



October 16, 2017

Riley Allen, Deputy Commissioner
Department of Public Service
112 State Street
Montpelier, VT 05620-2601

Omya Inc.
P.O. Box 10
Whipple Hollow Road
Florence, Vermont 05744
U.S.A.

Tel +1-802-770-7500
Fax +1-802-483-2105

Ted Brady, Deputy Secretary
Agency of Commerce & Community Development
One National Life Drive
Deane Davis Bldg. – 6th Floor
Montpelier, VT 05620-0501

www.omyainvermont.net

Dear Deputy Commissioner Allen and Deputy Secretary Brady,

I understand that you are reviewing the structure and effectiveness of the Efficiency Vermont [EEV] Customer Credit Program for commercial and industrial customers as a result of Act 77. We would like to provide Omya's perspective concerning the costs vs. the value that Omya receives from this program. Based on this experience, we believe that the State of Vermont should allow other companies, such as Omya, to be eligible for the so-called SMEEP program (Self-Managed Energy Efficiency Program) and make other adjustments to the SMEEP program including eligibility for investments that reduce total energy consumption and have positive impact on grid efficiency and reliability. In addition, a cap or reduction on the required annual investment to reflect the in-house program administration, should be established as well as a simplified verification of investments process.

Omya is a leading global producer of calcium carbonate with a facility located in Florence, Vermont. With 130 years of experience, it has over 175 plants in more than 50 countries including nine in the U.S. in VT, PA, KY, TN, AL, AZ, CA and MI. Most of these plants compete with each other to supply calcium carbonate to the paper, plastic, and coating industries. We have approximately 140 Vermont employees and heavily rely on more than 200 other Vermont workers through our many contractors.

Over the last six and a half years, Omya has made numerous significant investments in energy efficiency in electric, thermal and fuel sectors including improvements to our production process, our buildings and our transportation systems. In 2013 Omya contracted with Casella to convert its truck fleet, used for hauling stone from Middlebury to Florence, to LNG [Liquefied Natural Gas] instead of diesel. At the same time Omya converted all its dryers and boilers to use LNG instead of No.2 fuel oil by installing Vermont's first LNG storage facility. Recently Omya has supported renewable energy with power purchase agreements for significant solar energy projects here in Vermont. By the end of 2017 Omya would be the off-taker of ten 500kW solar facilities.

Omya is the sole participant in the Efficiency Vermont (EEV) Customer Credit Program. This program requires Omya to pay a surcharge on its electric bill. This surcharge is based on a kWh usage rate and a multiplier set by the Public Service Board for this EEV Program. Stated more simply, our current Omya EEV surcharge rate is on average about 8.6% of our regular electricity bill, which results in approximately \$1.5 million annually paid to EEV. Omya can then access approximately 90% of this money in the form of a refund once it completes approved energy efficiency projects. The program allows for the accumulation and carryover of the funds paid into EEV by Omya for a two-year period. This means that monies paid into the program in

2015 will expire at the end of 2017 unless applied to qualified projects. If fully utilized, our experience is that the program returns 89.1% of every dollar we pay in energy efficiency charges. For example, in 2017, Omya will pay approximate \$1.475 million in energy efficiency charges, of which \$1.314 million will be available for projects in the form of refunds. The balance of approximately \$160,000 is retained by Efficiency Vermont.

Unfortunately, it is getting more and more difficult to utilize the program and recoup the fees paid into the program because Omya has exhausted electric energy efficiency projects that make fiscal sense. As explained further below and on the accompanying attachments [Table 1], going into August 2017, Omya has a greater than \$2.4 million carryover of money from 2015 and 2016. A total of \$812,000 of this money would expire and be retained by Efficiency Vermont if Omya did not have projects for 2017 eligible for refunds. The chart in the accompanying attachment [Chart 1] shows the progression of Customer Credit Program balance, and it has steadily grown, Omya is running out of projects [under the current definitions] that would qualify for refunds.

