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October 30, 2020

Ms. Mary Jo Krolewski, Utilities Analyst
Vermont Public Utility Commission
112 State Street
Post Office Drawer 20
Montpelier, Vermont 05620-2701

Re: **Case No. 19-0302-INV – Annual Progress Report for Energy Savings Account Pilot Program**

Dear Ms. Krolewski:

Efficiency Vermont is submitting this letter to provide the first annual report for the Energy Savings Account (ESA) Pilot Program, as directed by Commission May 16, 2019 and December 20, 2019 Orders in this proceeding. At the time of this report, there are 9 Participants in the ESA Pilot Program. These include Chroma Technology, Collins Aerospace, Ethan Allen Operations, Inc., Jay Peak Resort, Killington Resort / Pico Mountain Resort, Mack Molding Company, Weidmann Electrical Technology, Inc., Westrock Converting, LLC, and Vail Resorts.

From July 1, 2019 through June 30, 2020, Participants completed the following activities related to the ESA Pilot Program.

- 8 Participants have signed the ESA Pilot Program MOU with Efficiency Vermont
- 8 Participants submitted their monthly Energy Savings Account balance to Efficiency Vermont
- Participants conducted activities in support of the development of their individual Energy Management Plans. These activities include
 - Consultation of projects
 - Audits of facilities
 - Project identification and prioritization
- \$0 ESA Pilot Program related expenses.
- Total ESA Pilot Program collections for the period of July 1, 2019 through June 30, 2020 was approximately \$1.3 million.

In addition to work accomplished by ESA Participants, Efficiency Vermont performed work related to program development and administration of the ESA Pilot Program, and provided support to ESA Participants. Work performed included the following activities.

- Filed a letter on February 21 2020 with the Commission to update the final list of ESA Participants for the ESA Pilot Program.
- Developed financial tracking systems to monitor and report on ESA costs, including costs billed to Participants and costs covered as part of Efficiency Vermont program administration.
- In January and February 2020, provided a contractual Memorandum of Understanding framework for Participants to access services from Efficiency Vermont, including required services and optional services. An amendment to the MOU was also developed after subsequent direction from the Commission in its December 20, 2019 Order.
- On March 30, 2020, provided documentation guidance for Participants related to project societal cost-effectiveness screening.
- Engaged with the Department and ESA Participants throughout the performance period to support project development and meeting regulatory requirements.
- In partnership with the Department, developed guidance for Participants on development of Energy Management Plans (EMPs) and an EMP template. Finalized guidance was distributed in early July 2020.

Efficiency Vermont understands there is direction from the Commission to work with ESA Participants to develop guidelines for annual reports that provide the necessary information but minimize any overlap in current reporting¹. Efficiency Vermont will work with Participants to develop such guidance once the majority of EMPs are filed to ensure that guidance is appropriate to planned projects. Guidance will be developed before the next annual progress report due date.

Attachment A of this letter is a compilation of annual progress report letters from all nine ESA Pilot Program Participants. Attachment B of this letter is a copy of the EMP guidance and template sent to Participants. Per Section 2(i) of Act 150 a copy of this filing is being submitted to the Department and the standing committees of jurisdiction.

Sincerely,



Michael Crowley
Efficiency Vermont

¹ PUC Order Re Evaluation, Measurement, and Verification of the SMEEP and ESA Pilot Program, 12/20/2019, page 23.



www.efficiencyvermont.com
888-921-5990 | 802-860-4095

Attachment A

Compilation of ESA Pilot Program Participant Annual Progress Report Letters



Janette Bombardier, P.E.
Chroma Technology
10 Imtec Lane
Bellows Fall, VT 05101

October 26, 2020

Re: Energy Savings Account Pilot Program Annual Report

Mike Crowley
Efficiency Vermont
20 Winooski Falls Way, 5th Floor
Winooski, VT 05404

Mr. Crowley:

I am writing to provide a summary of Chroma's activity related to the Energy Savings Account (ESA) Pilot Program. This information should be included in Efficiency Vermont's annual report on the ESA Pilot Program, which will be filed with the Public Utilities Commission.

