








Cape & Vineyard Electric Cooperative, Inc.
Fiscal Year 2018

FY18 ANNUAL REPORT

HIGHLIGHTS

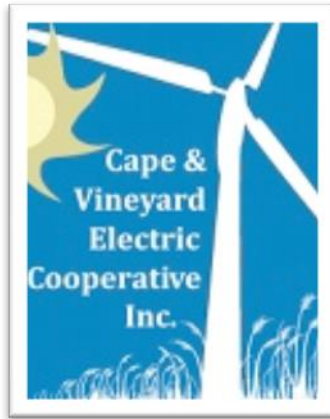
-  **Cumulative savings of over \$10M**
-  **CVEC Initiatives equaling 39.75 MW**
-  **Comparable reduction of greenhouse gases**



-  **Battery for DY High School Regional Emergency Shelter**
-  **CVEC PV Initiative Round 4**

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Cape & Vineyard Electric Cooperative, Inc.
ANNUAL REPORT FISCAL YEAR 2018
July 1, 2017 - June 30, 2018

Prepared September 2018

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I. EXECUTIVE SUMMARY

Since its organization in 2007, the Cape & Vineyard Electric Cooperative, Inc. (“CVEC” or the “Cooperative”) has worked to develop renewable energy projects in support of CVEC’s goals and objectives of developing and/or owning renewable electric generation facilities and procuring and/or selling long term electric supply or other energy-related goods or services at competitive prices to help stabilize electric rates for CVEC member communities. This Annual Report summarizes CVEC’s activities and operations in fiscal year (“FY”) 2018.

II. INTRODUCTION

A. Organizational History

CVEC was formed out of a strategic planning process commissioned and undertaken by the Cape Light Compact (“CLC”). CVEC was organized in 2007 with three members: CLC, Barnstable County, and the Town of Barnstable. Currently, CVEC has 20 members consisting of 17 towns, Barnstable and Dukes County, and the CLC. CVEC was formed under Massachusetts General Laws, c. 164, §136. This statute provides for the establishment of energy cooperatives. Section 136 cooperatives can, among other things: (1) purchase and own generation, transmission and other projects and property; (2) enter into contracts and incur liabilities; (3) borrow money, issue notes and bonds; (4) enter into private/public collaboration (contractual); (5) purchase, sell and distribute energy; and (6) sell electricity to any consumer within CVEC member communities.

CVEC’s goals and objectives include developing and/or owning renewable electric generation facilities and procuring and/or selling long term electric supply or other energy-related goods or services including renewable energy certificate contracts at competitive prices to member communities.

B. Current CVEC Members

Since its inception CVEC has grown from its three founding members (County of Barnstable, Cape Light Compact, and Town of Barnstable) to its 20 members as of June 30, 2018. The subsequent CVEC members include Dukes County, and the Towns of Bourne, Brewster, Chatham, Chilmark, Dennis, Eastham, Edgartown, Falmouth, Harwich, Oak Bluffs, Orleans, Provincetown, Sandwich, Tisbury, West Tisbury, and Yarmouth.



III. OFFICERS, BOARD OF DIRECTORS AND STAFF

Listed below are the Directors and Staff as of the end of the FY18, June 30, 2018.

Directors who joined CVEC during the course of FY18 are so noted with an asterisk (*).

- A. Officers (As of June 30, 2018)
 - Leo Cakounes, Barnstable County, President
 - Jennifer Rand, West Tisbury, Vice-President
 - Joseph Bayne, Eastham, Treasurer
 - Charles Hanson, Brewster, Clerk
- B. Board of Directors (As of June 30, 2018)
 - Austin Brandt, Cape Light Compact
 - Rob Hannemann, Chilmark
 - Lee-Gray Boze, Falmouth
 - Larry Cole, Harwich
 - Ron Collins, Orleans
 - Steve Gavin, Yarmouth
 - Greg Rounseville, Dennis
 - John Scott, Chatham
 - Kirk Metell, Tisbury
 - Richard Toole, Oak Bluffs
 - John Alley, Duke's County
 - Lydia Hamnquist, Provincetown
 - Betty Hyde-McGuire*, Sandwich
 - Vacant, Edgartown
- C. Executive Committee (As of June 30, 2018)
 - Charles McLaughlin, Barnstable
 - Leo Cakounes, Barnstable County
 - Chuck Hanson, Brewster
 - Austin Brandt, Cape Light Compact
 - Jennifer Rand, West Tisbury
- D. Finance Committee (As of June 30, 2018)
 - Charles McLaughlin, Barnstable
 - Leo Cakounes, Barnstable County
 - Joseph Bayne, Eastham, Treasurer
 - Steve Gavin, Yarmouth
- E. Staff (As of June 30, 2018)
 - Liz Argo, Manager





