



Milestones Reached. Building Momentum.



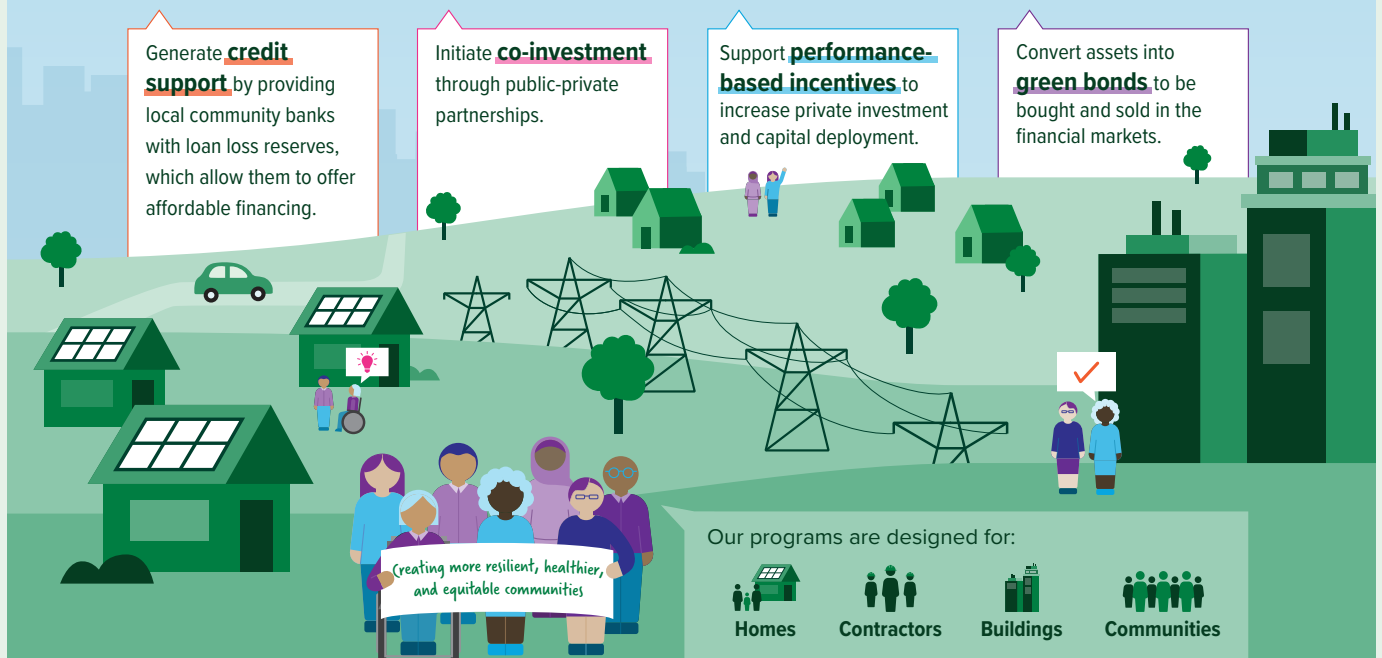
# The Green Bank Model

*A Planet Protected by the Love of Humanity*

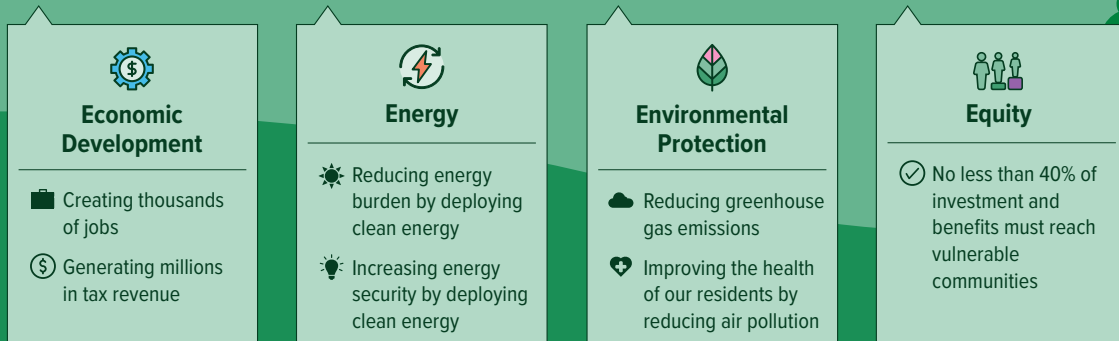
## 1 Attract Private Investment by Leveraging Public Funding