Chroma completed the application process and was successfully selected to be part of the ESA program in early 2019, and initiated the Energy Savings account balance in June 2019.

There was no clarity around the process and the requirements to use the money from Efficiency Vermont or the Vermont Public Service Department until the beginning of September, 2020. At that time, due to the organization and leadership of AIV (Associated Industries of Vermont), participants in the program were for the first time given some direction around the process of project approval and the requirements of the Energy management plan and its submission. We were also asked to report the Monthly Energy Savings Account balance to EVT, which we are doing, but this should be coming directly from our electric utility provider.

From July 1st, 2019 through June 30, 2020, Chroma completed the following activities related to the ESA Pilot Program.

- Signed the ESA Pilot Program MOU with Efficiency Vermont
- Started accumulating funds into our Energy Savings Account

From September 2020 until now we have

- Attended the communications session organized by AIV

- Reported monthly Energy Savings Account balance to Efficiency Vermont
- We have submitted our first project to EVT for approval. This was a project that had previously been reviewed by EVT under the traditional program. That project was approved and returned to Chroma.
- We are working to complete the development of Chroma's Energy Management Plan for submission in November 2020.
- Expended over \$40,000 on ESA Pilot Program related expenses, which will be included in a reimbursement request.

While we will continue to use the ESA program, it has developed into a much more complex process than needed and should be modelled after the original, more streamlined SMEEP program. It has taken a tremendous amount of time to clearly communicate what participants are required to do to access their own funds in the account.

Like many manufacturing companies Chroma has been and continues to be committed to the responsible use of energy.

Sincerely,

Janette K. Bombardier, P.E.

Janette Bombardier
Chief Operating Officer
Chief Technical Officer
Chroma Technology



Collins Aerospace

A United Technologies Company

100 Panton Rd
Vergennes, VT 05491
United States of America
Phone: 802-877-4832
Email: Nathan.hill@collins.com
www.collinsaerospace.com

Nathan Hill
EH&S Specialist
Collins Aerospace

October 22nd, 2020

Re: Energy Savings Account Pilot Program Annual Report

Mike Crowley
Efficiency Vermont
20 Winooski Falls Way, 5th Floor
Winooski, VT 05404

Mr. Crowley:

I am writing to provide a summary of Collins Aerospace's activity related to the Energy Savings Account (ESA) Pilot Program during the first year of the program. This information should be included in Efficiency Vermont's annual report on the ESA Pilot Program, which will be filed with the Public Utilities Commission.

From July 1st, 2019 through June 30, 2020, Collins Aerospace completed the following activities related to the ESA Pilot Program.

- Signed the ESA Pilot Program MOU with Efficiency Vermont
- Reported monthly Energy Savings Account balance to Efficiency Vermont
- Conducted activities in support of the development of Collins Aerospace's Energy Management Plan, including project review and identification measures

Sincerely,

Nathan Hill
Collins Aerospace

Stephen Montague
Ethan Allen Operations
27 Railroad Ave.
Orleans, VT 05860

October 22, 2020

Re: Energy Savings Account Pilot Program Annual Report

Mike Crowley
Efficiency Vermont
20 Winooski Falls Way, 5th Floor
Winooski, Vt 05404

Mr. Crowley:

I am writing to provide a summary of Ethan Allen Operations' activity related to the Energy Savings Account (ESA) Pilot program during the first year of the program. This information should be included in Efficiency Vermont's annual report on the ESA Pilot Program, which will be filed with the Public Utilities Commission.

From July 1st,2019 through June 30,2020, Ethan Allen Operations completed the following activities related to the ESA Pilot Program.