Figure 1. CVEC Board Meeting September 2017. Left to right. Rear row: Charles McLaughlin, Jr., Austin Brandt, Leo Cakounes, Chuck Hanson, Greg Rounseville, Joe Bayne, Steve Gavin. Front row: Lydia Hamnquist, Ron Collin, Larry Cole, and Manager, Liz Argo.

IV. FISCAL YEAR 2018 ACCOMPLISHMENTS

A. CVEC's Initial Initiative, Round 1, Round 2 and Round 3

CVEC continues to manage its portfolio of PV projects built through direct CVEC efforts. The 32 projects, made up CVEC's 2010 Initial Round portfolio of 750 kilowatts (kW) and CVEC's 2013 Round 1 and 2014 Round 2 PV Initiatives, have a capacity of 28.5 megawatts (MW). The total net metered energy value from the Initial Round (CVEC-7) and CVEC's Round 1 and 2 in FY18 was \$2,765,040. Those savings and earnings from CVEC's 28.5MW portfolio benefitted 19 governmental entities located on Cape Cod and Martha's Vineyard, including seventeen municipalities, one water district and two school districts.

In FY18 CVEC launched CVEC's PV Initiative Round 3 and, following a procurement process, CVEC awarded Alliance Clean Energy the contract for seven additional Behind-the-Meter roof projects, estimated to have a capacity of a total 1 megawatt once built. As of the FY18 Annual Report, construction of CVEC's PV Initiative Round 3 was stalled due to delays in the state's release of its newest incentive program, SMART (Solar Massachusetts Renewable Target) program, meant to replace the S-REC II (Solar Renewable Energy Certificates) incentive program.

In addition to providing renewable energy for Cape Cod and Martha's Vineyard's municipalities, CVEC further supports its communities through a unique revenue sharing mechanism developed by CVEC to allow sharing of its projects' net metered energy. For example, the CVEC Harwich Capped Landfill PV project was built to its fullest capacity

with the knowledge that total PV production would exceed Harwich's total kilowatt hour ("kWh") usage. Through the Cooperative, the Harwich Capped Landfill PV project's excess energy is allocated to off-taker participants like Barnstable County and the Town of Provincetown. In this way, Cooperative participants unable to host large renewable energy projects on their own municipal lands can lower their electric costs through the purchase of excess net metering credits from their neighbors.

The list of towns or other governmental entities participating as off-takers of CVEC's net metered energy are Barnstable County, Dukes County, Brewster, Chatham, Chilmark, Oak Bluffs, Monomoy Regional School District, Provincetown and Yarmouth.



Figure 2. Gathering at the CVEC Harwich Capped Landfill project to celebrate Round 1 & 2 projects, 10.12.14

B. CVEC's Purchase of Net Metered Power

On behalf of CVEC's pool of off-takers, in FY17, CVEC leveraged its position as an energy cooperative by contracting to purchase net metering credits from two off-Cape non-CVEC projects. The purchase included 3MW of net metered energy from an 8MW wind project known as Future Generation Wind ("FGW") located in Plymouth County.

Participation in the wind project brought the Cooperative closer to its goal of managing a diversified portfolio of distributed generation projects on behalf of its member towns.



Photo courtesy of Future Generation Wind

Figure 3. Photo of FGW wind turbines in Plymouth, MA.

In FY17 and in FY18, CVEC negotiated three additional Power Purchase Agreement (PPA) contracts with two off-Cape developers to bring added net metering credits to Cape & Vineyard governmental entities. CVEC's two contracts with Nexamp, LLC for net metering credits from its 6-megawatt solar farm located in Dartmouth, Massachusetts will allow CVEC to distribute over 3,000,000 kilowatt hours of net metering credits to CVEC's pool of offtakers as well as to three new beneficiaries; the Sandwich Water District, the Harwich Water Department, and the Upper Cape Regional Water Cooperative.