Like many other businesses, Omya has initiated and implemented most of the opportunities for electric energy efficiency. The remaining potential projects have longer paybacks on the order of five to seven years and very marginal returns. Omya's business practice is to pursue projects with up to a two-year payback period or less. As we have worked through the program, our carry over totals have increased each year and there are not enough sound projects where we can utilize these refunds without risking forfeiting any prior Customer Credit Program refunds.

Most electrical efficiency projects typically require significant Omya investment as the Customer Credit Program requires demonstration of the benefits before refunds are made or the overall cost of the project is greater than our balance of credits available. Omya funds the project, the installation and engineering, and then it monitors and report the benefits derived to EEV in order to qualify for refunds. From the beginning of the program through July 2017, Omya received approximately \$3.8 million in refunds for more than \$4.5 million in project costs, requiring that Omya invest an *additional \$684,000* to make up the difference beyond what was paid into the program. These projects typically have a seven to ten year payback period, which is far longer than today's standard business practice of no more than two years. A summary of these projects are listed in the attachment below [Table 2]. The chart attached ["blue" bars on Chart 1] shows the gradual increase in unused cumulative customer credits [the difference between customer deposits and qualified expenses] and this number is increasing each year.

We have identified projects yielding potentially \$1.1 million in refunds for 2017. Of this, \$180,000 will be for premium efficient media and \$750,000 will be for an energy audit and installation of more advance metering. This will allow Omya to fine tune even further its electrical energy usage, and potentially generate several projects in the future. The two projects for 2017, do not require additional Omya investment. The projects identified and approved will be able to consume all refunds at risk for 2017. However, for 2018 we will need to identify new projects of at least \$1.5 million in order not to forfeit cumulative EEV refunds for that calendar year. We have reached the position where the annual charge of approximately \$1.5 million that we pay on our electric bill to EEV would be better invested if we had a wider array of project choices for investment. For Omya, the next area to find valuable energy efficiency savings is by looking at our total energy consumption and investments that could improve electrical grid efficiency and reliability and not just electric efficiency.

From our experience with EEV, the Customer Credit Program at first resulted in some sound projects, such as lighting upgrades, that had solid payback periods. However, over time the program has evolved to encourage investment in a limited range of marginal projects resulting in long paybacks. It is really a success story for many companies like Omya that have achieved its electrical efficiency goals, but the program needs

to be adjusted to account for its maturity. We have harvested the so-called low hanging fruit. There are several changes that should be made to the program as set forth below.

Electricity is one of the most significant cost drivers for Omya and we compete with our other facilities nationally and globally. However, we employ other forms of energy in our production process such as thermal energy and LNG. Expanding the definition of the projects that qualify for this program to total energy consumption or investments that have a positive impact on grid efficiency and reliability would greatly expand our continued efforts and drive meaningful projects. Another important change would be a cap of the Efficiency Vermont charge Omya pays each month. Currently Omya pays a higher charge than IBM/Global Foundries and runs the risk of not being able to access that money as we have exhausted the meaningful, eligible projects. A reduction in the percentage Omya pays of its energy usage is warranted. Currently that is approximately 8.6% of the electrical bill, which is more than any other Vermont business or residential customer pays. Under SMEEP with the administrative functions handled in-house we would recommend a rate of 5% or less. Both of these changes could be made by making more companies like Omya eligible for the SMEEP program. This program has a broader scope of qualified projects and also has a cap on the annual expenditure.

I appreciate your investigation of the best way to achieve a clean, energy efficient future in a cost-effective manner and we would appreciate the opportunity to discuss this with staff at the DPS or the larger Act 77 group. The Efficiency Vermont suite of efficiency services has done many great things to improve Vermont's energy landscape over the past 20 years. It's time to recognize that the law of diminishing returns is at play and that the Efficiency Vermont's services are no longer as cost effective. This is particularly true for companies like Omya that have made very significant investments, achieved great results and now need adjustments to be made to make their continued participation meaningful.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne Wilmans". The signature is fluid and cursive, with a horizontal line underlining the name.