- Signed the ESA Pilot program MOU with Efficiency Vermont
- Reported monthly Energy Savings Account balance to Efficiency Vermont
- Conducted activities in support of the development of Ethan Allen Operation's Energy management Plan, including (audits of facilities, project indentification)

Sincerely,

Stephen Montague
Ethan Allen Operations

Memorandum

Date: October 26, 2020

To: Efficiency Vermont
Public Utility Commission

<p>From: ESA Participant: Jay Peak Resort Andy Stenger astenger@jaypeakresort.com (802) 327-2390</p>	<p>Report Preparer: Cx Associates, LLC Rachael Straub rachael@cx-assoc.com (802) 578-6444</p>
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Re: Energy Savings Account Pilot Project First Annual Report

Purpose

This memo was prepared by Cx Associates on behalf of Jay Peak Resort for their participation in the Energy Savings Account (ESA) Pilot Project from July 1, 2019 through June 30, 2022. This memo pertains to the first year of participation and complies with the Guidelines and Requirements for Reports as stated in the *State of Vermont Public Utility Commission Order Re Evaluation, Measurement, and Verification of the SMEEP and ESA Pilot Programs*.

Progress Report

During the period of July 1, 2019 to June 30, 2020, the following activities occurred:

1. Development of the Energy Management Plan

Cx Associates worked with Jay Peak Resort to draft an Energy Management Plan (EMP), the initial of which was submitted to the Commission on May 8, 2020. This EMP contained a list of potential projects that Cx Associates and Jay Peak have identified through Cx Associates' long-term relationship as Jay Peak's energy efficiency consultant. One of these projects, the *Water Park Heat Optimization Project*, was successfully screened by Efficiency Vermont in April/May 2020 as meeting ESA requirements. As this was the first EMP of the ESA pilot, Efficiency Vermont developed clarifications and modifications to the EMP requirements. These changes included limiting the EMP to contain only screened projects and requiring additional information about measurement and verification. These modifications/additions are currently being incorporated into the EMP by Cx Associates and a revised EMP will be sent to the Commission shortly on Jay Peak's behalf.

2. Development of the Water Park Heat Optimization Project

As stated above, the *Water Park Heat Optimization Project* was targeted for development and funding through the ESA for 2019-2022. In February and March of 2020, Cx Associates performed an energy analysis to assess the energy saving potential for recovering waste heat from Hotel Jay and the Ice Haus (ice rink) to help meet the heating needs of the Water Park. Cx Associates submitted a memo on March 24, 2020 (and revisions on April 21, 2020) to Jay Peak that identified the potential energy savings for both propane and electricity, provided high-level options for how to realize these savings, and suggested next steps for project development. The two options presented to Jay Peak, and successfully screened by Efficiency Vermont for the ESA, were:

Option 1: HRU Preheat Only

This option involves recovering waste heat from the Ice Haus and Hotel Jay to heat the preheat coils of the heat recovery unit in the Water Park. Since the preheat coil temperature setpoint is the only potential Water Park heat load lower than the waste heat temperature, this is the only application where the waste heat could be applied directly.

Option 2: Water-to-Water Heat Pumps + HRU Preheat

This option adds water-to-water heat pumps to increase the temperature of the waste heat from Hotel Jay and the Ice Haus for use in higher temperature applications like the Water Park water features. This approach would classify as a fuel switch, as we would be using electricity from efficient heat pumps to increase the waste heat water temperature, displacing existing propane consumption currently used by the boilers. If all waste heat could be recovered effectively, this would represent a potential reduction in propane consumption of around 93,000 gallons, while there would be a net increase in electricity consumption of around 260,000 kWh due to the operation of the water-to-water heat pumps. This increase in electric consumption would be offset - in part or in whole - due to the reduction in the use of the cooling towers of the Ice Haus and Hotel Jay. Further study would need to occur to determine the extent of this offset.

Table 2 from the Assessment Memo provides an overview of results.