Photo courtesy of Nexamp LLC

Figure 4. Photo of anchors being installed in preparation for solar racking installation at Dartmouth Farms Solar.

CVEC's FY17 contract with Syncarpha LLC on behalf of two additional regional governmental offtakers, the Centerville, Osterville, Marson Mills Fire District and the Cotuit Fire District Water Department (COMM), allowed CVEC to distribute 3,796,088 kWh of net metering credits through FY17 and FY18, creating savings to the two Fire Districts of \$183,187.

C. Battery Storage

To further meet the CVEC mission of developing economically viable renewable electric transmission and generation solutions, CVEC continues to move forward on its battery back-up system to be located at the Dennis Yarmouth ("DY") High School Regional Emergency Shelter. The energy storage system will be installed utilizing a \$1.4 million grant awarded to CVEC in 2014 by the Massachusetts Department of Energy Resources under the Community Clean Energy Resilience Initiative ("CCERI").

CVEC, in partnership with the Clean Energy States Alliance ("CESA") and Sandia National Laboratories, has completed a Request for Proposals, with which it will solicit potential developers to, first, provide an economic analysis of their proposed battery design, and second, to bid on their proposed turn-key system. At the end of FY18 the RFP continued to be under review by the Massachusetts Department of Energy Resources.

D. CVEC Consultant Services

The Town of Dennis, a CVEC member, continues to use CVEC's net metering expertise and services to manage the distribution of the Town's net metering credits from their Dennis capped landfill PV system, a PV system not installed under CVEC management.

CVEC member, the Town of Provincetown, also continues to utilize CVEC's services to delineate benefits from their Transfer Station PV system, a system installed by CVEC to operate both Behind-the-Meter and as a net metering credit exporter.

In FY18 the Town of Sandwich contracted to utilize CVEC's administrative services to aid the Town in transaction management relative to the Sandwich four megawatt PV system not initially installed under CVEC management.

The Cooperative invites all members to discuss the utilization of CVEC's management services with CVEC staff.



E. CVEC Operational Administrative Adder

To support CVEC's operations CVEC routinely imposes a CVEC Operational Administrative Adder. The Adder is included in costs collected to pay project developers' Power Purchase Agreement (PPA) costs. The Adder ranges from \$0.015 to \$0.005 per kilowatt hour.

In one case, however, no Adder existed. Eight Round 1 PV Initiative projects went operational with no Adder imposed. In late 2014 CVEC recognized it couldn't maintain financial and operational services for all participants at the current level without an Adder also collected on the Round 1 projects. After two years of negotiations, in early 2017 CVEC reached agreement on an Adder of \$0.005 (half a penny) per kilowatt hour of production with all fifteen participants in the Round 1 projects. The income from the Round 1 Adder of just over \$100,000 eliminated a previous gap between CVEC income and expenses.

The same Round 1 Adder continued through FY18 thanks to the support from towns and participants benefitting from the Round 1 projects.

F. Eversource Rate Case Intervention

In January 2017, Eversource, the local distribution company, submitted a request for a "Rate Case" hearing to the Department of Utilities (DPU). CVEC closely followed the Eversource "Rate Case" proceedings and in FY17 CVEC's Board voted unanimously to retain legal representation and file for intervenor status in the DPU hearing.

CVEC was granted limited intervenor status by the DPU on July 17, 2017 and, with the help of its consultant, Peregrine Energy Group, a case was built that demonstrated the effects on CVEC's participants should the renewable energy incentive devaluation be allowed to go forward with the Eversource rate increases.

CVEC's efforts were successful and in December 2017 the Department of Public Utilities (DPU) ruled that rate class projects like those under CVEC management would not be subject to the Eversource proposed rate redesign, saving CVEC's project participants an approximate \$600,000 annually. While CVEC's victory is reason for celebration, the decision in CVEC's favor included a warning that Eversource could revisit a similar plan in the future that would still affect the CVEC projects. CVEC will remain vigilant and, should another attempt be made by Eversource to devalue net metering credit value, CVEC will presume to return to legal proceedings.



G. Business Activities

In business news, CVEC renewed its contract for another year of energy consultant services provided by Peregrine Energy Group of Boston, Massachusetts and another year of accounting services provided by Glivinski and Associates of South Yarmouth, Massachusetts.

