CERINI & ASSOCIATES, LLP | CERTIFIED PUBLIC ACCOUNTANTS
*PRESENTS*

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## BRINGING A UNIQUE UNDERSTANDING OF KEY ISSUES FACING CONTRACTORS

# FROM THE EDITOR - JOSEPH SCIACCA, CPA


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CERINI & ASSOCIATES LLP
CERTIFIED PUBLIC ACCOUNTANTS

Hello my friends, and welcome to the Summer 2023 edition of the Blueprint, our Firm newsletter focused on the construction industry.

As you know, there are a significant level of issues facing the construction industry. Some of the biggest issues we are seeing are:

- Due to inflation, the cost of materials continues to rise. Unfortunately, a bill that would have provided some relief in this area made its way to Governor Hochul's desk earlier this year but was vetoed. We are hoping that this won't lose momentum and a new relief bill will find its way through the State legislature before the end of the year.
- During fiscal 2022, the Federal government passed the $1.2 trillion Infrastructure Investment and Jobs Act. Pursuant to this Act, the Federal government will increase spending on infrastructure by about $550 billion over the next decade. This money is starting to find its way down to the State and City, with a lot of IIJA funding supporting infrastructure projects in the region. This is expected considering the State's overall infrastructure grade of a C received last summer from the New York Chapter of the American Society of Civil Engineers. As part of the Act, the federal government is incentivizing local governments to revise their building codes to reduce carbon in their building materials and methods. Those incentives also come with equity mandates.
- Supply chains appear to be stabilizing in such areas as steel, concrete, and drywall, electrical items (*such as generators*) and mechanical items continued to slow. The crunch has ramped up pressure on designers and architects to work faster and commit to certain material and suppliers earlier in the process than they normally would.
- Interest rates have been rising during 2022, and with inflation still higher than the federal outlook, they may continue to rise through the end of the year. Couple that with tightening credit conditions and money has become expensive. This means that contractors who don't have adequate cash reserves, are not billing and collecting on a timely basis, or have not built appropriate profit margin into their pricing structure are going to see shrinking profits as borrowing to fund projects will cost more.
- Attracting and retaining labor continues to be an issue, though there has been significant growth in construction labor since the beginning of the year as we have seen growth in wages in the field.

There are challenges and opportunities out there. Like in any industry, information is super important to decision making. Having timely, accurate information regarding costs, time frames, resource availability and more, could be the difference between a profitable year and one full of red ink.

As always, we are here for you … *please stay connected!*

## *ARE AI AND OTHER TECHNOLOGIES THE KEY TO FILLING*

# THE LABOR GAP IN CONSTRUCTION?

Every year, as summer comes to an end, there are a few things that I look forward to, the changing color of the leaves, the return of football season, and the start of a new network television season. This year SAG-AFTRA and the WGA unions are on strike with no end in sight. One of the biggest points of contention in this battle is the use of AI in place of actors and writers who fear that their jobs will be eliminated in the future. The construction industry is no stranger to union labor but unlike Hollywood, it is experiencing labor shortages. If done correctly, *could embracing new technologies like AI be the key to solving this labor shortage?*

The first thing to look at is how we got here and what is causing this labor shortage in the first place. It is no surprise that the pandemic played a role. Outside of the medical field, most industries found themselves with a surplus of workers on the unemployment lines during the pandemic. With mandated government shutdowns over health concerns, employers had no choice but to lay off labor to cut costs to survive. Another side effect of the pandemic on labor is what we now know as the *"Great Resignation."* With no job to go to and endless amounts of time to sit at home and think about the future and what they wanted out of life, many people decided it wasn't the job they were already doing. Additionally, across all industries, there is a generational shift in what employees expect from their employers. The cost of living is rising, people are getting married older, starting families later, and we live in a world where every day you are barraged on social media by people living *"their best lives."* Gone are the days when working as much or more than your boss is a badge of honor. In construction specifically, you have the added hurdle of the physical demands of the job and the toll it takes on the body which doesn't appeal to the younger generation.

One of these things would be difficult enough but trying to overcome them all at the same time is a different kind of challenge. All the solutions take time, while the side effects continue to plague the industry. The first is classic supply and demand, which means labor costs are increasing as the supply of labor is low. There are also increased demands for labor because of the increase in jobs which leads to project delays. Client satisfaction is struggling because of the delays and sometimes the labor solution is inexperienced labor which leads to a decrease in quality workmanship. Embracing technological advances won't fix everything but here are the things it can help with.