Table 2: Analysis Results

Analysis Results Option	Propane Savings (gal)	Electric Savings (kWh)	Peak Demand Reduction (kW)	Propane Cost Savings (\$)	Electric Cost Savings (\$)	Energy Cost Savings ¹ (\$)	Project Cost ² (\$)	CO ₂ Reduction ³ (lbs)
Option 1 - HRU Preheat Only	36,581	7,776	3.6	\$45,726	\$859	\$46,585	\$232,926	464,579
Option 2 - Water-to-Water Heat Pump + HRU Preheat	93,501	-260,960	6.1	\$116,876	-\$26,414	\$90,462	\$452,312	1,187,465

¹Propane: \$1.25/gallon, electric consumption: \$0.08975/kWh, electric demand: \$12.04/kW

²Project cost assumes five-year simple payback

³CO₂ reduction includes propane only

Financial Activity

Attachment A outlines the ESA Account spending and savings for the first year of the ESA, namely from July 1, 2019 to June 30, 2020. All costs are related to preparing the EMP and assessing the potential energy savings related to the Water Park Heat Optimization Project.

Since June 30, 2020

Jay Peak shut down its business in mid-May 2020 due to the COVID 19 pandemic, which delayed further work on ESA-related activities until early October 2020. In the last month, Jay Peak has decided to pursue *Option 2: Water-to-Water Heat Pumps + HRU Preheat*. Cx Associates is currently pursuing the resubmission and approval of the EMP and developing next steps for the design of the project upon the approval of the EMP. Once implemented, this project would likely utilize all ESA funding available to Jay Peak, so funding sources beyond the ESA are being sought as well.

Jeff Temple
Killington Resort / Pico Mountain Resort
4763 Killington Road
Killington, VT 05751

October 22, 2020

Re: Energy Savings Account Pilot Program Annual Report

Mike Crowley
Efficiency Vermont
20 Winooski Falls Way, 5th Floor
Winooski, VT 05404

Mr. Crowley:

I am writing to provide a summary of Killington Resort / Pico Mountain Resort's, (KPSRP) activity related to the Energy Savings Account (ESA) Pilot Program during the first year of the program. This information should be included in Efficiency Vermont's annual report on the ESA Pilot Program, which will be filed with the Public Utilities Commission.

From July 1st, 2019 through June 30, 2020, KPSRP completed the following activities related to the ESA Pilot Program.

- We attended meeting in Montpelier as well as phone meetings to gain clarity on process of the ESA.
- We signed the ESA Pilot Program MOU with Efficiency Vermont.
- We have been reporting our monthly Energy Savings Account balance to Efficiency Vermont.
 - The reporting process has worked efficiently once details were worked out due to the fact that KPSRP has an extensive metering network.
- We conducted activities in support of the development of Killington Resort / Pico Mountain Resort's Energy Management Plan, including reviewing previous energy audit project proposals, energy impactful snowmaking production projects, current construction projects with related energy impacts and KPSRP's environmental mission, Play Forever project proposals.
 - We reviewed components / systems as potential projects for reimbursement as part of the construction of new \$30m lodge facility at the Resort. Although facility was under construction, other systems and components of facility were in final stage of design, so this list and the KPSRP's EMP submittal has been held back until package is compiled.
- Relative to funds expended to date, the timing of COVID in relation to identification of projects and subsequent shutdown of the Resort, precluded KPSRP from seeking the services of outside consultants to assist in completing the EMP and beginning to seek

reimbursement for these projects. With that said, the Resort has resumed operations and maintenance activities and as of this date is navigating regulations for a proposed November opening. In conjunction with the resuming of operations, and knowing we are approaching the halfway point in the ESA program and have accrued \$207,217 as of October 1, 2020, work has resumed on a planned submittal of the EMP and ESA Pilot Program related expenses, which will be included in a reimbursement request.

Sincerely,

A handwritten signature in black ink that reads "Jeffrey Temple". The signature is written in a cursive, flowing style.

