



COLLEGE & UNIVERSITY
CLEAN ENERGY INITIATIVE

REV Campus Challenge

NOISIA ENERGY VISION
REFORMING THE ENERGY

Spring 2018 Workshops

Contact us!
REVCampusChallenge@nyserda.ny.gov
www.nyserda.ny.gov/All-Programs/Programs/REV-Campus-Challenge



NEW YORK
STATE OF
OPPORTUNITY.

NYSERDA

Goals of Today's Workshop

- Discuss **available and potential future program opportunities** for REV Campus Challenge members
- Venue to **provide feedback** on programs
- Facilitate open and targeted **peer-to-peer discussion** to support near term clean energy objectives
- **Network and have fun!**

Introduce yourself!

Find someone you don't know and spend a few minutes introducing yourselves. Find out from each other (and report out to the group):

- What is your **name and role** at your institution?
- What is the **name and size** of your institution?
- What's your **favorite spot on campus** and why?
- What was your **favorite Earth Day/Week activity** at your institution?



REV Campus Challenge

Spring 2018 Update

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Reforming the Energy Vision (REV): Colleges & Universities

Governor Cuomo's REV initiative to build a cleaner, more resilient, and affordable energy system for all New Yorkers

- NYS colleges and universities are centers of clean energy innovation, **leading by example** and **training the next generation** of clean energy leaders
- The REV Campus Challenge aims to help NYS colleges and universities **reduce GHG emissions and set and achieve ambitious clean energy goals**



Defining Clean Energy

In the context of REV Campus Challenge, **clean energy** is broadly defined to include:

- **Energy efficiency**
- **Energy conservation**
- **Renewable energy**



The REV Campus Challenge Mission

REV Campus Challenge promotes clean energy efforts by recognizing and supporting C&Us in NYS that:

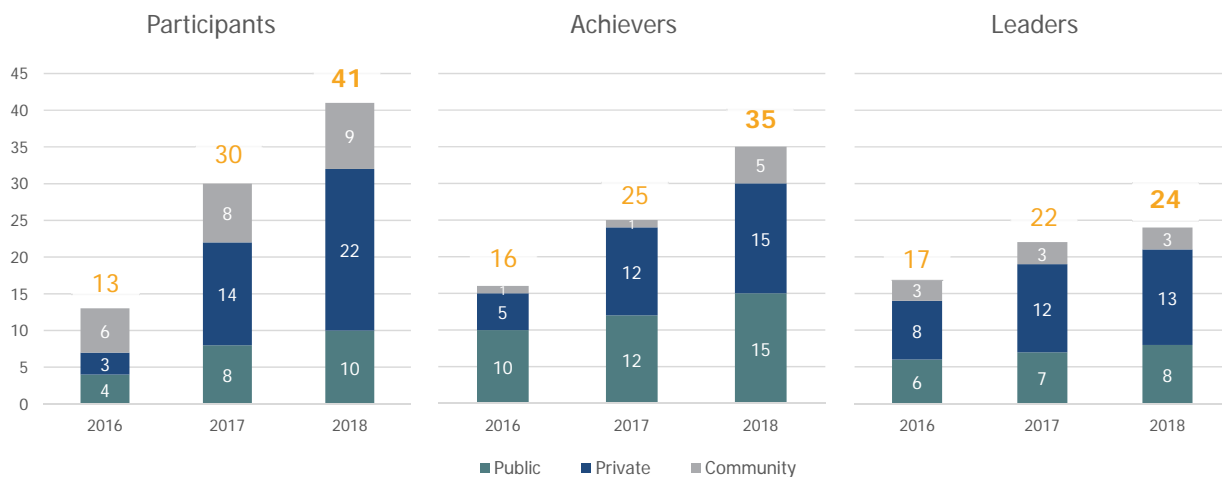
- **Invest** in clean energy and GHG reductions
- **Educate** by integrating clean energy into the curriculum and supporting cleantech R&D
- **Engage** the campus and off-campus communities to promote clean energy and sustainability