### EMBRACING SOFTWARE OVER SPREADSHEETS:

This one is straightforward; better project management will increase overall job efficiency and lead to cost savings as well as more accurate financial information. There are also mobile apps that help monitor job progress, keep track of inventory, view blueprints, and generate reports needed to evaluate the jobs.

### DATA COLLECTION APPS:

The ubiquity of apps in construction signifies a significant shift. The portability of tablets and smartphones enhances communication and remote work. Data collection apps, in particular, facilitate the rapid and accurate collection of high-quality job site data. Integrating these apps into workflows yields substantial time savings, reduced data entry errors, and streamlined reporting. Automation simplifies workflows, ensuring seamless task completion and sign-offs. Furthermore, data collection apps enhance safety compliance and empower instant reporting, enabling everything from equipment inspections to comprehensive safety analyses.



### OFFSITE CONSTRUCTION:

A not exactly new concept, offsite construction is gaining some traction. Utilizing the modular option means building small rooms like bathrooms completely offsite and then transporting them to the construction site and inserting them into the framework. This concept works best when the project has floorplans with repetitive designs and layouts which could range from hospitals and schools to fast food chains and hotels. The overall benefit is that the construction schedule becomes condensed making the time you need your labor force to go down as well.

### ROBOTICS AND AI:

Robotics are another option if you have simple, repetitive tasks. Not only can bricklaying robots work faster than human workers, but they also don't have to experience the physical tax of lifting bricks and bending over to set them. The other benefit of robots is that unlike the issues plaguing other industries, they aren't designed to replace the human component of the job. Workers are still required to set up the robot, start the machine and check their work afterward but the number of workers is reduced. AI is being used similarly to improve the employee experience. Not only can it identify the ideal time for tasks to be completed and increase scheduling efficiency, but it is being used to help make the construction industry less dangerous.

### AUGMENTED REALITY (AR) AND VIRTUAL REALITY (VR):

These immersive technologies revolutionize construction training and processes. Augmented Reality provides on-site guidance, overlaying digital information onto the real world, facilitating precise work, and reducing errors. Virtual Reality creates simulated environments for training, enabling workers to practice tasks in a safe, controlled setting. Additionally, both AR and VR enhance design reviews by allowing stakeholders to visualize and make informed decisions about construction projects before physical work begins.

### DRONES:

Drones are reshaping the construction landscape with their versatility. They perform accurate site surveys, capturing detailed topographical data that aids in precise project planning. Drones also track construction progress, enabling real-time monitoring of project milestones. In challenging or hazardous areas, drones inspect structures without risking worker safety. They offer an unprecedented aerial perspective, facilitating better decision-making and streamlined project management.

### 3D PRINTING:

While still maturing, 3D printing is poised to transform construction. By fabricating intricate components and even entire structures with precision and efficiency, it has the potential to reduce reliance on labor-intensive processes. This technology enables rapid prototyping, customized construction elements, and cost-effective production. The ability to create complex geometries and optimize material usage holds promise for revolutionizing traditional construction methodologies.

### 3D LASER SCANNER:

A game-changer in construction, the 3D laser scanner captures real-world objects with unparalleled precision. This technology revolutionizes site surveying, enabling high-accuracy measurements for layout and design validation. It facilitates project inspection by offering a comprehensive digital replica of the construction site, aiding in quality control and issue detection. By enhancing accuracy and efficiency, the 3D laser scanner empowers construction professionals to streamline processes and minimize rework.

### 4D SIMULATION:

4D simulations introduce time as a dimension, revolutionizing project planning and execution. They create dynamic visualizations that showcase the construction process from start to finish, accounting for the passage of time. These simulations allow stakeholders to identify potential clashes, optimize resource allocation, and predict project timelines accurately. By offering a holistic view, 4D simulations enable better decision-making, reducing uncertainties and enhancing overall project efficiency.

Technology, like anything else, comes with its benefits and faults. The construction industry is no different from any other in that regard, and while I might not see new episodes of my favorite TV shows anytime soon, companies that embrace this technology may be able to alleviate the labor gap.

