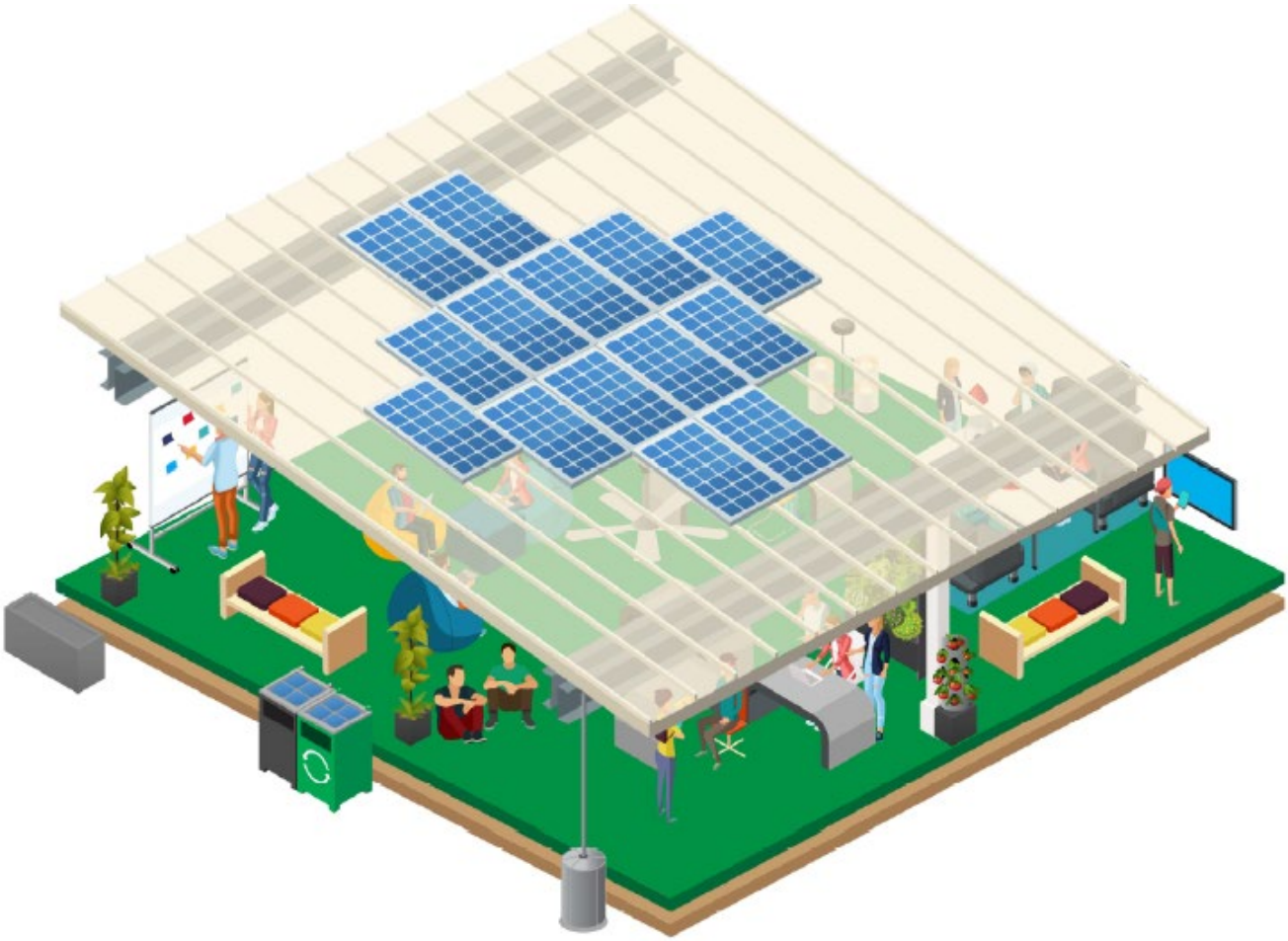
Solar Innovation: Powering Our Educational Future

Driven by the district's commitment to community-focused innovation and financial stewardship, the district's solar infrastructure leverages the 40% Federal Investment Tax Credit and substantial utility savings to create a transformative solution: **sustainable, multi-functional solar installations that double as practical campus improvements—including shaded playground areas, covered walkways, carport parking, and innovative learning spaces—while generating ongoing revenue to fund critical educational programs and enhance the overall school environment.**