Wayne Wilmans, Plant Manager
Omya Inc., Verpol Plant

Table 1: EEV Cash Flow Statement Summary – Omya

OMYA		Efficiency Vermont					
Customer Credit Program							
Cash Flow Statement							
	Electric Utility Billing Month	Monthly Customer EEC Payment	Cumulative Customer EEC Payment	Monthly Deposit to CC Account (89.1%)	Cumulative Customer Deposits	Cumulative Qualified Expenses	Account Balance Net of Customer Expenses
2015	Jan-15	\$96,655	\$3,523,892	\$86,119	\$3,139,788	\$2,655,321	\$484,467
2015	Feb-15	\$98,256	\$3,622,148	\$87,546	\$3,227,334	\$2,655,778	\$571,555
2015	Mar-15	\$118,897	\$3,741,045	\$105,938	\$3,333,271	\$2,685,064	\$648,207
2015	Apr-15	\$107,739	\$3,848,784	\$95,995	\$3,429,267	\$2,685,064	\$744,202
2015	May-15	\$98,546	\$3,947,331	\$87,805	\$3,517,072	\$2,685,064	\$832,007
2015	Jun-15	\$109,127	\$4,056,458	\$97,233	\$3,614,304	\$2,685,064	\$929,240
2015	Jul-15	\$108,594	\$4,165,052	\$96,758	\$3,711,062	\$2,685,064	\$1,025,997
2015	Aug-15	\$111,988	\$4,277,040	\$99,781	\$3,810,843	\$2,685,064	\$1,125,778
2015	Sep-15	\$108,443	\$4,385,483	\$96,622	\$3,907,465	\$2,760,775	\$1,146,690
2015	Oct-15	\$105,008	\$4,490,491	\$93,563	\$4,001,028	\$2,876,249	\$1,124,778
2015	Nov-15	\$103,935	\$4,594,426	\$92,606	\$4,093,633	\$2,982,161	\$1,111,472
2015	Dec-15	\$101,225	\$4,695,651	\$90,191	\$4,183,825	\$2,982,161	\$1,201,664
2016	Jan-16	\$105,366	\$4,801,017	\$93,881	\$4,277,706	\$2,982,161	\$1,295,545
2016	Feb-16	\$112,266	\$4,913,283	\$100,029	\$4,377,735	\$2,982,161	\$1,395,574
2016	Mar-16	\$115,334	\$5,028,616	\$102,762	\$4,480,497	\$2,982,161	\$1,498,336
2016	Apr-16	\$111,598	\$5,140,215	\$99,434	\$4,579,931	\$3,021,157	\$1,558,775
2016	May-16	\$115,653	\$5,255,868	\$103,047	\$4,682,979	\$3,021,157	\$1,661,822
2016	Jun-16	\$114,764	\$5,370,632	\$102,254	\$4,785,233	\$3,021,157	\$1,764,076
2016	Jul-16	\$115,105	\$5,485,736	\$102,558	\$4,887,791	\$3,021,157	\$1,866,634
2016	Aug-16	\$118,807	\$5,604,543	\$105,857	\$4,993,648	\$3,021,157	\$1,972,491
2016	Sep-16	\$117,685	\$5,722,228	\$104,857	\$5,098,506	\$3,194,881	\$1,903,625
2016	Oct-16	\$116,224	\$5,838,452	\$103,555	\$5,202,061	\$3,433,497	\$1,768,564
2016	Nov-16	\$119,331	\$5,957,784	\$106,324	\$5,308,385	\$3,492,433	\$1,815,952
2016	Dec-16	\$116,310	\$6,074,094	\$103,632	\$5,412,017	\$3,505,365	\$1,906,652
2017	Jan-17	\$119,930	\$6,194,024	\$106,858	\$5,518,875	\$3,505,365	\$2,013,510
2017	Feb-17	\$132,410	\$6,326,433	\$117,977	\$5,636,852	\$3,505,365	\$2,131,487
2017	Mar-17	\$128,764	\$6,455,198	\$114,729	\$5,751,581	\$3,505,365	\$2,246,216
2017	Apr-17	\$125,165	\$6,580,363	\$111,522	\$5,863,103	\$3,732,037	\$2,131,066
2017	May-17	\$138,140	\$6,718,503	\$123,083	\$5,986,186	\$3,732,037	\$2,254,149
2017	Jun-17	\$126,020	\$6,844,523	\$112,284	\$6,098,470	\$3,732,037	\$2,366,433
2017	Jul-17	\$131,760	\$6,976,283	\$117,398	\$6,215,869	\$3,732,037	\$2,483,831