## 2 Apply Innovative Financial Tools to Deploy Investment Towards Our Programs



## 3 Deliver Social and Environmental Benefits to Connecticut's Families and Businesses

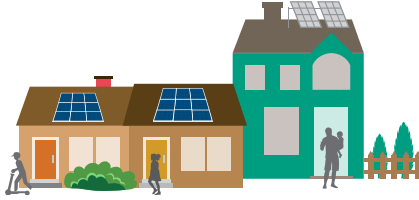


**Our mission** is to confront climate change by increasing and accelerating investment into Connecticut's green economy to create more resilient, healthier, and equitable communities. Established in 2011 as a quasi-public agency, the Green Bank uses limited public dollars to attract private capital investment and offers green solutions that help people, businesses and all of Connecticut thrive. Guiding this mission is **our vision** for "...a planet protected by the love of humanity."

# our solutions

The Green Bank is helping Connecticut flourish by offering green solutions for homes and buildings, and by creating innovative ways to invest in the green economy.

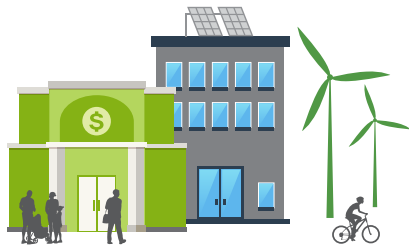
## home solutions



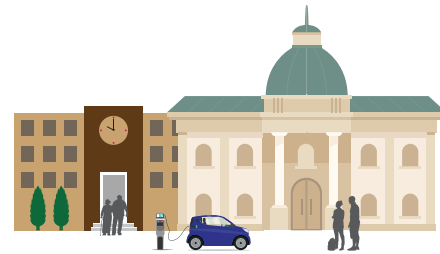
## building solutions



## investment solutions



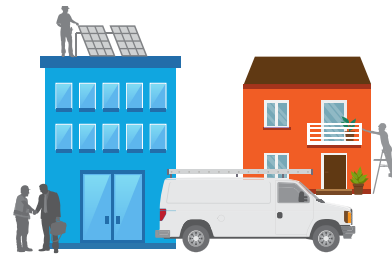
## community solutions



## energy storage solutions



## contractor solutions



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## Milestones reached help build momentum for the future.

MESSAGE FROM THE PRESIDENT & CHIEF EXECUTIVE OFFICER

An annual report allows us a moment to simultaneously learn from the successes and challenges of the year passed while looking ahead at future opportunities.

In FY 2023, two of our flagship programs, C-PACE and the Smart-E Loan, reached their 10-year milestones. These programs embody much of how the Green Bank model works ([see page 2](#)) and the impact of this approach ([see page 5](#)). Smart-E is a loan for residents seeking to improve their home's energy efficiency, reduce energy costs, increase their family's comfort, or become more resilient in the face of climate change. This program is made possible through our partnerships with a vast network of skilled contractors and a pool of dedicated local lenders, all working together to build the green economy in Connecticut. More than 7,500 households have benefited from Smart-E.

C-PACE offers similar project financing support to building owners through an innovative structure that allows improvement costs to be spread out over time while the energy benefits are recognized on day one. Nearly 400 property owners have accessed this financing, and, as the program continues to expand and evolve, we anticipate that number will continue to grow. With new construction projects, EV charging infrastructure, and soon resiliency measures included under the growing umbrella of financeable improvements (in addition to renewables, battery storage, and energy efficiency), C-PACE is a tool well aligned with the State's climate goals and well suited to our commercial property owners.