On campus, in the classroom, in the community



REV Campus Challenge Membership

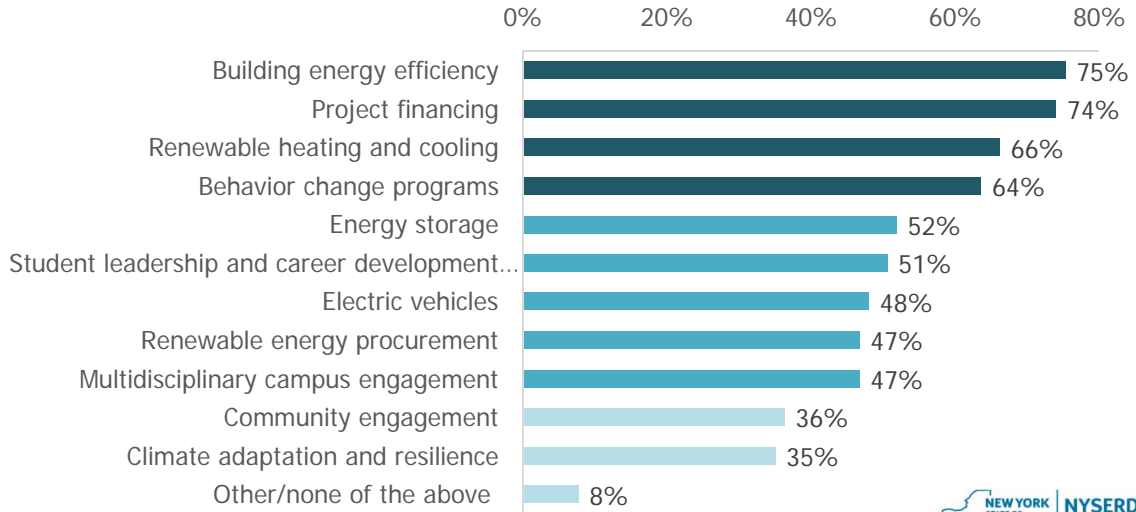
Membership has grown from 77 to 100 since last year's workshops



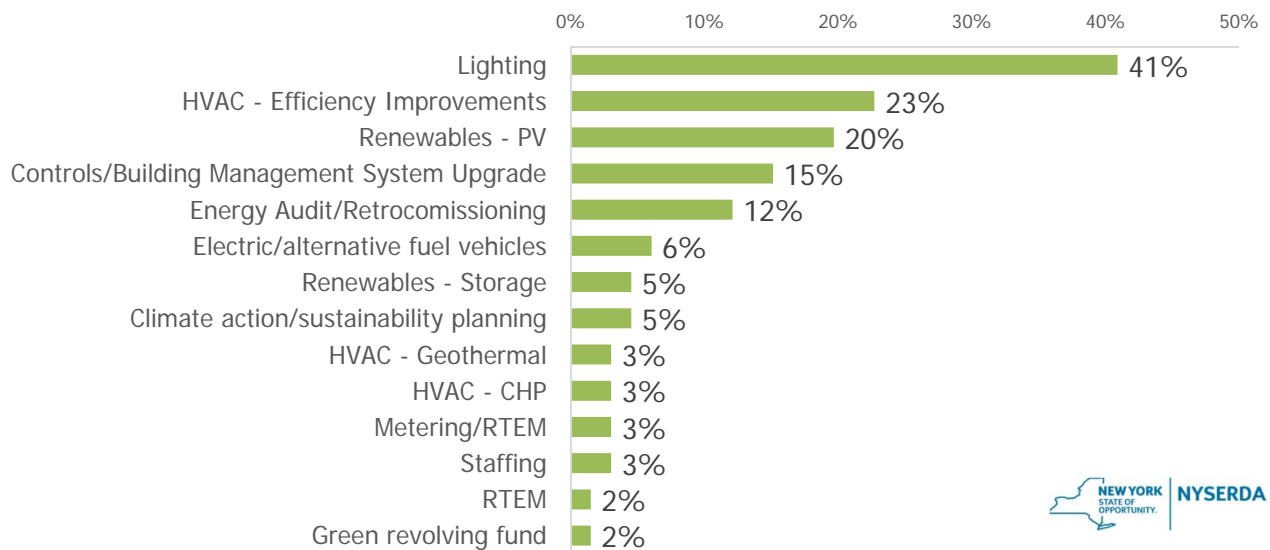
Thank you for filling out the annual survey!