**KIMBERLY MARTINEZ**
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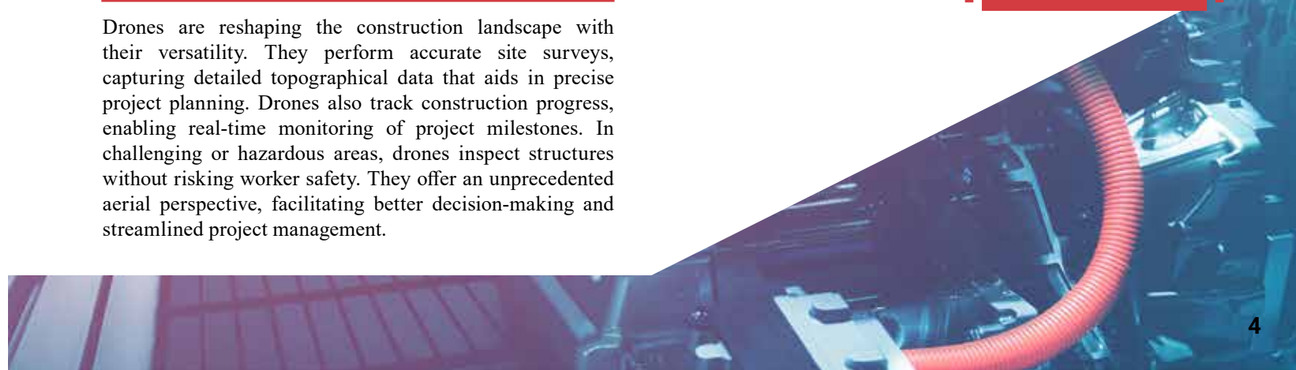


# CURRENT EXPECTED CREDIT LOSS

*Is anyone else tired of the accounting regulations constantly changing?* In the past few years, construction companies have had to deal with an overhaul of revenue recognition rules, *"clarifying"* (*confusing*) defined benefit plan pronouncements, enhanced disclosure requirements for many items, and significant new ways to account for operating leases. Of course there were some minor updates as well that had less far-reaching impacts. And now here comes CECL. CECL stands for Current Expected Credit Loss, which is an accounting standard introduced by the **Financial Accounting Standards Board (FASB)** in the United States. CECL was implemented to provide guidance on how companies should estimate and report credit losses on financial assets. CECL is effective for most entities for years beginning after December 15, 2022, which, for most of you, means calendar 2023 or fiscal 2024.

The main objective of CECL is to require earlier recognition of credit losses, especially impactful for (*but not limited to*) loans and other financial instruments held by companies. It moves away from the previous standard, known as the incurred loss model, which recognized losses only when they were probable or had already occurred. CECL, on the other hand, requires entities to recognize expected credit losses over the entire life of a financial asset, even if the losses have not yet materialized.

Under the CECL model, companies are expected to consider historical information, current market conditions, and reasonable and supportable forecasts when estimating credit losses. They must also take into account relevant qualitative factors, such as creditworthiness, financial health, and macroeconomic factors that could affect the collectability of the assets.

CECL primarily applies to financial institutions and is not specifically designed for construction companies. However, construction companies that hold financial assets, such as trade receivables, investments, or loans, may be indirectly affected by CECL in a few ways:

## INVESTMENTS:

Construction companies often have investment portfolios that may include debt securities, equities, or other financial instruments. If these investments are subject to CECL reporting requirements, the organizations may see changes in the valuation, impairment assessment, and reporting practices for those assets.

## LOAN PROGRAMS:

Companies that provide loans or engage in lending activities may need to consider the principles of CECL when estimating credit losses on their loan portfolios. They will be required to adopt a forward-looking approach and consider relevant information to estimate expected credit losses on their loans, similar to financial institutions.

## TRADE RECEIVABLES:

Construction companies typically have significant accounts receivable owed by their various customers and for may ongoing projects. Companies will need to evaluate the potential credit risk associated with those receivables. While CECL's provisions may appear to not directly apply target these receivables (*focusing instead mostly on financial institutions' receivables*), companies should still incorporate forward-looking assessment techniques and credit risk management practices, similar to the principles outlined in CECL, to estimate any potential future losses.

