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December 27, 2018

Performance Audit  
Recommendations and  
Corrective Actions for Audit:  
15-2

STATE AGENCY ENERGY  
PLAN

Extent in Reduction of Energy  
Usage Uncertain

Dated: March 5, 2015

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# Overview

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The State Auditor's Office (SAO) makes recommendations designed to improve the operations of state government. For our work to produce benefits, auditees or the General Assembly must implement these recommendations, although we cannot require them to do so. Nevertheless, a measure of the quality and persuasiveness of our performance audits is the extent to which these recommendations are accepted and acted upon. The greater the number of recommendations that are implemented, the more benefit will be derived from our audit work.

In 2010, the SAO began to follow-up on the recommendations issued in our performance audits. Experience has shown that it takes time for some recommendations to be implemented. For this reason, we perform our follow-up activities one and three years after the calendar year in which the audit report is issued. Our annual performance reports summarize whether we are meeting our recommendation implementation targets.

<http://auditor.vermont.gov/about-us/strategic-plans-and-performance-reports>

This report addresses the requirements of Act 155 (2012) to post the results of our recommendation follow-up work on our website. The report does not include follow-up on recommendations issued as part of the state's financial statement audit and the federally mandated Single Audit, which are performed by a contractor. However, our current contract for this work requires the contractor to provide the results of its recommendation follow-up.

| Audit Number & Name  | Rec # | Recommendation  | Follow-Up Date   | Status                | Review Comments  |
|--|-------|---|--|-----------------------|--|
| <a href="#">15-2 State Agency Energy Plan - Extent of Reductions in Energy Usage Uncertain</a> | 1.a   | Ensure that the 2016 update to the State Agency Energy Plan (SAEP) specifies targets for energy consumption and Green House Gases (GHG) emission reduction by energy sector (transportation, infrastructure, and purchasing/contract administration). | 2016   | Partially Implemented | The Department of Building & General Services (BGS) reported in the 2016 SAEP that the five percent annual energy reduction goal in Act 40 was not feasible given current economic conditions, technologies, and funding. Therefore, BGS incorporated revised targets in the 2016 SAEP for state agencies to reduce energy consumption by 20 percent by 2025 and GHG by 40 percent by 2030. The SAEP also contains targets by energy sector. For example, reduction in fuel usage in state buildings by 15 percent by 2030, reducing gasoline use by 10 percent by 2020 and increasing the use of biodiesel for transportation and bio-heating oil from zero percent in 2015 to five percent by 2020 using the State's fuel-purchasing contracts, and meeting 35 percent of the State's energy needs from renewable sources by 2025. BGS has not sought an amendment to the Act 40 energy goals but reported that they will consider revising the statutory language with input from the Governor's Office. Therefore, we conclude this recommendation is partially implemented. |
|  |       |   | 2018   | Partially Implemented | Although BGS specified energy reduction goals in the 2016 SAEP, the goals were not in alignment with the five percent annual energy reduction goal in Act 40. BGS reported in the 2016 SAEP that the five percent annual energy reduction goal in Act 40 was not feasible given current economic conditions, technologies, and funding. BGS has not provided documentary evidence to show they sought an amendment to revise the Act 40 energy goals. Therefore, this recommendation remains partially implemented.  |
|  | 1.b   | Ensure that the 2016 update to the State Agency Energy Plan specifies a baseline year in order to measure the extent of energy consumption and GHG emission reductions.   | 2016   | Implemented           | The 2016 SAEP specifies 2015 as the baseline year against which energy consumption and GHG emission reductions will be measured.   |
|  |       |   | No further follow-up is required because the recommendation was implemented. |                       |  |
|  | 1.c   | Ensure that the 2016 update to the State Agency Energy Plan specifies a systematic process, including written guidance, for state organizations to utilize to track and evaluate progress toward reducing energy consumption.                         | 2016   | Partially Implemented | The 2016 SAEP recommends that state agencies work with the State Agency Management Program (SAMP) to gather and analyze current energy use using EPA's Energy Star Portfolio Manager software. Since March 2015, BGS Energy Office and Efficiency Vermont have provided introductory presentations, technical resources, and/or troubleshooting support to five state entities. However, BGS has not implemented written guidance for all agencies to use. Instead, BGS is directing agencies to the Department of Energy's website for online training and information to establish a systematic approach to tracking building energy usage. Currently, only BGS, Agency of Transportation (AOT), and the Department of Corrections (DOC) are using the EPA's Energy Star Portfolio Manager software. The 2016 SAEP indicated one of BGS' strategies will be to increase the number of state facility and operations managers that are actively measuring progress in reducing energy use against a measured baseline.  |
|  |       |   | 2018   | Partially Implemented | According to BGS, one additional state entity, the Agency of Natural Resources, has implemented the use of the Energy Star Portfolio Manager for tracking progress towards reducing energy consumption.  |