- 76 of 91 members (84%!) at the time completed the survey
- A few highlights from the survey:
 - 40% of members created a new or updated climate action plan, energy master plan, and/or GHG inventory in 2016
 - 30% of members do not currently collect data on GHG emissions
 - 39% do not have dedicated staff members assigned to manage clean energy/sustainability initiatives

Which of the following topics would be of interest for further exploration in REV Campus Challenge programs and resources?



Percentage of REV Campus Challenge members reporting having completed a clean energy action in 2016



Funding opportunities and updates for REV Campus Challenge members



Open program opportunities

- Roadmaps Technical Assistance Program
- On-site Energy Manager (OsEM)
- NY-SUN
- Renewable Heat NY (RHNY)
- Combined Heat and Power (CHP)
- FlexTech
- Workforce Training – Building O&M
- Real Time Energy Management (RTEM)
- Geothermal Clean Energy Challenge
- Small Wind Turbine Program
- Clean Heating and Cooling Communities
- Ground Source Heat Pump Rebate
- Air Source Heat Pump Rebate



Ongoing program opportunities

- Roadmaps Technical Assistance Program
- On-site Energy Manager (OsEM)
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- Renewable Heat NY (RHNY)
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Unless otherwise noted, applicant must pay electric SBC to be eligible



2017 Energy to Lead Competition Recap

- Award letters out
- \$3 million competition
- Based on member feedback from first round:
 - Flexibility in award size
 - Timeline to prepare application
 - Streamlined application
 - Opportunity for feedback on project concept



2017 Energy to Lead Competition Recap

- **Feedback sessions**
 - Opportunity for teams to present and ask questions of three NYSERDA panelists to get constructive feedback on their project concepts
 - 20-minute slots at State of NY Sustainability Conference
 - Student involvement in presentation
- **Feedback** from the 10 schools that presented:
 - Students found the experience valuable and feedback provided/discussion insightful
 - Respondents found the sessions to be very useful for preparing their applications
 - Some respondents suggested adding an opportunity to submit follow-up written questions to panelists/directly to NYSERDA



Roadmaps Technical Assistance Program (PON 3438)

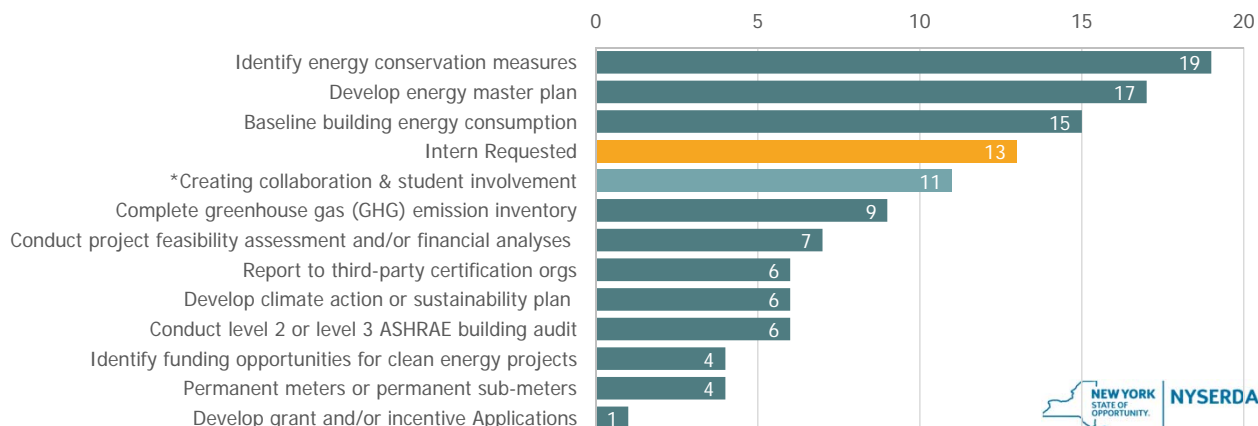
- Launched December 2016 as a **member-exclusive** program, available through December 2018
- **Direct response to feedback** from REV CC members at 2016 Spring workshops
- Assistance in evaluating existing campus energy conditions and establishing a roadmap for managing campus energy needs
- Funding support to work with a consultant of your choice
- Funding capped at \$150,000 per member
 - \$4,000 bonus to fund student intern support