## DISCLOSURE REQUIREMENTS:

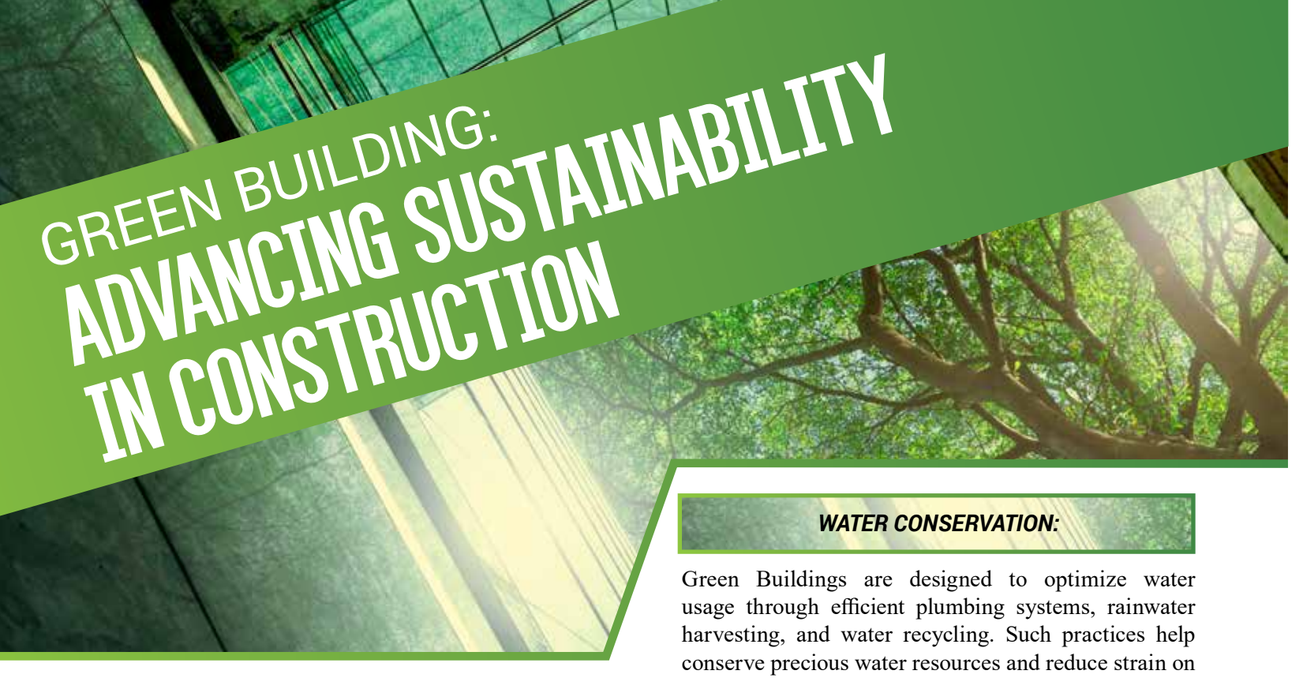
While construction companies are not subject to the same reporting requirements as financial institutions under CECL, they may need to provide additional disclosures about credit risk management, expected credit losses, and other relevant information if they hold financial assets that fall within the scope of CECL.

Practically speaking, CECL will require all companies to spend more time analyzing and considering the potential for future uncollectable values in their various categories of receivables. Virtually all companies are owed at least something at different points in time, be it from customers, employees, debtors, government agencies, related parties, and others. Whereas in the past bad debts could be recognized when they became apparent, now companies will have to invest time in reviewing past write-offs, past bad debts, credit worthiness, etc. to calculate a reasonable and fair estimate for future bad debts. A common approach is to review aging categories, or how *"old"* receivables may be. These aging categories can be ascribed certain reserve percentages based on delinquency and past experience, knowledge of who owes what, etc. Those values would aggregate into a company's allowance or reserve for bad debts.

Auditors will be reviewing this closely as CECL is implemented, as accounting estimates by their very nature are considered *"risky"* from an audit perspective. Companies have motivations to keep reserves understated, as doing so keeps asset values higher and expenses lower, both of which improve overall financial conditions and operations. CECL may also have a negative impact on liquidity measures and ratios, which could impact lending, bonding, and other insurance.

Companies should consult with accounting professionals or seek guidance from industry experts to understand how the principles and concepts introduced by CECL may affect their financial reporting practices and ensure compliance with applicable accounting standards. CECL may be daunting, but with proper attention and effort, you can be prepared for this new standard and its impacts on your company's financial statements and operations. As always, we're here to help in any way possible.

**MATTHEW BURKE, CPA, CFE**
*PARTNER*



# GREEN BUILDING: ADVANCING SUSTAINABILITY IN CONSTRUCTION

As the world continues to grapple with environmental challenges, the construction industry has taken center stage in addressing these issues. The concept of Green Building has gained significant momentum in recent years, and for good reason. Not only does it promote environmental sustainability, but it also offers numerous benefits for builders, occupants, and the planet as a whole.