$52M of M&O Budget Benefit

$36M of utility savings

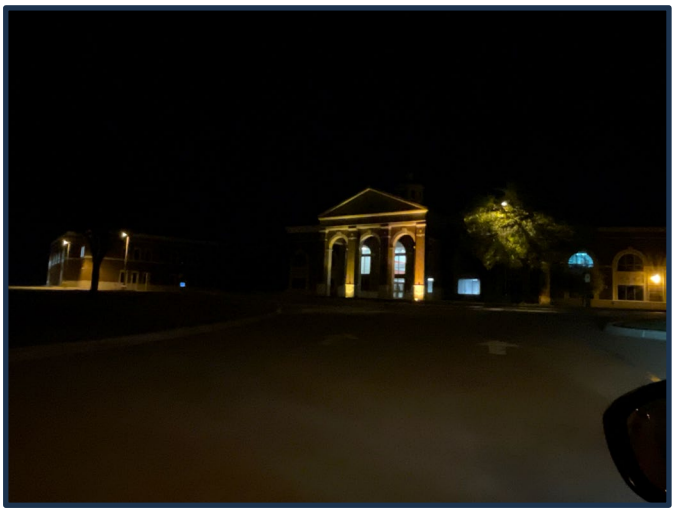
$16M of Federal Reimbursement

While these projections represent a conservative estimate over 25 years, current market indicators suggest potential for even greater financial benefits. The district's investment is structured to provide substantial value even under current variable conditions, with promising opportunities for increased savings as energy markets evolve (i.e. trends in increasing utility rates and longer solar solution performance).

Proactive Maintenance: Investing in Our Districts Future

Our district is taking a comprehensive approach to enhancing the quality of the environment in our district's facilities by addressing three critical areas: campus safety, energy efficiency, and mechanical systems. Strategic investments in LED lighting retrofits, safety lighting, and HVAC upgrades will create a more comfortable and sustainable learning environment, improving occupant visibility, energy performance, and overall facility operations for students and staff.

Prioritizing safety with recent improvements at the High School



Before

After

Key Maintenance Initiatives:

- **Safety and Security Lighting:** District-wide lighting upgrades will enhance campus security, improve visibility, and create safer environments for students, staff, and community members during evening hours and events. Additionally, interior LED lighting retrofits at Lykins Elementary and the High School will transform classroom and common spaces, while reducing energy consumption by up to 60%

- **HVAC Modernization:** Targeted replacements of HVAC equipment at Odell Elementary and the Celina High School will improve energy efficiency, student and staff comfort, and reduce ongoing maintenance costs. These upgrades represent a proactive investment in our educational facilities' infrastructure.

- **Operational Budget Optimization:** By implementing these strategic maintenance initiatives, the district transforms capital investments into ongoing operational efficiencies. This approach allows for continuous improvement of our educational facilities while maintaining fiscal responsibility.

~$4M of Utility and M&O Savings

Price Breakdown

TECHNOLOGY, SAFETY AND RENNOVATION

HVAC

$7.7M

New Equipment at the High School, O'Dell ES and the District Admin

Includes Building Automation Controls

Lighting

$1.1M

Security Lighting District Wide

Interior Lighting at the High School

Interior Lighting at Lykins ES

Solar

$40.9M

Solar Infrastructure District Wide, including outdoor learning environments, playground covers, awnings, car ports and other array styles.

Additional

$2.15M

Water Conservation Efforts District Wide

Gym Renovation at Admin Building for Additional offices

$51.85M of Investment --> $56M of M&O Benefit

Benefit Breakdown

COMMUNITY, INNOVATION, STEWARDSHIP

HVAC

$2.5M

Lower operational costs, improved indoor air quality, enhanced student comfort, and reduced energy consumption.

Lighting

$1.5M

Decreased operational costs, lower utility bills, and increased security for student safety.

Solar

$36M

Reduced utility costs, improved educational environments, and an innovation approach to create efficiency back to the M&O budget*

ITC

$16M

40% Federal Reimbursement for the solar project after installation (ITC: Investment Tax Credit)