H. Outreach Activities

CVEC was quite visible in FY18 with CVEC Manager, Liz Argo, appearing as a panelist at Boston's Solar Power Northeast 2018, and at the 2018 Massachusetts Sustainable Communities and Campuses Conference held in Plymouth.



Figure 6. CVEC presents a Solar Power Northeast in Boston. February 2018





Figure 7. CVEC presents at the 2018 Massachusetts Sustainable Communities and Campuses Conference in Plymouth. April 2018

Closer to home, in the spring of 2018, CVEC took the lead in orchestrating the first annual “Cape and Island Wide Energy Committees Meeting”. Forty-two energy committee members from fourteen towns assembled at the Cape Light Compact offices to network, discuss prospects, coordinate efforts and compare accomplishments.



Figure 8. First Annual All Cape & Island- Wide Energy Committees Meeting. June 2018

V. DATA REVIEW: PREVIOUS YEARS & FY18 REVIEW

A. Energy Benefits

While annual production from CVEC’s 32 PV projects continues to exceed contracted guaranteed annual outputs, FY18 production totaled 31,997,745, down from the FY17

kWh total of 34,840,192. The lower production is attributed to weather related poorer solar insolation during winter and spring of 2017/2018. For further details see Attachments A – E at the rear of the FY18 Annual Report.

In addition to the CVEC projects, in FY18 the Future Generation Wind Project, the Syncarpha Marie's Way project and the Nexamp Dartmouth 1 project brought net metering credit benefits. Participating entities receiving these benefits included fourteen CVEC members as well as the Barnstable Fire District, the Monomoy School District, the Dennis Yarmouth Regional School District ("DYRSD"), the Centerville, Osterville, Marston Mills Fire District (COMM) and the Cotuit Fire District Water Department.

At the end of FY18, total to date savings from all 32 CVEC-installed projects totaled \$10,054,023 with FY18 savings alone totaling \$2,765,040. With the addition of purchased Net Metering Credits from the above named off-Cape developments, total to date savings to CVEC participants in FY18 equaled \$10,435,979 with FY18 savings alone totaling \$3,041,153.

B. Environmental Benefits

CVEC's projects, both those CVEC has installed and those from which CVEC purchases net metering credits, deliver 34.5 MW of renewable power. The renewable energy from CVEC's PV Initiatives produces not only financial benefits but educational and environmental benefits to the 21 participating municipal and governmental hosts and off-takers. Environmental benefits from the 34.5 MW of solar energy are estimated to offset over 61 million pounds of carbon equivalent annually. A carbon offset of this size is equal to taking 5,958 cars off the road each year. It is also equal to powering 4,170 homes every year or eliminating the need for 368 tankers of gasoline!

FY18 Carbon Offsets Equal to:



Figure 9. Equivalency calculations from EPA Energy Resources Calculator

* <http://www.epa.gov/cleanenergy/energy-resources/calculator.html#results>

VI. SUMMARY

In FY18 CVEC delivered over \$3,041,153 in savings to CVEC members and participants. With the addition CVEC's work towards a battery back-up system for the DY High School Regional Emergency Shelter, CVEC is progressing steadily towards its objective of developing renewable energy and providing significant benefits and grid stabilization to the ratepayers in CVEC's communities.



Photo courtesy of Sarah Coleman and Amar Rambhadjan

Figure 10. Group Photo at Earth Day 2015 Celebration for Completion of CVEC Round 1 & 2 Initiatives held at the CVEC Barnstable Municipal Airport PV installation.



CVEC Projects in Review

Table 1. CVEC Project Benefits (using a NMC value of ~ \$0.16 or cost of electricity of \$0.185) * Equivalency calculation from EPA Energy

