

EXECUTIVE SUMMARY

The Energy Efficient Schools Council and staff are pleased to send you this Annual Report for the calendar year 2020. In many respects 2020 has been a productive year for EESI. The same cannot be said of our school districts which have felt the full weight of the Covid-19 virus. The unprecedented circumstances that have dictated radical changes in our public-school system have had an incredible impact on every family, teacher, and school age child. From our perspective we see and hear about the frustration and the difficulty our educators deal with on a day-to-day basis. We listen, and then look for every opportunity to render assistance.

In June 2020, The Council initiated measures to give high priority to rural and economically distressed districts and reduced loan interest rates to 0.5%. Additionally, in partnership with the Tennessee Valley Authority (TVA), the Council approved the use of \$600,000 from its administrative funds account to provide matching grants to school district participants in the Strategic Energy Management (SEM) Program. These grants will be matched by funds from TVA, resulting in \$400,000 grants being awarded to 3 schools, based on a qualitative and quantitative analysis of need and impact. Several rural school districts are participating, and all of them are getting professional technical assistance.

Another milestone was realized in 2020 when EESI's Regional Energy Specialists were deployed. The response has been gratifying. These two contract specialists represent EESI in the field. They provide technical assistance, attend meetings with local governments, help develop loan projects, inspect work funded by EESI, and provide staff with feedback from district administrators.

Governor Lee has stressed his priority to improve school facilities in rural school districts, and to address the need to improve the indoor air quality. EESI initiated programs in these fields and gave priority in funding consideration to rural and economically distressed counties. It is hoped that some funds from round two of Covid-19 relief funding can be dedicated to these counties.

EESI appreciates the assistance provided by the Office of State and Local Finance in the Comptroller's Office and the Attorney General's Office. Their support is critical in managing the EESI Revolving Loan Funds. Our ongoing processes of managing grant and loan transactions are continuing to run smoothly. All loans are current in their payments, and we have several completed projects that are entering repayment in the next month.

This report will contain financial information that will show that the Council has been an excellent steward of the funding trusted to it since 2008. What it cannot show are the dramatic results from the EESI programs in improving the physical learning environment. In short, what we do is far more than reduce the cost of building utilities. We are helping our school children learn by improving the classroom and providing a safe and healthy learning environment.

CUMULATIVE STATISTICS SINCE INCEPTION

EESI staff reports the following highlights that represent cumulative data from 2008 through 2020:

- Through EESI's grant and revolving loan programs, \$138,670,543 has been awarded to Tennessee's public K-12 schools and saved schools in excess of \$96 million of energy costs.
- All administrative costs associated with the 3-person EESI team are covered by interest payments. Administrative costs have remained less than 3% of the total original allocation of \$90 million.
- Every dollar of the original funding (FY2008) and the state appropriation (FY2019) has gone directly to Tennessee's public school districts. 126 grants and 93 loans have been generated by this program since 2008.
- As of December 15, 2020, 93 loan originations totaled \$125,833,780.
- 21 loans have been paid in full, and there have been no defaults to date.

ENERGY EFFICIENT LOAN PROGRAM

EESI staff has produced the following loan program highlights for calendar year 2020, which includes data from January 1, 2020 - December 15, 2020. The most recent financial reports are located in the financial section below.

- EESI's application period is open year-round and projects are funded as soon as funding is available and have met the EESI technical review criteria. Since January 1, 2020, the EESI has received and approved 5 loan applications totaling \$9,569,352, which is 19% more than the previous year.
- The current EESI Loan Program uses a low-interest (0.5%) revolving loan mechanism to fund energy efficient projects in Tennessee's public K-12 schools. Loan interest payments for calendar year 2020 increased by 30% totaling \$496,466.
- Loan funds disbursed during the construction phase of projects accrue interest, which is added to the principal upon project completion. The construction period interest increases the total funds available for loans. In calendar year 2020, construction period interest increased the loan pool by \$200,071.
- Principle repayments averaged \$855,419 per month and are forecasted to increase to \$904,041 per month during FY2021.
- As of December 15, 2020, loans outstanding totaled \$63,772,459 and loan principle repayments were \$53,999,945.

STRATEGIC ENERGY MANAGEMENT

Strategic Energy Management (SEM) is a program that is funded and led by TVA with staff support provided by EESI and engineering and program management outsourced to Strategic Energy Group (SEG). SEM promotes zero or low-cost energy conservation through modification of day-to-day equipment operations as well as behavioral changes by students and staff. This report provides a chronological summary of the primary 2020 activities of the SEM program

Jan.-March 2020

- Seven (7) economically disadvantaged School Districts (Bledsoe, Fentress, Morgan, Pickett, Van Buren, Washington, and York Institute), representing 13 schools, signed SEM participation agreements
- SEM held a kick-off meeting in February and a schedule of activities was provided
- COVID-19 dramatically impacted scheduled activities and forced all meetings to be virtual
- Webinars were held on topics such as Building Opportunity Assessment (BOA), Equipment Scheduling and Use of Outside Air for all participants

April-June 2020

- On-site activities had to be replaced with Zoom meetings and participation by schools was sporadic due to overwhelming COVID related issues
- EESI staff became more involved and initiated and led the on-going process to obtain both energy use data and the completion of Information Request Forms for each participating school

July-Sept. 2020

- Building Opportunity Assessments (BOA) began to take place remotely through the use of special glasses that allowed a virtual audit to take place
- Building Automation Systems (BAS) also began to be accessed remotely and Improvement Opportunities were identified where implementation results in immediate energy savings
- Heat maps were developed which became a significant tool to identify specific energy usage issues for the school, many of which could be addressed immediately

Oct.-Dec 2020

- Energy Usage models were developed, and a baseline established for each school as the energy data was obtained and the virtual energy audits were completed
- School participation began to increase as results were shared through monthly webinars
- EESI and TVA's announcement in November of a grant program to be rolled out in early 2021 drove a significant increase in completion of specific milestones for all participants.