$4M

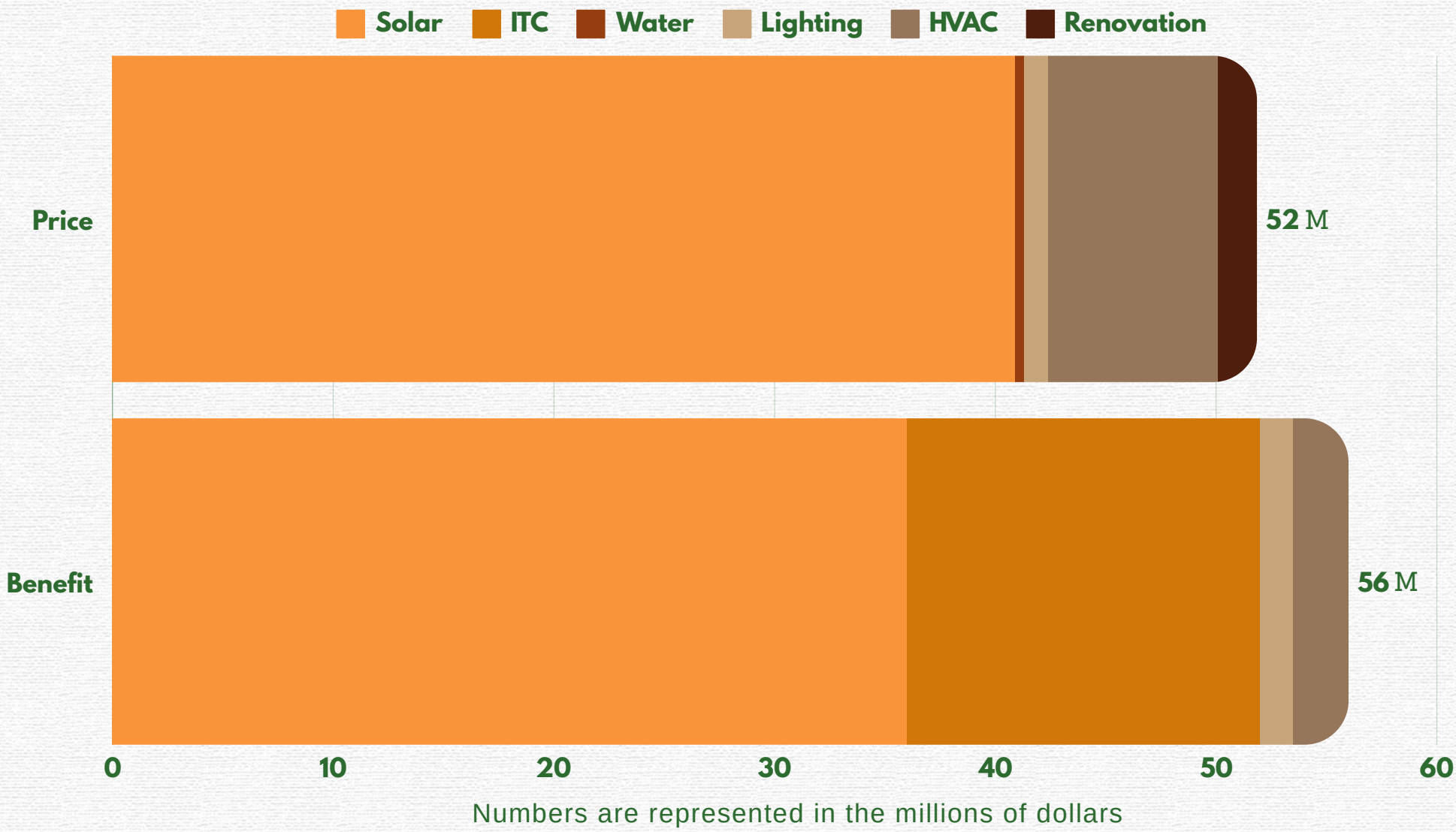
$52M

$56M of M&O Benefit

*Based on current solar projections, variable wholesale rates are estimated between $0.05 and $0.07 per kWh, leading to potential benefit between $26M and $36M. Further negotiations with the utility company could increase this to over $51M.

Price and Benefit

CELINA ISD 2025 BOND



Numbers are represented in the millions of dollars

Longview Independent School District

Achieved Objectives

Reduce utility costs across the district

Utilize bond funds to generate a revenue stream

Offset future utility and operational cost escalations

"This project not only offers a means to offset future cost escalations but also plays a pivotal role in ensuring the overall success of the 2024 bond projects."

Dr. Wayne Guidry
Assistant Superintendent of Finance

Financial Impact

$451,000 in annual savings

Additional estimated $6M in Investment Tax Credit Reimbursement

$18.6M in **lifecycle savings** over the next 25 years

This $12.7M solar PV project is expected to generate over $24.7M in financial benefit to the district.

A Trusted Partner in Texas School Districts

Life Is On Schneider Electric

School District Advances Net-Zero Energy Initiative With Onsite Solar

Richland County School District One, South Carolina

Richland County School District One (Richland One) in Columbia, South Carolina, is implementing a new project to accelerate their goal of achieving Net-Zero energy consumption. The project will maximize the impact of energy upgrades due to be completed in 2022 by adding solar arrays on the roofs of 15 district campuses. The two phases of work will reduce the district's energy bill by nearly 73 percent cumulatively, guaranteeing Richland One nearly $57 million in energy savings over the next 20 years. The new solar panels will more than fund themselves over their lifecycle and create a strong financial cash flow.

Through an innovative Net Metering program, the district is turning their new solar arrays into an opportunity to generate renewable energy at each campus. In addition to reducing its operational costs through renewable energy, the district will receive financial credits from its local utility, Dominion Energy, for any excess power that has been generated but not consumed, and at the same rate they would have paid to purchase it.