Initiative Project Group	Name Plate Rating for Initiative	kWh Production in FY18	kWh Production in FY17	Net Savings in FY18**	Net Savings in FY17	FY18 CO2 Offsets in Pounds *
Round 1 (8 projects)	16,205 kW (16 MW)	17,422,967	19,754,464	\$1,486,579	\$1,474,126	28,586,169
Round 2 (6 projects)	9,453 kW (9.5 MW)	11,468,827	11,810,028	\$1,016,137	\$868,686	18,817,107
Round 2 Small BTM (11 projects)	2,144 kW (2.14 MW)	2,205,137	2,346,358	\$216,834	\$215,915	3,618,007
ConEdison Solutions (7 projects)	760.67 kW (.76 MW)	900,814	929,342	\$45,490 (\$0.185**)	\$42,284 (\$0.18)	1,477,981
Future Generation Wind (4 turbines)	3,000 kW (3MW)	2,416,639	2,309,836	\$110,960	\$57,006	3,965,022
Syncarpha Marie's Way (1 project)	2,176 kW (2.18 MW)	2,472,584	1,323,505	\$134,351	\$48,837	4,056,812
Nexamp Dartmouth 1 (1 project)	717 kW (.717 MW)	499,323	N/A	\$30,802	N/A	819,248
FY18 TOTALS (34 Projects)	34.5 MW	37,386,291 kWh in FY18	38,473,533 kWh in FY17	\$3,041,153 Savings in FY18	\$2,706,854 Savings in FY17	61,295,57 Pounds
TOTALS to DATE	34.5 MW	125,214,339 kWh To Date		\$10,433,337 To Date		205,441,37 Pounds

Resources Calculator: <http://www.epa.gov/cleanenergy/energy-resources/calculator.html#results>

** (using cost of electricity for BTM or annual NMC for Virtual Metering)





Photo courtesy of Sandy Cashen

Figure 11. Station Avenue School Children pose with CVEC PV installation at DY High School Ground Mount.

VII. FISCAL YEAR 2018 FINANCIALS

A. CVEC Unaudited Preliminary Balance Sheet

ASSETS

Current Assets

Checking/Savings

10005 • TD Money Market	25.00
10001 • Century Control 7499	328,582.46
10002 • Century Checking 1992	31,228.65
10003 • TD Bank Disbursements 0974	244,180.22
10004 • CC5 Checking 6865	100.08

Total Checking/Savings 604,116.41

Accounts Receivable

11000 • Accounts Receivable	704,154.21
11100 • Accounts Rec - Pass-through	178,877.52

Total Accounts Receivable 883,031.73

Other Current Assets

12800 • Rent Deposit	1,500.00
12000 • Undeposited Funds	58,546.56
12500 • Accrued Revenue	159,222.38
12700 • Prepaid Insurance	7,546.94
12710 • Prepaid Expenses	650.02

Total Other Current Assets 227,465.90

Total Current Assets 1,714,614.04

TOTAL ASSETS 1,714,614.04

LIABILITIES & EQUITY

Liabilities

Current Liabilities

Accounts Payable

20000 • Accounts Payable	1,012,434.65
21000 • Accounts Payable - Pass through	178,877.52

Total Accounts Payable 1,191,312.17

Credit Cards

20100 • Century Bank Credit Card	349.50
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Total Credit Cards 349.50

Other Current Liabilities

21001 • Other Accd Exp & AP	140,630.04
22000 • Accrued Liabilities	1,436.88

Total Other Current Liabilities 142,066.92

Total Current Liabilities 1,333,728.59

Total Liabilities 1,333,728.59

Equity

32000 • Unrestricted Net Assets 300,841.00

Net Income 80,044.45

Total Equity 380,885.45

TOTAL LIABILITIES & EQUITY 1,714,614.04



B. CVEC Unaudited Preliminary Income Statement for FY 2018

	<u>Jul '17 - Jun 18</u>
Ordinary Income/Expense	
Income	
40000 • Project Income	3,485,688.00
44300 • Services Income	12,720.00
44450 • On Peak Hours Resources Income	18,370.30
45000 • Operational Adders	<u>293,652.24</u>
Total Income	<u>3,810,430.54</u>
Gross Profit	3,810,430.54
Expense	
63800 • Food (Board lunches, etc.)	817.86
63750 • Internet, Telephone & IT	2,964.35
64500 • One Time Non-Recurring Expenses	8,250.00
63790 • CCERI Grant Expense Acct	6,342.97
60000 • Project Expense	3,485,688.00
62790 • Payroll Expenses	86,283.35
62710 • Legal Fees	14,541.34
62700 • Audit Fees	15,400.00
62720 • Consultant Costs	73,163.75
62730 • Bank Fees	2,379.19
62744 • Filing Fees	125.00
62750 • Insurance Expense	13,988.00
62760 • Travel Expense	3,342.98
63000 • Misc. Office Operating Expenses	11,594.15
63600 • Office Rental	6,100.00
64000 • Professional Development	<u>1,390.00</u>
Total Expense	<u>3,732,370.94</u>
Net Ordinary Income	78,059.60
Other Income/Expense	
Other Income	
44500 • Interest Income	<u>2,440.85</u>
Total Other Income	2,440.85
Other Expense	
81000 • State Income Tax	<u>456.00</u>
Total Other Expense	<u>456.00</u>
Net Other Income	<u>1,984.85</u>
Net Income	<u><u>80,044.45</u></u>