Jeff Temple

KPSRP

jtemple@killington.com

o 802.422.6219

c 802.770.8866

Bud Pagliccia
Mack Molding Company
608 Warm Brook Rd
Arlington, VT 05250

October 26, 2020

Re: Energy Savings Account Pilot Program Annual Report

Mike Crowley
Efficiency Vermont
20 Winooski Falls Way, 5th Floor
Winooski, VT 05404

Mr. Crowley:

I am writing to provide a summary of Mack Molding Company's activity related to the Energy Savings Account (ESA) Pilot Program during the first year of the program. This information should be included in Efficiency Vermont's annual report on the ESA Pilot Program, which will be filed with the Public Utilities Commission.

From July 1st, 2019 through June 30, 2020, Mack Molding Company completed the following activities related to the ESA Pilot Program.

- o Signed the ESA Pilot Program MOU with Efficiency Vermont
- o Reported monthly Energy Savings Account balance to Efficiency Vermont
- o Conducted activities in support of the development of Mack molding Company's Energy Management Plan, including audits of facilities and project identification
- o Mack has formally requested assistance from Eff. Vt. To help develop an EMP

Sincerely,

Bud Pagliccia
Mack Molding Company
Plant Manager
79 E. Arlington Rd.
Arlington Vt. 05250



Efficiency Vermont Energy Savings Account Pilot

June 2020 Annual Report

Okemo Mountain Resort & Stowe Mountain Resort (combined)

October 29, 2020

Introduction

Okemo Mountain Resort and Stowe Mountain Resort, combined under Vail Resorts Management Company, would like to submit this Annual Report for the period of July 1, 2019 through June 30, 2020 as required per this Energy Savings Account (ESA) pilot.

Contacts

Doug Pierini
Senior Vice President & COO – Northeast Region
DPierini@vailresorts.com
802-228-1967

Bobby Murphy
Vice President and GM – Stowe Mountain Resort
BMurphy@vailresorts.com
802-253-3419

Bruce Schmidt
Vice President and GM – Okemo Mountain Resort
BSchmidt@vailresorts.com
802-228-1968

Ian Clampert
Energy & Sustainability Manager – Vail Resorts Corporate
IClampert@vailresorts.com
303-404-1102

Annual Report (July 1, 2019 – June 30, 2020)

Energy Management Plan: During this period, we have begun reporting our ESA balance to Efficiency VT as well as developing a forecast for 2021 and 2022 in order to plan for potential capital investments. Specific investments have not yet been fully identified, but are in discussions with operations teams at each resort.

ESA Spending and Savings: No ESA spending has occurred during this time period, and there are no ESA savings to report. ESA collections have been reported to Efficiency VT during this period.

Vail Resorts continues to be engaged with the Efficiency VT program staff and will continue development and execution of the Energy Management Plan in the second and third year of this pilot.

WEIDMANN

Memorandum

Date	October 20, 2020
From	Bill Stimpson, T +802 751-3311, bill.stimpson@weidmann-group.com
To	Efficiency Vermont
CC	Bernie Brochu, Zach Hatch

Subject matter: Annual Progress Report, ESA Activities

In accordance with Section 2(i) of Act 150, Weidmann Electrical Technology as an ESA participant submits the following update.

Weidmann St. Johnsbury operation continues to update their Energy Management Plan. Over the last 12 months Weidmann has identified five improvement opportunities to be included in the plan. These improvement initiatives are at the very beginning stages of review with data collection and feasibility review taking place with potential contractors. This information will soon be collected and compiled into the Energy Management Plan for submission to Efficiency Vermont.

Weidmann has not incurred any costs associated with this early data collection. Included with this memorandum is the current program YTD Weidmann ESA Contributions and ESA balance.