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| <a href="#">15-2 State Agency Energy Plan - Extent of Reductions in Energy Usage Uncertain</a> | 2     | Define right-sizing of a vehicle and develop a structured method that includes consistent criteria to determine the appropriate size and number of motor vehicles to ensure right-sizing the State's passenger fleet vehicles, in order to reduce average fuel consumption.  | 2016           | Partially Implemented | BGS reported that it is using the Department of Energy's fleet rightsizing strategy to reduce the State's fuel consumption. BGS provided information which shows an example of a utilization review (how many miles is the vehicle expected to travel based on the employee's mileage reimbursement history) and Fleet Management Services' (FMS) decision to downsize the agency's request from SUVs to sedans after evaluating the business purpose documented in the FMS vehicle request justification form. State entities must submit this form to FMS when a vehicle is identified as under-utilized or when a new or replacement vehicle is requested. BGS is still developing this right-sizing allocation methodology which will require input from all state agencies and departments who use fleet vehicles. |
|  |       |  | 2018           | Partially Implemented | BGS continues to recommend appropriately sized vehicles based on the business purpose and utilization information collected from agencies through the required online vehicle order justification form. However, BGS has not defined right-sizing of a vehicle or developed a structured method that includes consistent criteria to determine the appropriate size and number of motor vehicles in the State's passenger fleet inventory.  |
|  | 3     | Require submission of periodic progress reports (e.g., report card) by state entities to BGS, including comparison of targets to actual results, narrative explanation and reporting energy consumption in BTU's. Develop written instructions for state entities for data collection and reporting via the progress report. | 2016           | Not Implemented       | BGS reported that the AOT, DOC, and BGS are tracking energy consumption via the Energy Star Portfolio Manager software. However, energy consumption data and comparison of targets to actual results are not being periodically reported to BGS by state entities and BGS has not developed written instructions for state entities to report periodic progress.  |
|  |       |  | 2018           | Partially Implemented | According to BGS, state entities are required to report their progress towards the 2016 SAEP goals in their Agency Energy Implementation Plans (AEIPs) every two years. Two state entities reported energy consumption data and comparison of targets to actual results in the 2018 AEIPs, BGS and the Military department. Sixteen other state entities submitted AEIPs, but did not report progress toward goals. In addition, BGS has not developed written instructions for state entities to report periodic progress.   |
|  | 4     | Work with the Agency of Administration (AOA) to obtain AIEPs from all state entities.  | 2016           | Partially Implemented | BGS reported that a new 2016 AEIP template was developed and emailed to all secretaries and commissioners in July 2016. This template can be used by agencies and departments that rent space from BGS or from a private landlord. BGS worked directly with the Climate Cabinet members to help ensure timely AEIP submissions by August 31, 2016. The members consist of agency/department secretaries and commissioners including the secretary of the AOA. Despite these efforts, BGS has only received nine AEIPs as of October 2016.   |
|  |       |  | 2018           | Implemented           | According to BGS, two memos were issued to state entities in 2018 requesting timely submission of AEIPs. As a result, 18 state entities submitted AEIPs in 2018 compared to 2016 when only nine AEIPs were submitted to BGS. Due to this significant increase in AEIPs submitted to BGS, we consider this recommendation fully implemented.   |