Roadmaps Technical Assistance Program (PON 3438)

- What have REV CC members been doing through Roadmaps?

of applicants pursuing eligible activities



Roadmaps Technical Assistance Program (PON 3438)

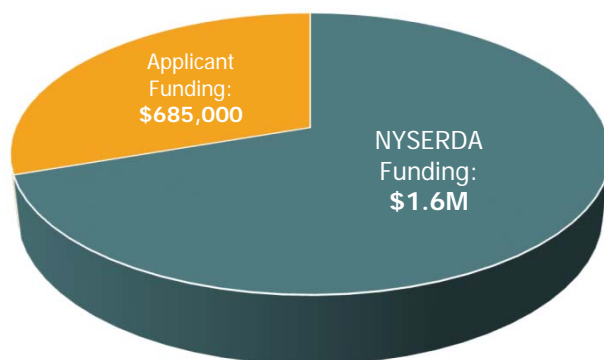
- Who has participated in Roadmaps so far?
 - ~25 applications
 - Participants, Achievers, and Leaders
 - Community colleges, public, and private institutions



Roadmaps Technical Assistance Program (PON 3438)

- What have REV CC members been doing through Roadmaps?

Total Value of Projects Supported:
\$2.2 Million



Typical project cost:
\$150,000 - \$160,000

Typical incentive:
~\$115,000

75% of project funding
provided by NYSERDA



Workforce Training – Building O&M (PON 3715)

- Goal: reduce building energy use and operations by **improving skills of workers in building O&M** across New York State
 - Applicants propose a training curriculum to improve energy management and O&M skills among buildings staff
 - Funding capped at \$400,000 per proposal and requires minimum cost-share of 50%
- 2 REV CC member applicants to date:



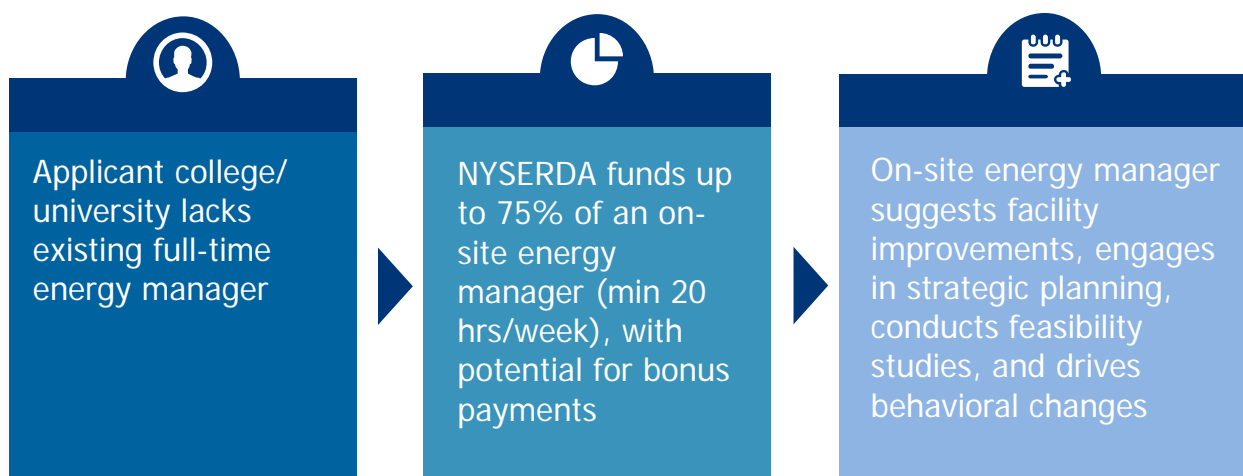
Workforce Training – Building O&M (PON 3715)

