96813

Re: DRAFT copy of (1) *Review of General Excise and Use Tax Exemptions and Exclusions* and (2) *Review of Income and Financial Institutions Tax Credits*

Dear Director Choy:

Attached for your review is a draft copy of the Auditor's:

1. *Review of General Excise and Use Tax Exemptions and Exclusions Pursuant to Section 23-73, Hawaiʻi Revised Statutes*; and

2. *Review of Income and Financial Institutions Tax Credits Pursuant to Section 23-92, Hawaiʻi Revised Statutes*.

Please let us know by March 19, 2021 whether your department plans to provide comments on one or both of the draft reports, and if so, provide such comments by **March 23, 2021**. We would appreciate separate comments for each report.

As these are draft reports, we request that these reports be kept confidential within your department. Also, please let us know by **March 19, 2021** whether or not you or your staff would like to schedule a teleconference to discuss the drafts. If so, we will be glad to set something up.

If you have any questions, please feel free to contact project supervisor Chuck Narikiyo via email at chuck.narikiyo@hawaii.gov.

Thank you for your consideration.

Very truly yours,

Leslie H. Kondo
State Auditor

CTN:SLH:emo
Attachments
cc/attach: Seth S. Colby, Tax Research and Planning Officer (Seth.S.Colby@hawaii.gov)
Ted Shiraishi, Rules Officer (ted.s.shiraishi@hawaii.gov)