WEIDMANN

ESA Contributions

Attachment A

Weidmann ESA Contributions and ESA Balance

Account Statement Date: **October-20**

Activity Period	Monthly Customer EEC Payment	Cumulative Customer Deposits	Invoice Total	Qualified Participant Labor	Qualified EVT Labor	Qualified Subcontractor	Qualified Materials	Qualified Installation	Qualified Misc.	Cumulative Qualified Expenses	Account Balance Net of Customer Expenses
July-19	\$11,579	\$11,579								\$0	\$11,579
August-19	\$11,996	\$23,575								\$0	\$23,575
September-19	\$14,533	\$38,108								\$0	\$38,108
October-19	\$10,083	\$48,190								\$0	\$48,190
November-19	\$10,993	\$59,183								\$0	\$59,183
December-19	\$10,083	\$69,266								\$0	\$69,266
January-20	\$13,676	\$82,942								\$0	\$82,942
February-20	\$13,238	\$96,180								\$0	\$96,180
March-20	\$11,618	\$107,798								\$0	\$107,798
April-20	\$14,327	\$122,125								\$0	\$122,125
May-20	\$14,429	\$136,553								\$0	\$136,553
June-20	\$13,436	\$149,989								\$0	\$149,989
July-20	\$11,353	\$161,342								\$0	\$161,342
August-20	\$14,605	\$175,947								\$0	\$175,947
September-20	\$13,319	\$189,265								\$0	\$189,265



October 26, 2020

Re: Missisquoi Mill Energy Savings Account-Pilot Program 2020 Progress Report

Mike Crowley
Efficiency Vermont
20 Winooski Falls Way, 5th Floor
Winooski, VT 05404

Mr. Crowley:

Please find below a summary of WestRock Missisquoi Mill's efforts related to the Energy Savings Account-Pilot for the timeframe 1 July 2019 to 30 June 2020. This is provided to comply with the reporting requirements of Act 150. The Mill has continued its internal process of energy project identification, evaluation, ranking, and selection. The Missisquoi Mill has the following to report for its efforts during the first year of this Pilot:

- a. The Mill has been moving forward with all the necessary preliminary studies for a Combined Heat and Power (CHP) facility at the mill. This analysis includes energy and emission studies as well as cost/benefit analyses. This effort is to support the societal screening requirements. This project will be in partnership with Vermont Gas Systems.
- b. Refiner Horsepower-Day per Ton Audit. Pulp refiners are the Mill's single largest contributor to electrical energy consumption at 15%.
- c. Vacuum Pump Distribution, Management, and Control -Study and Audit. Vacuum Pumps are the second largest process consumer of Mill electricity at 11%.
- d. Machine Screen Rotor Speed Optimization – Pilot study.
- e. Condensate Return Thermal Energy Utilization – Audit. Potential partnership with Vermont Gas Systems.
- f. PM 2 Ross Air Unit 1 Receiver Tank Conversion – Engineering study. Potential partnership with Vermont Gas Systems.
- g. Mill Steam Insulation – Audit. Potential partnership with Vermont Gas Systems.
- h. Mill wide Ventilation Balancing, Repairs, and Upgrades – Audit. Potential partnership with Vermont Gas Systems.
- i. The Mill provided an ESA-Pilot contribution accounting to EVT but was informed that EVT was only accepting copies of the Mill's power bills or a contribution accounting from our electric utility provider. We are awaiting this documentation from our electric utility provider. All our EEC Pilot funds currently remain unspent.
- j. In September 2020, the Mill participated in an Associated Industries of Vermont workshop where the Mill got clarity regarding how the Pilot was envisioned to operate administratively and what was required for project submittals.
- k. The Mill has not reached the point where projects going through the Mill's process are able to be screened for ESA-Pilot participation. This effort requires an MOU between WestRock and EVT, and we are unable to finalize this document until we resolve outstanding issues related to EVT cost recovery.

The Mill has concentrated its efforts on the CHP due to the high potential societal energy savings, and financial benefits. However, the Mill has also started preliminary studies on some of the above to include capturing the required baseline performance as well as moving forward with Pilot projects to test/verify the technology.