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| <a href="#">15-2 State Agency Energy Plan - Extent of Reductions in Energy Usage Uncertain</a> | 5  | Establish a process to review AEIPs that ensures the relevant components of the current SAEP are addressed.  | 2016   | Partially Implemented | BGS reported that each agency and department is responsible for its own internal review process to ensure AEIP compliance with the 2016 SAEP. Members of the SOWG reviewed the AEIP template before it was submitted to the Commissioner of BGS for final approval. However, BGS does not perform all the reviews of completed AEIP's to ensure all relevant components of the SAEP have been addressed.  |  |
|  |  |  | 2018   | Implemented           | BGS provides state entities with a template along with an example of BGS' AEIP. BGS reported that the State Energy Program Manager reviewed all AEIPs in 2018 and provided a sampling of email correspondence with four state entities which showed BGS is providing feedback to state entities during the review process to ensure the relevant components of the current SAEP are addressed.  |  |
|  | 6  | Expediently report energy consumption for state government operations subsequent to 2011 to the legislature, including analysis of actual energy consumption compared to targets and narrative explanation for differences between targets and actual results, and disclose that energy consumed by leased space is omitted.   | 2016   | Implemented           | In October 2016, BGS and Efficiency Vermont submitted their first joint report to the legislature on the SAMP. This annual report is required in accordance with 2015 Act 58 §E.112 which specified FY 2016 total energy usage and related costs were to be reduced by an amount not less than \$150,000. BGS reported first year energy savings of \$74,000 from projects BGS identified, developed, and implemented and an additional \$341,000 for projects BGS and Efficiency Vermont supported across state government. This report did not include a disclosure that energy consumption data for leased spaces was omitted. However, this disclosure was referenced on page 9 of the 2016 SAEP. |  |
|  | No further follow-up is required because the recommendation was implemented. |  |  |                       |   |  |
|  | 7  | Commencing with the next biennial report on the status of the SAEP, incorporate energy consumption data and an evaluation of the impact of energy consumption reduction efforts into the report.   | 2016   | Implemented           | BGS has included energy consumption data and an evaluation of the impact of energy consumption reduction efforts related to greenhouse gas emissions in the 2016 SAEP.  |  |
|  | No further follow-up is required because the recommendation was implemented. |  |  |                       |   |  |
|  | 8  | Expediently obtain energy consumption data for all leased space according to BGS procedures effective August 2014 and include energy consumption from leased space into the tracking and reporting of energy consumption in state government operations.   | 2016   | Not Implemented       | BGS reported they contacted National Life in December 2014 to begin the process of benchmarking energy in leased space but have not received any information regarding energy use from the National Life Group. BGS did not provide any supporting documentation to show that energy consumption data is being obtained from leased spaces and is being tracked and reported by BGS.  |  |
|  |  |  | 2018   | Not Implemented       | BGS has not implemented the recommendation and maintains its primary focus is tracking energy usage in state-owned and operated buildings.  |  |
|  | 9  | Work with AOA to determine whether the functionality that exists within the VISION system for recording quantity and unit price of energy sources (e.g., fuel, electricity, etc.) purchased is sufficient or whether enhancements are required. To the extent VISION is found adequate, AOA and BGS should collaborate to provide training to state entities to ensure consistent and appropriate use of VISION purchase order fields for quantity and unit price. | 2016   | Implemented           | BGS reported that it requested all state entities responsible for purchasing energy to utilize the Energy Star Portfolio Manager for building related energy consumption. Purchasing cards are used for fuel and tracked through the WEX Fleet Purchase Card reporting system. Therefore, this recommendation is fully implemented.   |  |
|  |  |  | No further follow-up is required because the recommendation was implemented. |                       |   |  |