The addition of these solar arrays is the next step in a district-wide comprehensive infrastructure modernization project started in 2020, in order to tackle deferred maintenance and upgrades to HVAC to improve air quality. Energy and operational savings from this initial phase of work plus additional revenue from the renewable energy generation will help fund improvements across Richland One campuses, placing the district in a position to be less reliant on funding from taxpayers to upkeep schools.

With this ambitious energy infrastructure project came an opportunity to integrate new STEM curriculum for the district. Lessons about energy generation, conservation, carbon impact and sustainability will be taught in hands-on learning labs featuring the new equipment on each campus.

With this project, Richland One won the Association of South Carolina Energy Managers (ASCEM) 2021 Energy Project of the Year and Energy Manager of the Year, awarded to the district's Miles Hanley. The Energy Project of the Year award is presented to a district that has taken great strides to "improve their energy management system at their facilities by implementing measures to save energy," as well as, "the innovative use of energy-saving technologies, which improve energy efficiency and save energy dollars."

Solar Investment Tax Credit

Direct Pay Option for Public Entities

What is the Solar Investment Tax Credit?

Established in 2005, the Solar Investment Tax Credit (ITC) is one of the most important federal policy mechanisms to support the growth of solar energy in the United States. The credit amounts to 30% of project eligible costs, with additional "adder" benefits available for meeting domestic content requirements, building in an "energy community" or in a low-income area.

The Inflation Reduction Act (the "IRA"), which became law on August 16, 2022, included key provisions including extending the Solar ITC through 2033 and adding a "Direct Pay" provision for tax-exempt entities.

What is Direct Pay, and How Does it Help?

One of the most innovative features of the energy tax credit provisions of the IRA is a provision that allows tax-exempt organizations to receive a cash payment of the tax credit directly from the federal government.

Historically, tax-exempt entities have not been able to benefit from tax credits, because tax-exempt entities generally do not have any tax liabilities against which a tax credit can be used as an offset. The IRA changed this situation by allowing certain tax-exempt entities (referred to as "Applicable Entities") to elect to receive a cash payment of certain energy tax credits, including the Solar ITC directly from the federal government.

In order to make a direct pay election, an Applicable Entity must:

- Obtain a pre-filing registration number (described under "New Tax Credit Registration System" below).
- Make the direct pay election on an original tax return (i.e., not on an amended tax return)
- Complete any relevant source credit forms and IRS Form 3800, General Business Credit
- Provide certain supporting information and calculations.

The direct-pay election must generally be made no later than the due date (including any extension of time) that would apply if the entity were required to file an annual federal income tax return under the rules for tax returns of tax-exempt organizations (generally, the 15th day of the fifth month after the end of the tax-exempt organization's taxable year). The proposed regulations provide that there is no 9100 late filing relief for a late direct pay election.

Tax Credit Registration System

Under Proposed Regulations, Applicable Entities that intend to make a direct pay election must register with the IRS on a new online portal that will provide a special registration number that must be included on the tax return for the year for which the taxpayer is making the election. A taxpayer must obtain a separate registration number for each project for which the taxpayer intends to monetize a tax credit.

What Does the Process Look Like?

Identify and Pursue Project SOW

Identify solar SOW that is right for your project. Project costs will need to be paid for up-front.

Pre-Filing Registration

Tax-exempt entities will need to pre-apply to "earmark" funding for a project with the IRS through their designated pre-registration system. Our team can help you with this process.

3rd Party Verification

Our tax partner can provide a 3rd party verification called a "Cost Segregation Study" to properly substantiate any tax credit on the tax return.

File Tax Return

Tax-exempt entities will file a tax return using IRS form 990 by tax filing due date of November 15th (for June 30 fiscal YE). Our tax partner can provide any support.

IRS Evaluation and Award

Essentially, the IRS will treat these tax credits as an overpayment of taxes, and it will refund the overpayment to you. Guidance is still to come on when Direct Payments will be paid, but early impression is within 90-120 days after filing.

What We Still Don't Know

Treasury stated more guidance will be provided after Q&A period ends in August and pre-registration system launched "late 2023," so there is still more to come around this program.

- Current thinking is that each individual site or facility is a separate energy property ("project") - not per contract. If the "project" is over 1MW, prevailing wage and apprenticeship requirements must be met to obtain the 30% base credit.
- The amount of the ITC may be reduced by up to 15% if tax exempt bonds/financing are used to finance the solar project.
- No word on when direct payments will be paid, but current thinking is 90-120 days following filing.
- Specific details on 10% bonus items:
    - Energy Communities: Although there remain some open questions, recent guidance resolves many issues regarding qualification for Energy Community bonus credits
    - Low-Income Communities: must be applied for but this adder can be 10-20% depending on the location
    - Domestic Content: If cells are sourced outside the U.S., can be particularly challenging to qualify.