CVEC INITIAL INITIATIVE (CVEC-7) PROJECTS' DETAILS

SITE	Name plate Kilowatts	Output in Kilowatt hours FY18	Commercial Operation Date	Estimated Behind the Meter Savings since 2010
Barnstable High School	131	160,342	August 23, 2010	\$ 47,362
Eddy Elementary School (Brewster)	100.98	115,760	July 16, 2010	\$ 36,239
Stony Brook Elementary School (Brewster)	100.98	123,630	July 16, 2010	\$ 37,341
Eastham Elementary School	100.8	114,059	February 27, 2010	\$ 34,632
Eastham DPW	80.4	88,587	February 25, 2010	\$ 28,544
Bourne Middle School	142.56	172,762	April 30, 2010	\$ 55,077
Harwich Elementary School	103.95	125,674	July 22, 2010	\$ 38,470
TOTAL	760.67	900,814		\$ 277,665

Table 1. Table Describing CVEC Solar PV Initial Initiative



CVEC ROUND 1 PROJECTS' DETAILS

SITE	Name plate Kilowatts	Estimated Output in Kilowatt hours (EAO)*	Commercial Operation Date	Savings FY18 (NMC \$\$ less Costs)	Savings to Date
Barnstable Landfill	4,171	4,814,040	September 15, 2014	\$417,947	\$1,313,339
Brewster Landfill	1,231	1,364,580	September 15, 2014	\$97,469	\$317,788
Chatham Landfill	1,837	1,749,600	September 29, 2014	\$145,561	\$514,297
Eastham Landfill	587	563,876	April 23, 2014	\$48,518	\$354,172
Edgartown's Nunnepog	1,442	1,459,802	June 6, 2014	\$86,611	\$476,361
Edgartown's Katama Farm	1,271	988,020	June 6, 2014	\$69,101	\$541,239
Harwich Landfill	4,492	5,265,717	August 1, 2014	\$459,819	\$1,452,777
Tisbury Landfill	1,174	1,217,332	July 29, 2014	\$161,552	\$370,052
TOTAL	16,205	17,422,967		\$1,486,579	\$5,830,136

Table 2. Table Describing CVEC Solar PV Initiative Round 1

* Estimated Annual Outputs ("EAOs") as per recent project owner calculations (not per contractual obligations).



CVEC ROUND 2 PROJECTS' DETAILS

*(BTM stands for Behind the Meter)

SITE	Name pate Kilowatts	Estimated Output in Kilowatt hours (EAO)**	Commercial Operation Date	Savings FY18 (NMC \$\$ less Costs)	Savings to Date (Estimates for BTM projects)
Barnstable Airport	5,735	6,968,400	April 3, 2015	\$631,446	\$1,553,919
Barnstable Fire District	934	1,098,478	April 21, 2015	\$95,357	\$236,164
Barnstable Senior Center (BTM)*	136	163,206	December 2, 2014	\$19,428	\$51,052
Barnstable High School (BTM)*	463	417,578	October 8, 2014	\$42,509	\$107,204
West Villages Elementary School, Barnstable (BTM)*	39	44,538	October 8, 2014	\$4,534	\$11,160
Bourne Community Center (BTM)*	37	40,732	August 30, 2014	\$4,020	\$11,948
Chatham Police Station (BTM)*	22	27,417	August 30, 2014	\$2,706	\$7,300
Chatham Town Hall Annex (BTM)*	22	28,953	August 30, 2014	\$2,858	\$8,140
DY High School Roof, Yarmouth	590	513,808	March 6, 2015	\$39,509	\$126,904
DY High School Ground, Yarmouth	690	815,444	April 14, 2015	\$64,854	\$161,279
Ezra Baker School, Dennis (BTM)*	71	68,647	August 30, 2014	\$6,775	\$18,616
M.E. Small School Ground, Yarmouth	832	991,740	February 27, 2015	\$88,508	\$233,795
Mattacheese School Roof, Yarmouth (BTM)*	209	227,225	December 16, 2014	\$21,998	\$46,236
Wixon School Ground, Dennis (BTM)*	403	458,335	December 8, 2014	\$47,380	\$131,176
Orleans Capped Landfill	554	697,104	May 15, 2015	\$57,879	\$129,650
Provincetown Transfer Station (BTM)*	152	214,667	December 15, 2014	\$25,116	\$63,495
West Tisbury Capped Landfill	708	897,661	January 5, 2015	\$78,054	\$205,548
TOTAL	11,597	13,673,933		\$1,232,971	\$2,975,344