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| <a href="#">15-2 State Agency Energy Plan - Extent of Reductions in Energy Usage Uncertain</a> | 10   | Continue to implement alternatives to using expenditure data from VISION for calculating energy units used and energy consumption via an Excel spreadsheet.  | 2016   | Partially Implemented | BGS reported that it uses Energy Star Portfolio Manager software to maintain energy data for energy consumed in state owned buildings and the WEX Fleet purchase card and the Fleet Focus management system for tracking energy consumption related to transportation. Currently, only BGS, AOT, and the DOC are using the Energy Star Portfolio Manager software.  |
|  |  |  | 2018   | Partially Implemented | According to BGS, the VISION expenditure data and the Excel spreadsheet are no longer used for energy tracking purposes. The WEX Fleet purchase card and Fleet Focus Management System are used for tracking energy consumption related to transportation. BGS, along with the AOT, DOC, and the Agency of Natural Resources, rely on EPA's Energy Star Portfolio Manager for tracking energy consumption in state-owned buildings while the Military Department uses its own energy management tracking software. Because only five state entities are utilizing a tool to track energy consumption, this recommendation is partially implemented.   |
|  | 11   | Implement strong operational controls, such as process documentation, access controls, logic checks of formulas, and a review by someone other than the preparer, for the spreadsheet utilized by BGS to calculate energy consumption and GHG emissions. | 2016   | No Longer Applicable  | BGS reported that it no longer uses excel spreadsheets to calculate energy consumption and GHG emissions. Instead, it relies on Energy Star Portfolio Manager software to maintain the energy accounting system.  |
|  | No further follow-up is required because the recommendation is no longer applicable. |  |  |                       |   |
|  | 12   | Assess the State's progress toward meeting the Act 40 goal to reduce energy consumption by 5 percent annually and for the periods that energy consumption from leased space is not included, disclose its omission.                                      | 2016   | Implemented           | BGS reported in the 2016 SAEP that the 5% annual energy reduction goal was not feasible given current economic conditions, technologies, and funding. Therefore, BGS proposed a 20% reduction in energy consumption by 2025 which is comparable to the goal set forth in the Comprehensive Energy Plan. BGS assessed progress toward energy consumption reduction noting that transportation energy use increased, but that building energy consumption decreased. In particular, BGS noted that gasoline and diesel use combined accounted for 45 percent of the total energy mix in 2015, an increase of 28 percent from 2012. Electrical consumption in buildings decreased and the amount of renewable energy consumed increased from 2012 to 2015. Energy in leased spaces was not included so BGS disclosed this omission in the 2016 SAEP. |
|  |  |  | No further follow-up is required because the recommendation was implemented. |                       |   |

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| <a href="#">15-2 State Agency Energy Plan - Extent of Reductions in Energy Usage Uncertain</a> | 13    | Ensure that state entities incorporate the Act 40 goal to reduce energy consumption by 5 percent each year into their 2014 update to AEIPs and include it as a goal in the 2016 SAEP. | 2016           | Partially Implemented | Instead of using Act 40 goal of five percent annual energy reduction, BGS proposed a 20 percent reduction in energy consumption by 2025 in the 2016 SAEP. BGS believes the five percent annual goal is not feasible. We reviewed two 2016 AEIPs but did not find an analysis of the agencies progress towards either of these goals. For example, AOT's AEIP showed trends in its heating, transportation, and electricity consumption from its 2012 baseline and DOC's AEIP reported only the energy savings in five correctional facilities where solar arrays are offsetting the electric consumption. BGS is not ensuring that the state's energy goals are incorporated into the agencies' AEIPs, but goals were listed in the 2016 SAEP. |
|  |       |   | 2018           | Partially Implemented | BGS reported it continues to work with agencies to ensure they track energy consumption in buildings and vehicles. BGS provided email correspondence with the AOT which illustrates this. However, only two state entities reported energy consumption data and comparison of targets to actual results in the 2018 AEIPs, BGS and the Military department. Sixteen other state entities submitted AEIPs, but did not report progress toward goals. Therefore, we conclude this recommendation is partially implemented.   |