Chart 1: History of EEV Deposits and Qualified Expenses – Omya

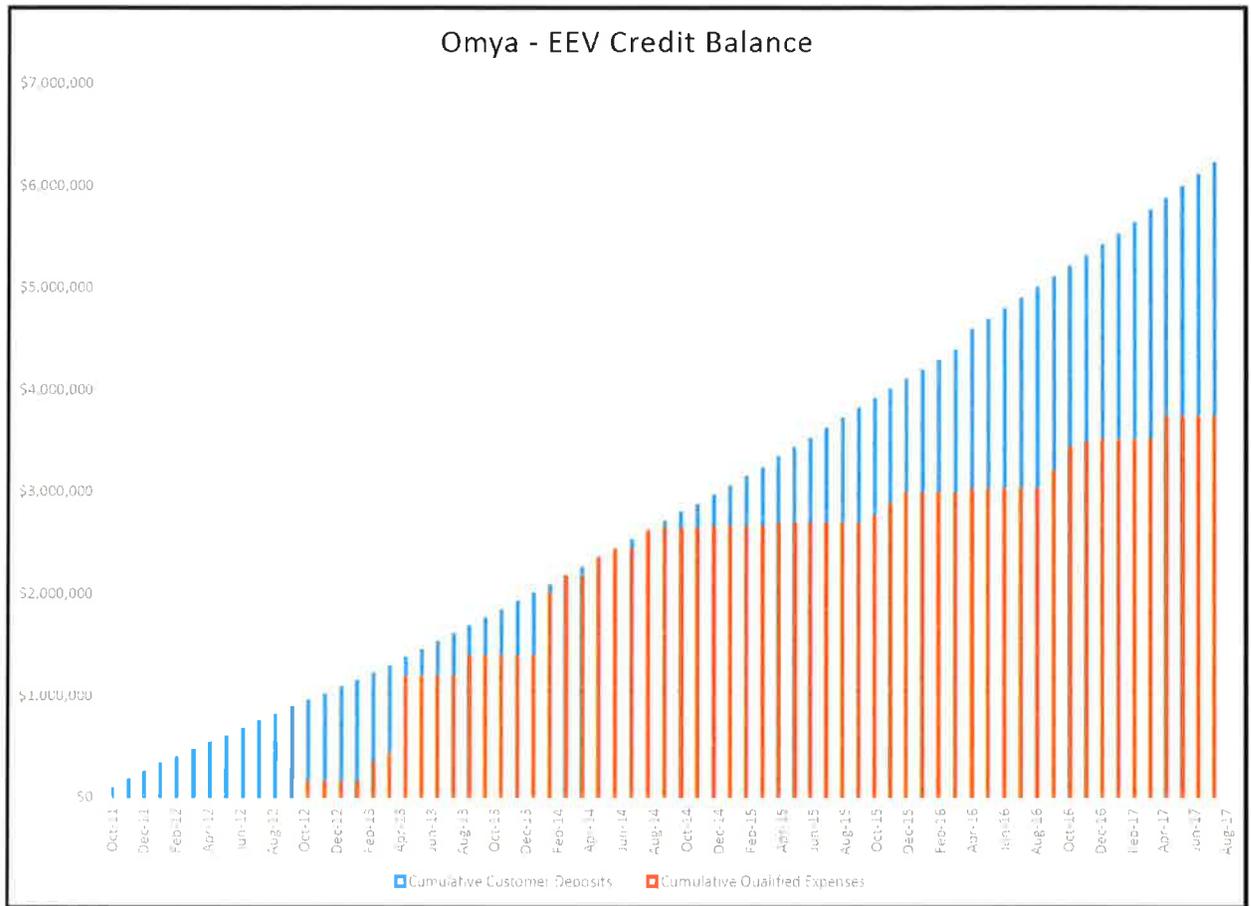


Table 2: Cost Summary for EEV Program – Omya

Projects	Description (Scope)	Year	Cost	Rebate / Refund	Net Cost to Omya
		2011			
PX Mill Screen & 1m Rotor	Installed a smaller Rotor for Efficiency and a screen to clean media	2012	\$226,650	\$144,667	\$81,983
Lighting Retrofit (Dec 2012)	Changed Incandescent and Halogen lights to LEDs	2013	\$226,037	\$194,187	\$31,850
Lighting Retrofit (Jan 2013)	Changed Incandescent and Halogen lights to LEDs	2013	\$682,602	\$553,828	\$128,774
Lighting Retrofit (Feb 2013)	Changed Incandescent and Halogen lights to LEDs	2013	\$255,951	\$197,874	\$58,077
PX Mill Screens	Increase grinding efficiency by using in-line screens to remove worn/broken media	2013	\$124,748	\$88,626	\$36,122
Dryer Back Mixer	Replace 100 HP back-mixer with 5 HP screw conveyor	2013	\$39,378	\$24,061	\$15,317
Replace Dryer Hydraulic Drives	Replace power consuming pump with regenerative braking system	2013	\$213,816	\$174,171	\$39,645
Lighting Project 2014	Changed Incandescent and Halogen lights to LEDs	2014	\$1,360,931	\$1,263,658	\$97,273
Centrifuge Discharge Pump VSD	Installed Variable speed drive to save energy	2015	\$15,271	\$14,250	\$1,021
PX Mill Rotor	Reduce power on mill by installing smaller classifier rotor	2015	\$65,018	\$21,022	\$43,996
Dryer Conveyor Retrofit	Removed inefficient system for dry product transportation and installed conveyor	2015	\$10,692	\$8,264	\$2,428
Dryer Backdrive	Replace power consuming pump with regenerative braking system	2015	\$86,005	\$75,711	\$10,294