Table 3. Table Describing CVEC Solar PV Initiative Round 2 (*BTM stands for Behind the Meter)

** Estimated Annual Outputs ("EAOs") as per recent project owner calculations, (not per contractual obligations).



PARTICIPANT REPORT FOR ALL CVEC INITIATIVES & POWER PURCHASES

(Participants are both Offtakers and Hosts)

CVEC Net Metering: FY 2018 Report

This report does not reflect additional savings thru Syncarpha and Nexamp.

Totals by Year

	kWh	Avg NMC Rate	NMC / BTM credit	Developer Cost	CVEC Admin Cost	Net Benefit
FY 2017	38,615,550	\$0.15	\$5,901,095	(\$2,971,459)	(\$188,134)	\$2,741,501
FY 2018	37,226,654	\$0.17	\$6,215,082	(\$2,905,670)	(\$280,157)	\$3,028,861

FY 2018 by Participant

Participant	kWh	NMC / BTM credit	Developer Cost	CVEC Admin Cost	Revenue Sharing	Net Benefit	
Airport	1,337,933	\$218,798	(\$83,980)	(\$13,581)	\$255,104	\$376,342	Host with Offtaker (Barnstable)
Barnstable	11,230,171	\$1,858,124	(\$768,859)	(\$86,609)	(\$255,104)	\$747,552	Host and Offtaker from Airport
Barnstable County	1,196,124	\$197,641	(\$105,837)	(\$7,153)	(\$32,911)	\$51,741	Offtaker
Barnstable Fire Dist..	393,256	\$64,121	(\$23,981)	(\$5,988)	\$30,622	\$64,775	Host with Offtakers
Bourne	213,494	\$39,496	(\$26,141)	(\$414)	\$0	\$12,942	Host
Brewster	2,386,516	\$393,203	(\$218,801)	(\$10,745)	(\$20,109)	\$143,548	Host and Offtaker
Chatham	2,167,818	\$348,940	(\$162,020)	(\$10,547)	(\$8,683)	\$167,690	Host and Offtaker
Chilmark	51,408	\$8,568	(\$4,101)	(\$379)	(\$1,748)	\$2,341	Offtaker
COMM FD	2,096,991	\$344,611	(\$209,699)	(\$20,970)	\$0	\$113,607	Offtaker
Cotuit	375,595	\$61,724	(\$37,559)	(\$3,756)	\$0	\$20,348	Offtaker
Dukes County	70,984	\$11,728	(\$5,343)	(\$478)	(\$2,954)	\$2,954	Offtaker
DYRSD	1,170,637	\$205,631	(\$81,738)	(\$17,809)	\$78,304	\$184,388	Host with Offtaker (Yarmouth)
Eastham	616,140	\$104,058	(\$56,490)	(\$1,756)	\$6,470	\$52,282	Host with Offtakers
Edgartown	1,647,265	\$270,613	(\$154,319)	(\$8,080)	\$23,749	\$131,963	Host with Offtakers
Harwich	3,252,636	\$529,625	(\$230,937)	(\$14,658)	\$87,894	\$371,925	Host with Offtakers
Monomoy Schools	1,437,969	\$242,595	(\$152,757)	(\$8,653)	(\$15,243)	\$65,942	Offtaker
Oak Bluffs	380,159	\$62,937	(\$33,822)	(\$2,333)	(\$10,033)	\$16,749	Offtaker
Orleans	697,104	\$112,081	(\$47,131)	(\$7,071)	\$0	\$57,879	Host
Provincetown	1,323,603	\$223,481	(\$113,878)	(\$8,953)	(\$26,166)	\$74,484	Host and Offtaker
Tisbury	1,068,336	\$244,069	(\$97,539)	(\$4,751)	\$9,887	\$151,665	Host with Offtakers
West Tisbury	778,362	\$125,959	(\$50,381)	(\$7,897)	\$5,187	\$72,867	Host with Offtakers
Yarmouth	3,334,153	\$547,079	(\$240,358)	(\$37,576)	(\$124,267)	\$144,878	Offtaker
Grand Total	37,226,654	\$6,215,082	(\$2,905,670)	(\$280,157)		\$3,028,861	

