

JULY

2018-

JUNE

2019



NC STATE UNIVERSITY



**NC CLEAN ENERGY**  
TECHNOLOGY CENTER

**ANNUAL REPORT**



# MISSION STATEMENT

The N.C. Clean Energy Technology Center advances a sustainable energy economy by educating, demonstrating and providing support for clean energy technologies, practices, and policies.



## PROGRAM AREAS

### Renewable Energy

Clean Power &  
Industrial Efficiency

### Clean Transportation

Energy Policy & Markets

### Training



## MAJOR PROJECTS JULY 2018–JUNE 2019

Database of State Incentives for  
Renewables and Efficiency (DSIRE)

### 50 States Reports

Community Solar for the Southeast

### Clean Fuel Advanced Technology (CFAT)

CAPER Report

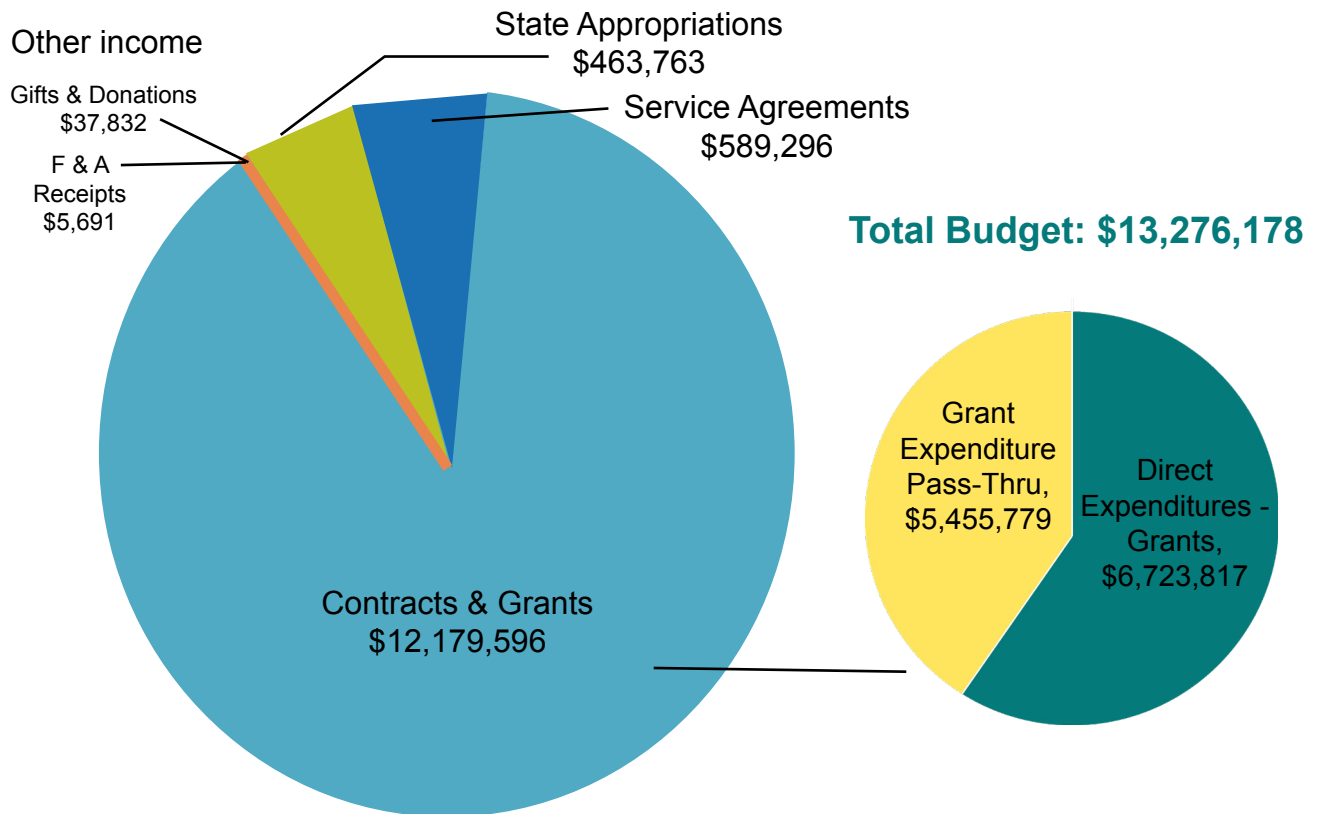
### Powering Energy Efficiency & Impacts Framework Project