Rank Agitator VSD's	Installed Variable speed drive to lower speed on pump when maximum flow is not needed	2015	\$51,460	\$46,758	\$4,702
PX Mill Screens	Increase grinding efficiency by using in-line screens to remove worn/broken media	2015	\$176,755	\$115,474	\$61,281
Evaporator VSD's	Installed Variable speed drive to lower speed on pump when maximum flow is not needed	2015	\$93,801	\$59,154	\$34,648
PX Mill Discharge Pump	Installed a more efficient pump with a variable speed drive to save energy	2016	\$43,365	\$38,996	\$4,369
Premium Efficiency Media 1.0-1.2	Purchased higher quality grinding media to increase grinding efficiency	2016	\$28,152	\$173,724	-\$1,680
Premium Efficiency Media 1.0-1.2	Purchased higher quality grinding media to increase grinding efficiency	2016	\$143,892		
Premium Efficiency Media - 1.8-2.0	Purchased higher quality grinding media to increase grinding efficiency	2016	\$239,788	\$238,616	\$1,172
High Efficiency Pump	Installed a more efficient pump with a variable speed drive to save energy	2016	\$65,370	\$52,350	\$13,020
Metering Project - Phase 1	Plant wide Energy Metering and Auditing - Pre-Project Engineering	2016	\$12,932	\$12,932	\$0
Premium Efficiency Media 1.0-1.2	Purchased higher quality grinding media to increase grinding efficiency	2017	\$246,701	\$226,672	\$20,029
Premium Efficiency Media - 1.8-2.0	Purchased higher quality grinding media to increase grinding efficiency	2017	\$114,030	\$114,030	\$0
Total (Up to July '17)			\$4,523,326	\$3,839,025	\$684,301