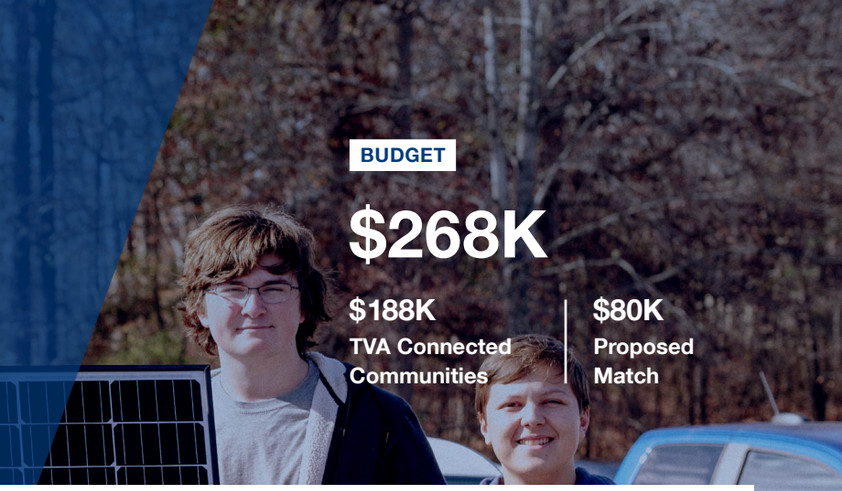
PLEASANT VIEW, TN

Economic Solutions Through Solar Innovation

The Cheatham County School District (CCSD) is installing a 50kW solar and storage system. This technology demonstration allows the school district to save in annual energy costs while enabling a community resiliency hub and providing Career and Technical Education (CTE) for students to excel in renewable energy careers.



BUDGET

$268K

$188K
TVA Connected Communities

$80K
Proposed Match

Background

Solar Possibilities

Renewable energy jobs offer substantial learning and career opportunity for today's students. Currently, the state of Tennessee is in the bottom 5% for the amount of money spent per student in schools compared to all states nationally. By investing in solar energy education, CCSD is creating more opportunities for Tennessee students to experience STEM subjects in action.

THE OPPORTUNITY

Alignment With Strategy

Demonstrating solar technology benefits the students, adds resiliency for the community as well as saves energy and reduces emissions for the school.

CCSD DATA

120K
students served over 20 years

10:1
CCSD teacher interest in incorporating solar into lesson planning

Scope

Operational Savings

are created through the solar array and battery operations.

Career Pathways

are introduced using the solar installation as a teaching tool.

Community Benefits

include a pipeline of talent, greater resiliency and decreased carbon emissions.

THE GOAL

Function and Learning

The energy generated and stored saves in energy costs, enables days of critical functions in the event of a power outage and reduces school emissions. Alignment with CTE/STEM curriculum prepares students for post-secondary job opportunities and introduces solar energy science to college-bound seniors.

QUANTITY

48hrs
backup battery

$3.5K
saved in annual energy costs

1.2K
tons CO2 avoided over its lifetime

40
students enrolled in solar CTE for Fall '22

HIRING

FOCUS AREA
Economic Empowerment

TVA TENNESSEE VALLEY AUTHORITY

Performance

Key Performance Indicators

- Financial savings
- Duration of uptime supplied battery back-up during power outages
- CTE credentials earned
- Number of graduates who complete a program of study with a solar component

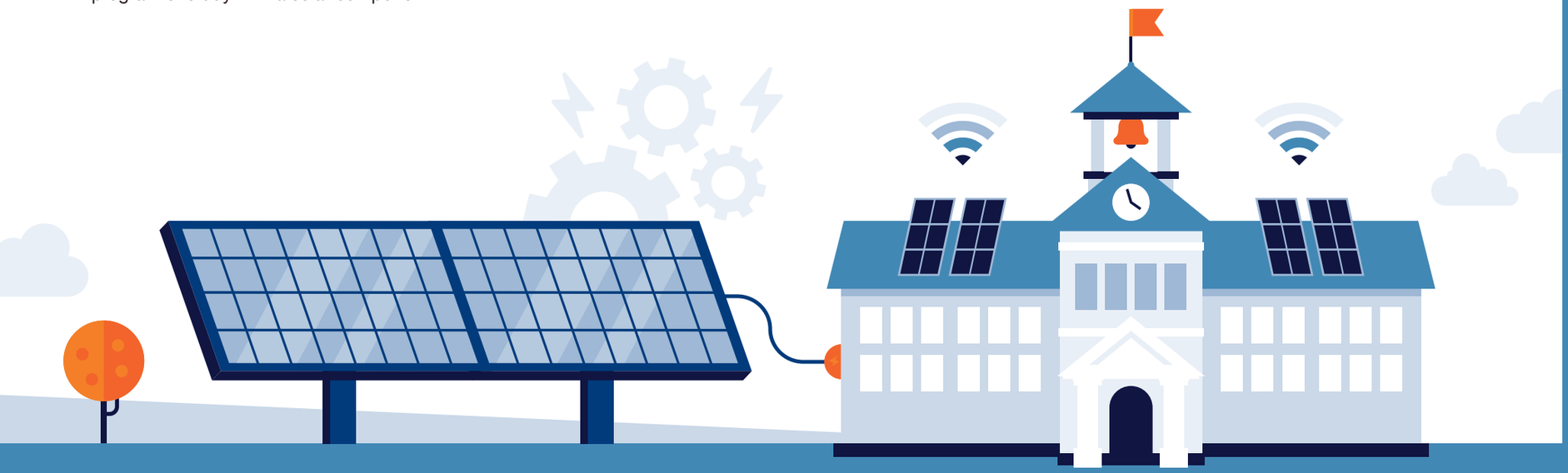
The Value

CCSD

- 20 years of energy savings
- Battery backup during power outages

CCSD Students

- Opportunities to learn about installation, maintenance and benefits of solar power



Key Partners

PROJECT LEAD

Cheatham County School District

ADDITIONAL PARTNERS

Cheatham County Economic and Community Development Board

Sycamore High School

Tennessee Valley Authority

Wilmot, Inc.

Learn more about this pilot project

Timeline

Phase 1

Conduct a career assessment and introductory solar lesson for 7th and 8th graders.

Phase 2

Conduct an interest survey of 7th through 10th graders about participation in a solar program at the high school level.

Phase 3

Identify curricular components in existing CCSD CTE programs of study.

Phase 4

Begin highlighting and implementing embedded solar modules in high school CTE programs of study and middle school science.

Phase 5

Prepare and submit a proposal to the Tennessee Department of Education for a Special CTE program of study with a Solar Energy focus.

Phase 6

Begin the process of establishing new CTE Solar program of study, recruiting students and scheduling classes.

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