North Carolina Energy Storage Study

### Solar in Your Community

Customer Rate Comparison Tool

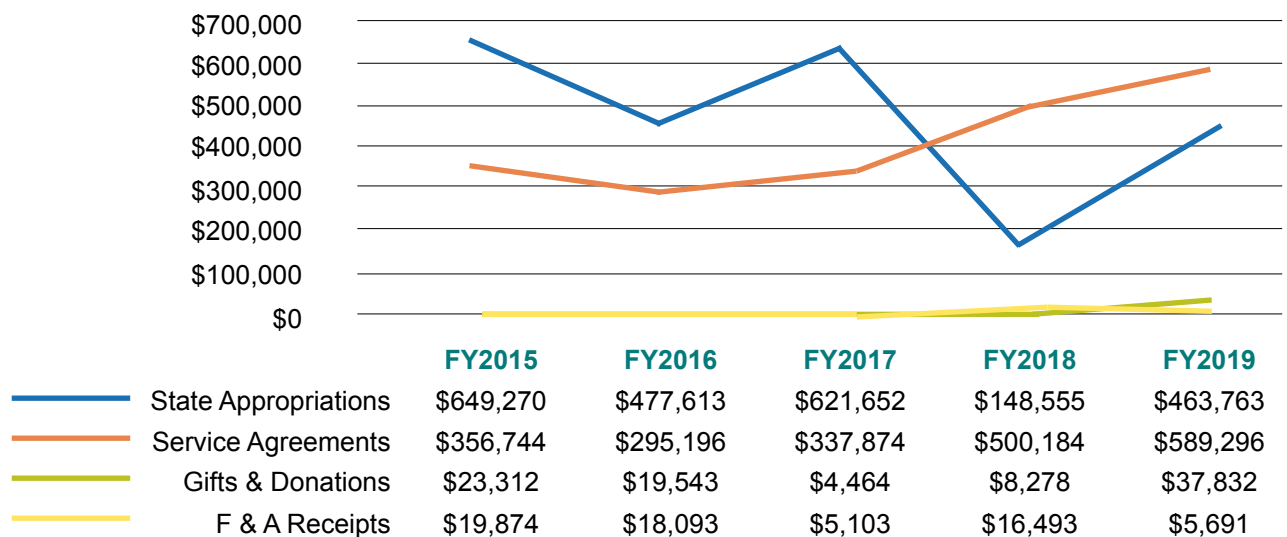




## Highlights:

- For FY2019, the NCCETC annual operating budget consists primarily of grant support from DOE and NCDOT with approximately 41% of grant funds appropriated to subrecipients to broaden the reach the Center's mission and core programs.
- State Appropriations and revenue from Service Agreements also support the Center's mission and for FY2019, 46% of these funding sources were leveraged for cost share.
- The cost share required for the \$6,723,817 in direct expenditures of grants in FY2019 was \$1,344,763. Of that amount, the Center was able to leverage \$30,728 in personnel costs with the remaining cost share coming from subrecipients and third party partners.

## FY2019 NCCETC Operating Budget – Non-Grant Sources (5-Year Trends):




- The 5-year trends of non-grant funding sources illustrate how vital grant funds are for the Center.
- State Appropriations are subject to action by the State Legislature on an annual basis leading the financial strategy of the Center to seek grant funding and engage in Service Agreement work for sustainability.
- Over the course of the last five years, Service Agreement revenues have increased 39%. This is a trend we expect to continue.

JULY  
**2018-**  
JUNE  
**2019**

BY  
THE  
NUMBERS

CELEBRATING  
**31** YEARS!

 **23**  
FACILITY  
ENERGY  
ASSESSMENTS

**4,060 kW**  
SOLAR PV IDENTIFIED

**10,820 kW**  
COMBINED HEAT &  
POWER IDENTIFIED

**\$952.3K**  
POTENTIAL ENERGY  
COST SAVINGS  
PER YEAR

  
HOURS OF  
TRAINING  
OFFERED **368**

STUDENTS  
TRAINED **115**

**18** HANDS-ON  
TRAINING  
CLASSES

**8** DIPLOMA  
GRADUATES



**20**  
AVERAGE PUBLIC  
ASSISTANCES  
GIVEN A WEEK

 **49**  
PRESENTATIONS  
& WEBINARS GIVEN

WE'RE  
TRENDING!