Participants include hosts of solar projects and oftakers of net metering credits from solar projects hosted by others.



ANNUAL COMPARISONS FOR ALL CVEC INITIATIVES & POWER PURCHASES

(Compare Net Benefits by System and Net Benefits by Participant)

Annual Comparisons

Net Benefits By System

Round	System Name	FY 2017	FY 2018
1	Barnstable Landfill 1	\$225,650	\$242,036
	Barnstable Landfill 2	\$156,955	\$175,911
	Brewster Landfill	\$97,612	\$97,469
	Chatham Landfill	\$183,613	\$145,561
	Eastham Landfill	\$43,694	\$48,518
	Harwich Landfill	\$451,160	\$459,819
	Katama Farm	\$73,385	\$69,101
	Nunnepeg Well	\$77,176	\$86,611
	Tisbury Landfill	\$189,267	\$161,552
2	Airport - Section 2	\$541,007	\$631,446
	Barnstable Fire District	\$79,598	\$95,397
	Barnstable HS	\$39,901	\$42,450
	Barnstable Senior Ctr	\$19,447	\$19,428
	Bourne Community Ctr	\$4,203	\$4,217
	Chatham Annex	\$2,173	\$2,853
	Chatham Police Station	\$2,726	\$2,702
	DY High Roof Mount	\$59,026	\$39,401
	DYHS Ground Mount	\$53,760	\$64,854
	Ezra Baker School	\$7,039	\$6,761
	Marguerite Small School	\$81,318	\$88,508
	Mattacheese School	\$21,872	\$21,950
	Orleans Landfill	\$50,524	\$57,879
	Provincetown Transfer Sta.	\$24,744	\$25,082
	West Tisbury Landfill	\$62,479	\$78,054
	West Villages School	\$3,695	\$4,527
	Wixon School	\$40,510	\$41,217
	CVEC... Barnstable HS (CVEC-7)	\$8,637	\$8,097
	Bourne MS (CVEC-7)	\$8,206	\$8,724
	Eastham DPW (CVEC-7)	\$4,193	\$4,473
	Eastham ES (CVEC-7)	\$5,075	\$5,760
	Eddy School (CVEC-7)	\$5,514	\$5,846
	Harwich ES (CVEC-7)	\$6,101	\$6,346
	Stoney Brook School (CVEC-7)	\$4,638	\$6,243
Other	First Generation Wind	\$57,768	\$110,960
	Nexamp		\$25,151
	Syncarpha	\$48,837	\$133,955
Grand Total		\$2,741,501	\$3,028,861

Net Benefits By Participant

Participant	FY 2017	FY 2018
Airport	\$322,440	\$376,342
Barnstable	\$672,852	\$747,552
Barnstable County	\$40,539	\$51,741
Barnstable Fire District	\$54,047	\$64,775
Bourne	\$12,409	\$12,942
Brewster	\$133,771	\$143,548
Chatham	\$199,212	\$167,690
Chilmark	\$1,625	\$2,341
COMM FD	\$41,418	\$113,607
Cotuit	\$7,418	\$20,348
Dukes County	\$2,739	\$2,954
DYRSD	\$194,002	\$184,388
Eastham	\$50,101	\$52,282
Edgartown	\$129,399	\$131,963
Harwich	\$364,921	\$371,925
Monomoy Schools	\$38,808	\$65,942
Oak Bluffs	\$12,359	\$16,749
Orleans	\$50,524	\$57,879
Provincetown	\$59,346	\$74,484
Tisbury	\$177,684	\$151,665
West Tisbury	\$58,327	\$72,867
Yarmouth	\$117,561	\$144,878
Grand Total	\$2,741,501	\$3,028,861

This report does not reflect additional savings thru Syncarpha and Nexamp.