Sincerely,

Jerry Brown, Ph.D, PE-Ret.
WestRock Missisquoi Mill
369 Mill Street
Sheldon Springs, VT 05485



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Attachment B

Copy of ESA Energy Management Plan (EMP) Guidance and Template
Sent to ESA Pilot Program Participants



July 10, 2020

To: Energy Savings Account (ESA) Pilot Program Participants

Re: ESA Energy Management Plan (EMP) Guidance

Dear ESA Pilot Program Participants:

This letter, jointly sent from the Department of Public Service (Department), Efficiency Vermont, and the Agency of Commerce and Community Development (ACCD) is intended to provide clarification on process and content related to the development and submittal of an Energy Management Plan (EMP) pursuant to the requirements of your participation in the ESA Pilot program.

Since the time of the original Request for Proposals for ESA Pilot Program participation, two Commission Orders have been issued (Track 1 Order on May 16, 2019 and Track 2 Order on December 20, 2019), which establish certain requirements for participation in the ESA Pilot. Based on these Orders, we are providing a template that we encourage all participants to use for development of an EMP, and steps to take for development and submittal of the plan.

EMP Development and Submittal

Section 2(e) of Act 150 requires that each customer selected for the ESA pilot program work with Efficiency Vermont to "develop an energy management plan for the three-year period of the pilot with projects to be implemented, energy savings targets, and a timeline for projects and investments." As a participant in this pilot, we strongly recommend the following steps to ensure the requirements are satisfied and your projects can be a success:

Step 1 - Project Development and Analysis: Develop estimates for project(s) design and implementation costs, and savings estimates for both energy and non-energy savings. Efficiency Vermont may be used as a resource to assist with this work.

Step 2 - Project Screening: Provide project(s) cost and savings estimates to Efficiency Vermont. Efficiency Vermont will perform societal cost-effectiveness screening. Only projects that pass societal cost-effectiveness screening based on screening criteria established by the Public Utility Commission under the terms of this ESA Pilot may be included in a Participant's EMP.

Step 3 - Project Selection: Make final decision regarding which projects of those that are societally cost-effective to include in the EMP.

Step 4 - EMP Development: Develop a Draft EMP based on the template attached to this letter. (Participants may use a different format for an EMP provided all required information is included in it.) Efficiency Vermont may be used as a resource to assist with this work. Please note:

- EMP must include estimates for project(s) costs, savings, and timeline.
- EMP must include a description of information and data to be collected for project EM&V, as well as estimated costs for EM&V. The Department may be consulted for estimating EM&V costs.
- For customers with Natural Gas savings, EMP must include estimates regarding costs and savings share across ESA and Vermont Gas.

Step 5 - Draft EMP Review/Comment. Submit a Draft EMP to the Department and Efficiency Vermont for review and feedback. For customers with Natural Gas savings, the draft EMP should also be submitted to Vermont Gas. At this point, the Department will be able to provide feedback on necessary EM&V activities.

- The Department and Efficiency Vermont are available to discuss EM&V needs related to savings verification and/or Forward Capacity Market (FCM) requirements. The Department may reach out as needed to your organization to for more information to better understand the scope and of proposed projects.

Step 6 - EMP Submittal: After incorporating feedback from Efficiency Vermont and the Department, the EMP must be filed with the Commission, and a copy of the final plan sent to the Department, Efficiency Vermont, ACCD, and Vermont Gas (if applicable).

Please note that any work performed by Efficiency Vermont in support of project analysis, screening, and EMP development will be billed to the Participant. All costs will be in accordance with the ESA Pilot Program Memorandum of Understanding (MOU) with Efficiency Vermont and are eligible for payment from the balance of the Participant's ESA account.

Should you have any questions, please feel free to contact Efficiency Vermont at ESAInfo@efficiencyvermont.com.

We look forward to continuing to work together toward successful project planning and implementation.

Best Regards,

Michael Crowley
Efficiency Vermont

Kelly Launder
Vermont Public Service Department

Ted Brady
Vermont Agency of Commerce and Community Development



Energy Savings Account (ESA) Pilot Program Energy Management Plan [Template]

7/9/2020

Business Name:
Lead Contact Name:
Lead Contact email:
Lead Contact phone:

Overarching ESA Objectives:

Please describe the overarching objectives for the work you intend to undertake within the ESA Pilot Program.