## BENEFITS OF GREEN BUILDING: A SUSTAINABLE APPROACH

Green Building practices are rooted in creating structures that minimize their impact on the environment while promoting the well-being of those who inhabit them. Some of the key benefits of Green Building include:

### *ENERGY EFFICIENCY:*

One of the primary goals of Green Building is to enhance energy efficiency. Through innovative designs and the integration of advanced technologies, buildings can significantly reduce energy consumption, leading to lower operational costs and a smaller carbon footprint.

### *SUSTAINABLE MATERIALS:*

The use of sustainable materials is another key aspect of Green Building. Builders are increasingly turning to renewable or recycled resources like bamboo, wool, and cork to construct eco-friendly structures that minimize resource depletion.

### *WATER CONSERVATION:*

Green Buildings are designed to optimize water usage through efficient plumbing systems, rainwater harvesting, and water recycling. Such practices help conserve precious water resources and reduce strain on local water supplies.

### *IMPROVED INDOOR AIR QUALITY:*

Green Buildings prioritize indoor air quality by selecting low-emission materials and incorporating proper ventilation systems. This leads to healthier living and working environments, reducing the risk of respiratory issues and other health problems.

### *WASTE REDUCTION:*

A sustainable approach to construction entails minimizing waste generation and promoting recycling. Green Building projects prioritize waste reduction, ensuring that materials are used efficiently, and construction debris is recycled wherever possible.

## CURRENT TRENDS IN GREEN BUILDING

Green Building is an ever-evolving field, and staying up-to-date with the latest trends is crucial for builders and architects committed to sustainability. Here are some of the emerging trends in Green Building for 2023:

### *NET-ZERO ENERGY BUILDINGS:*

Net-zero energy buildings generate as much energy as they consume. They achieve this by combining highly energy-efficient designs with renewable energy systems, such as solar panels and wind turbines.

### *BIOPHILIC DESIGN:*

Biophilic design aims to connect building occupants with nature by incorporating natural elements like plants, natural light, and water features into the built environment. This trend has proven to enhance well-being, productivity, and creativity.

### *SMART BUILDING TECHNOLOGIES:*

The integration of smart technologies allows buildings to optimize energy consumption, lighting, and climate control based on real-time data. Smart buildings enhance energy efficiency and offer a more responsive and comfortable environment for occupants.

### *CIRCULAR ECONOMY PRINCIPLES:*

Adopting circular economy principles means designing buildings with a focus on reusability and longevity. This approach encourages the refurbishment and repurposing of materials and components, reducing waste and resource consumption.

## TIPS FOR IMPLEMENTING GREEN BUILDING PRACTICES

For builders and architects looking to embrace Green Building, here are some practical tips for successful implementation:

### *COLLABORATE AND EDUCATE:*

Green Building requires a collaborative effort from the entire project team. Ensure that everyone involved, including contractors and subcontractors, understands the goals and benefits of sustainability.

### *SET CLEAR SUSTAINABILITY GOALS:*

Establish clear sustainability goals from the outset of the project. Define **key performance indicators (KPIs)** for energy efficiency, material usage, and waste reduction, and track progress throughout the construction process.

### *STAY INFORMED ABOUT INCENTIVES:*

Research local and national tax incentives and rebates for sustainable building practices. The availability of such incentives can make a significant difference in the project's overall cost and viability.

### *ADOPT GREEN CERTIFICATIONS:*

Consider obtaining green building certifications such as **LEED (Leadership in Energy and Environmental Design)** or **BREEAM (Building Research Establishment Environmental Assessment Method)** to demonstrate your commitment to sustainability and attract environmentally-conscious clients.

### *MONITOR AND OPTIMIZE:*

After the building is completed, regularly monitor its performance and energy usage. Implement ongoing optimizations to ensure the building continues to operate at peak efficiency.

## TAX INCENTIVES FOR GREEN BUILDING

Apart from the intrinsic benefits, there are also tax incentives available to encourage Green Building practices. By adopting sustainable construction methods, builders and architects may be eligible for various tax credits and deductions. These incentives vary by location and may include tax credits for energy-efficient building components, renewable energy systems, and sustainable design features.

## CONCLUSION

Green Building practices are no longer just a trend but a necessity for the construction industry. Builders and architects hold the key to a more sustainable future by adopting energy-efficient designs, using sustainable materials, conserving water, and prioritizing indoor air quality. With the numerous benefits it offers, including reduced operational costs, improved occupant health, and a positive environmental impact, Green Building is undoubtedly the way forward.