- Eligibility requirements
 - Applications accepted until **May 30, 2018** (or until funding is exhausted)
 - Proposals must involve buildings or groups of buildings with total annual energy expenditures of \$1 million or more
 - College/university can be the lead proposer (or a training provider can submit proposal)

Contact Debora Moran: debora.moran@nyserda.ny.gov | 518.862.1090 x3488



On-Site Energy Manager (OsEM – PON 3701)



On-Site Energy Manager (OsEM – PON 3701)

Previously open only to industrial facilities, opened up to commercial buildings (including colleges and universities) in late 2017

- Open enrollment solicitation through December 2019
- Applicants can opt for full or part time On-Site Energy Manager
 - ≥ 0.5 Full Time Equivalent (20 hours per week)
- Applicant cannot have an existing dedicated full time energy manager on-site
- Applicants can seek support for their On-Site Energy Manager via new hire, contracted staff, or hybrid of supplementing permanent staff with contract staff



On-Site Energy Manager (OsEM – PON 3701)

Facility Consumption (aggregated)	OsEM Cost-share* (initial 12 to 24** month term)	1 st Bonus: 12 months after initial term	2 nd Bonus: 24 months after initial term
>\$1 million annual energy spend	Up to 75%, not to exceed \$200,000	\$7,000	\$7,000
<\$1 million annual energy spend	Up to 75%, not to exceed \$100,000	\$5,000	\$5,000

Use funds for services only; not for implementation or equipment purchases

** Must include minimum 25% cost-sharing in form of cash support from customer*

*** Minimum 12 month OsEM initial term (at minimum 20 hours/week); work must be completed within 24 months of receiving NYSERDA PO unless otherwise negotiated.*



Real Time Energy Management (RTEM – PON 3689)

Continuously monitor building system data in real time

Monitoring and metering of energy at the device, equipment, and/or system-level

Pushing that data to cloud based software

Turning that data into actionable insights

Providing you with those insights



Real Time Energy Management (RTEM – PON 3689)

- Open enrollment solicitation through June 2021
- Must pay into the electric System Benefits Charge (SBC)
- Cost share up to 30% of overall RTEM project costs
- Qualified list of vendors with wide ranging capabilities and specialties
- RTEM Advisor provides tools and support to customers



Opportunities for Improvement and New Programming

More on RTEM

To date, no colleges and universities have applied for RTEM

- Are you interested?
- What's holding you back?
- What would encourage you to participate?

Bandwidth
Competing priorities
Cost/financing
Procurement

ROI
Confidence in technology
Confidence in vendors

More on Roadmaps

Lots of interest in Roadmaps from a variety of campus types

- What do you like about the **Roadmaps** program?
- How could it be **improved** to better meet your needs?
- One possibility: a follow-on phase to encourage implementation
 - What would be most valuable?



Other future REV Campus Challenge programs

- What other **programs and resources** can REV Campus Challenge **provide** that could help you address your clean energy challenges?
- What other **external programs and resources** have been helpful for achieving your clean energy goals?

On-site, NYSERDA-led charrette
to identify and overcome
institutional barriers

Workforce training to build internal
staff capacity and knowledge

On-site energy manager program
extended to higher ed

Energy to Lead 2017

Student clean energy internships





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