- 1.
- 2.
- 3.

Metrics to measure progress towards objectives:

Please list the metrics by which you will determine if you've met your overarching objectives. Metrics may be energy related or non-energy related. Please also provide a description of what you intend to measure to assess success of your project(s). The Department may reach out to your organization as needed for more information to better understand the scope and requirements of proposed projects.

Metric	Baseline	Target

Action Plan to Achieve Targets

Project #1:

Project Description:

Please provide a short description of the project you will undertake.

Key Results:

Key results should indicate the data and information to be collected for the project and include estimates for both energy-related results/metric (e.g., electric energy, electric demand, fossil fuel savings, etc.) and non-energy related results/metrics (e.g., job creation, productivity improvements, maintenance cost savings, etc.). Examples of information and data that may be collected was provided by the Department as part of Case 19-0302; please see the attachment at the end of this template.

Estimated Costs:

Estimated costs should include anticipated amounts for project planning work, implementation activities, and evaluation, measurement & verification (EM&V).

Milestones	Date	Estimated Cost	Estimated Results

Project #2:

Project Description:

Key Results:

Estimated Costs:

Milestones	Date	Estimated Cost	Estimated Results

ATTACHMENT A:

Examples of Information and Data to be collected for evaluation and verification of projects, as presented in Department comments and included in the Commission's Track 2 Order of December 20, 2019 (pp 14-15).

Criterion	Evaluation to Include	Data Examples
Job Creation/Retention	<ul style="list-style-type: none"> – Interviews to help determine jobs created and retained, and determine what might have happened otherwise Estimate of indirect job creation (service or supply resulting from company growth) 	<ul style="list-style-type: none"> – Capital investment – Capital avoidance – Resource (energy, water) savings – O&M net benefits – Output information (e.g. production figures) – Customer labor and employment data (e.g., number of full-time equivalents) – Average compensation for created jobs
Energy Savings, Total Energy Cost Reductions	<ul style="list-style-type: none"> – Engineering analysis of the completed projects – Analysis should use approved avoided costs – Reduced on- or off-peak demands and associated charges 	<ul style="list-style-type: none"> – Baselines (e.g., existing conditions, nameplate information, operating hours) – Invoices for purchase and installation of equipment Detailed project summaries including equipment cut sheets – Historical peak demand times, demands, and charges
Energy Productivity	<ul style="list-style-type: none"> – Measurement by MMBtu/\$ – output or unit of output – (machine or facility specific) Examples of these metrics include: MMBtu/dry ton (per day/week/month); MMBtu/ton of paper (per day/week/month) MMBtu/per silicon wafer (or multiples thereof) – Metrics should be normalized for weather and then converted into a percentage of energy saved to allow some comparison across industry types 	<ul style="list-style-type: none"> – Baseline: Average amount of energy required to make one unit of the same product (or total output) in the two years preceding implementation of the measure, or average amount of energy required to make one unit of the same product (or total output) for an appropriate reference period given the nature of the product Average amount of energy required – to make a similar product, extrapolated from the reference product that was being made – Equipment availability data pre- and post-project implementation, and energy use pre- and post-project implementation (accounting for energy use differences in the production and idle modes, if applicable) – Throughput data for equipment for a specific product from the reference period, or for current product output extrapolated from earlier production

Capital Applied and Leveraged	<ul style="list-style-type: none"> - Invoice/capital expenditure review - Capital avoided 	<ul style="list-style-type: none"> - Invoices and costs related to participation in self-managed programs - Program expenditures versus capital expenditures
Greenhouse Gas Reductions	<ul style="list-style-type: none"> - Analysis of net energy savings by fuel to be multiplied by greenhouse gas coefficients 	<ul style="list-style-type: none"> - Net energy savings