By embracing current trends, implementing practical tips, and capitalizing on available tax incentives, builders and architects can spearhead the movement towards a greener and more sustainable construction landscape, contributing to a healthier planet for generations to come.

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*MANAGING PARTNER*

*TAX CREDIT RESOURCES ON NEXT PAGE*



# TAX CREDIT LINKS
## (CLICK THE UNDERLINED TEXT FOR LINK)

**BUSINESS COUNCIL OF WESTCHESTER (*CW BCM*) PROGRAM**
Offers a 20% discount towards green business certification, providing financial support for sustainable development in business.

**CON EDISON COMMERCIAL AND INDUSTRIAL ENERGY EFFICIENCY (CIEE) PROGRAM**
Provides cash rebates and incentives for energy efficiency projects, including energy-efficient equipment installations.

**NEW YORK STATE POLLUTION PREVENTION INSTITUTE (*NYSP21*)**
Offers online assistance, process evaluation, audits, and pollution prevention strategies to improve business sustainability, with funding covering a significant subsidy of the service costs.

**NYC'S RETROFIT ACCELERATOR PROGRAM**
Provides no-cost technical assistance and advisory services to help building owners accelerate retrofit processes, lower energy and water costs, and increase property value.

**NATIONAL GRID PROGRAMS AND INCENTIVES**
Offers financial incentives for energy-efficient upgrades, compressed air systems, steam traps, and tiered incentive programs for large commercial and industrial customers.

**FLEXTECH PROGRAM**
Provides financial support for energy studies, identifying energy-saving opportunities, and incorporating clean energy into capital planning for businesses.

**ORANGE AND ROCKLAND PROGRAMS AND INCENTIVES**
Includes prescriptive rebate pathway, instant lighting incentives, and incentives for installing electric vehicle chargers.

**NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY (NYSERDA) INCENTIVE PROGRAMS**
Administers 75 different programs to help businesses across New York clean up their energy use.

**GREEN ROOF TAX ABATEMENT**
Provides a one-time property tax abatement for buildings with green roofs, encouraging green roof installations.

- *The Green Roof Tax Abatement offers a tax credit of $4.50 per square foot of eligible green roof space installed.*
- *The credit is applicable to residential, commercial, and industrial buildings.*
- *Eligible green roofs must have a minimum of 50% vegetation coverage and be accessible to maintenance personnel.*
- *The credit is capped at $200,000 or the total tax liability for the tax year, whichever is less.*

**GREEN INNOVATION GRANT PROGRAM (GIGP)**
Supports projects that improve water quality and mitigate the effects of climate change through green practices.

**ALTERNATIVE FUELS AND ELECTRIC VEHICLES RECHARGING CREDIT**
Offers nonrefundable credits for investments in new alternative fuels and electric vehicle infrastructure.

**BIOFUEL PRODUCTION CREDIT**
Provides a refundable credit for businesses that produce biofuel.

**CLEAN HEATING FUEL CREDIT**
Offers a refundable credit on the purchase of bio-heating fuel for space heating and hot water production.

**CONSERVATION EASEMENT CREDIT**
Provides a refundable tax credit for businesses that own land subject to a conservation easement.

**SALES AND USE TAX EXEMPTIONS FOR COMMERCIAL SOLAR ENERGY SYSTEMS EQUIPMENT (*TSM-M-05(11)S*)**
Exempts commercial solar energy systems equipment from state sales and use tax.

**SALES AND USE TAX EXEMPTIONS RELATED TO COMMERCIAL FUEL CELL SYSTEM EQUIPMENT (*TSB-M-16(3)S*)**
Provides exemptions for commercial fuel cell electricity generating systems equipment.

**GREEN PROJECTS TAX CREDIT**
Allows companies with eligible green projects to capture a tax credit for net new job creation.

**GREEN INVESTMENT TAX CREDIT**
Discretionary credit for qualifying new capital investments in green projects.

**FUNDING SUPPORT FOR NATURE-BASED SOLUTIONS**
Provides funding for the development of innovative nature-based solutions to lower emissions and sequester carbon.

**NEW YORK GREEN BANK**
Mobilizes private capital to support clean energy start-ups and climate change mitigation projects.

**REGENERATE NEW YORK FORESTRY COST-SHARE GRANT PROGRAM**
Supports forest regeneration projects for climate change mitigation and conservation.

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