 **3,060**

**2,508** 

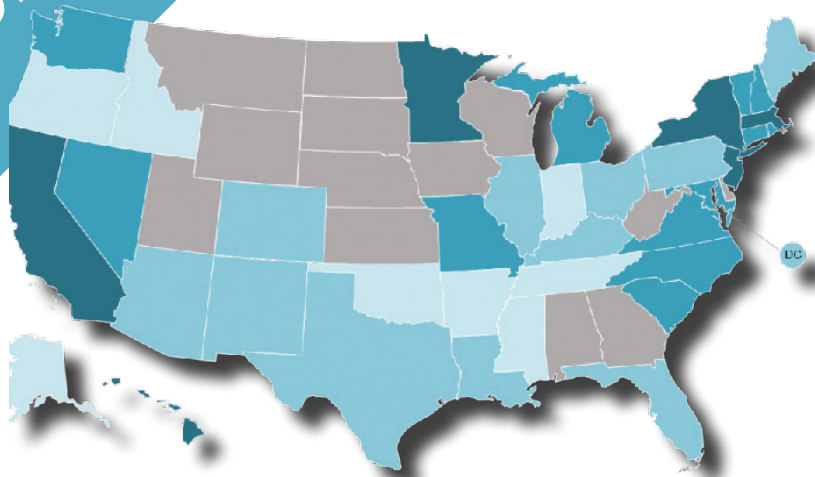
 **399**

**3,083** 

**20,000**  
NEWSLETTER  
RECIPIENTS

 **15** EVENTS &  
WORKSHOPS  
HOSTED BY THE CENTER





Launched in December 2018, DSIRE Insight is an extension of the Database of State Incentives for Renewables and Efficiency (DSIRE), offering policy and regulatory tracking, reports, and data related to solar energy, energy storage, grid modernization, and electric vehicles. DSIRE Insight research, including the 50 States report series, is intended to keep industry stakeholders informed with comprehensive and unbiased updates from our team of state policy experts.

## 2019 STATE ENERGY CONFERENCE



A record number of more than 850 energy professionals gathered in April for the 2019 State Energy Conference of North Carolina in Raleigh, NC, hosted by the NCCETC and the NC State Office of Professional Development. Attendees came from state and local government, non-profit, start-ups, academia and corporate organizations – suitable for this year's theme: "Connecting North Carolina's Diverse Energy Economy." Attendees listened to and connected with industry leaders while sharing their own ideas about North Carolina energy's present and future. Conference sessions focused on best practices and case studies about current, emerging and innovative technologies, energy policy, commercial, industrial and institutional buildings, grid modernization, residential homes, renewable energy and utilities and infrastructure. Learn more: [www.NCenergyconference.com](http://www.NCenergyconference.com).

## SOLSMART DESIGNATION PROGRAM

After a successful effort at helping Orange County and the Towns of Chapel Hill and Carrboro become SolSmart communities in 2017, Virginia was the focus in 2019. SolSmart is a national program to help local governments facilitate the adoption of solar photovoltaics (PV) and be recognized for their efforts. Assisting local governments in understanding the policy opportunities to offset their energy use with solar PV and developing related permitting processes and development ordinances was also supported.



## SUSTAINABLE FLEET TECHNOLOGY CONFERENCE & EXPO 2019



The 2019 Sustainable Fleet Technology Conference & Expo, hosted by the NCCETC, showcased the latest and greatest technologies in the biofuels, electric, natural gas and propane arenas. More than 50 speakers in a variety of backgrounds presented their ideas and practices last week in Durham, NC – highlighting the leading edge of sustainable fleet practices and alternative fuel opportunities – including fleet managers, technicians, company presidents and CEOs, university professors, researchers, analysts, nonprofit managers and more. Conference tracks included Trends in Advanced Fuels and Fueling, Integrated Fleet Technology Solutions, and Fleet Efficiency & Sustainability. The expo hall was full of more than 40 exhibitors and over a dozen vehicles. Learn more: [www.sustainablefleetexpo.com](http://www.sustainablefleetexpo.com).

## FAYETTEVILLE PUBLIC WORKS COMMISSION COMMUNITY SOLAR

NCCETC provided a community solar feasibility study to help the Fayetteville Public Works Commission (PWC) consider adopting renewable energy as part of their overall generation portfolio. Working with the civil engineering firm Dewberry, the 1 megawatt solar array was installed, along with a 500 kW 2-hour battery storage component. The PWC started producing solar energy by the end of the month and signing up customers fall of 2019. NCCETC's Community Solar for the Southeast project aims to accelerate the installation of community solar photovoltaic (PV) systems at municipal and cooperative electric utilities across the southeast.

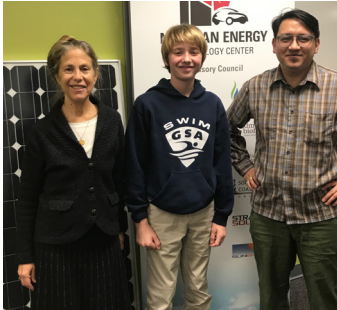


## POWERING ENERGY EFFICIENCY & IMPACTS FRAMEWORK

Powering Energy Efficiency & Impacts Framework was a two year data driven project to focus on low income households, energy use and related services in Northeastern North Carolina. The two year project sponsored by the U.S. Dept. of Energy was a groundbreaking collaborative effort of eight organizations that developed a database and mapping application to enhance energy-related decision making utilizing publicly available and private data. A comprehensive final report and media interviews provided opportunities to spread the word and inform for a second generation effort.







## GET INVOLVED

Achieving a sustainable future requires securing the work done by the Center. Become a Friend of the North Carolina Clean Energy Technology Center and support its mission of advancing clean energy for a sustainable energy economy. Individuals, private firms, and non-profit organizations are invited to support the Center (through the N.C. State Engineering Foundation) and its initiatives.

## CONTACT US

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