The two-year-old Energy Storage Solutions incentive is facing barriers to adoption similar to those faced by solar PV a decade ago. While interest has been strong in the commercial sector, which can reap significant energy savings in addition to the resilience of storage, residential adoption has been slower. We believe that program changes recently determined by the Public Utilities Regulatory Authority (PURA) will help spur homeowners to consider this newer technology while the Green Bank continues to raise awareness with its partners ([see page 12](#)).



A handwritten signature in black ink, appearing to read 'B. Garcia'.

Bryan Garcia, President and CEO  
Connecticut Green Bank

We are continuing to build upon our legislative expansion into the world of environmental infrastructure, learning how to incorporate the areas of agriculture, parks and recreation, water, waste and recycling, and land conservation into our vision for a planet protected by the love of humanity. Earlier this year, we began to build the team, including the hiring of a Manager of Community Engagement and Director of Infrastructure Programs. After an extensive search, we were excited to welcome our leader of environmental infrastructure programs to help chart a path towards implementing the green bank model in this new arena ([see page 15](#)).

As we look ahead into 2024 and beyond, we are focused on supporting and deploying the funds that are expected to flow from the Inflation Reduction Act. We have been preparing for a significant increase in activity stimulated by the Greenhouse Gas Reduction Fund (GGRF), which is modelled after the Connecticut Green Bank. The GGRF is focused on a dual mission of reducing GHG emissions and air pollution to confront climate change, while lifting up vulnerable communities by addressing environmental justice and a just transition. In the coming years, we expect new rebates, tax incentives, and GGRF dollars to catalyze state and federal green economies, jumpstarting the investment necessary to combat climate change with a focus on vulnerable communities.

There are now many green banks across the country from Maine to Hawaii and Michigan to Puerto Rico in cities, counties, and states across the country, and many of them are looking to Connecticut as a leader because of our track record of delivering social, economic, and environmental impact for all families and businesses, especially those in vulnerable communities.

This is a race to the top in America, our continued pursuit to become an ever-greater nation, and we couldn't be more excited to build upon what we've learned.



# by the numbers

FY12  
FY23

Since the Connecticut Green Bank's inception through the bipartisan legislation in July 2011, we have mobilized more than \$2.43 billion of investment into the State's green economy. To do this, we used \$362.7 million in Green Bank dollars to attract \$2.06 billion in private investment, a leverage ratio of \$6.70 for every \$1. The impact of our deployment of renewable energy and energy efficiency to families, businesses, and our communities is shown in terms of economic development, environmental protection, equity, and energy (data from FY 2012 through FY 2023).

## ECONOMIC DEVELOPMENT

**JOBS** The Green Bank has supported the creation of more than **27,113** direct, indirect, and induced job-years.



### TAX REVENUES

The Green Bank's activities have helped generate an estimated **\$129.6** million in state tax revenues.



**\$49.7 million**  
individual income tax

**\$50.5 million**  
corporate taxes

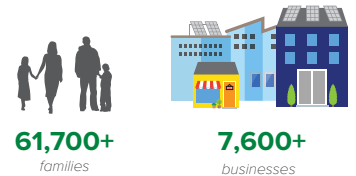
**\$27.8 million**  
sales taxes

**\$1.5 million**  
property taxes

## ENERGY

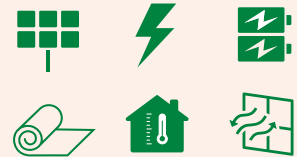
### ENERGY BURDEN

The Green Bank has reduced the energy costs on families, businesses, and our communities.



### DEPLOYMENT

The Green Bank has accelerated the growth of renewable energy to more than **571.8 MW** and lifetime savings of over **68.6 million MMBTUs** through energy efficiency projects.



## ENVIRONMENTAL PROTECTION

**POLLUTION** The Green Bank has helped reduce air emissions that cause climate change and worsen public health, including **6.3** million pounds of SOx and **7.9** million pounds of NOx lifetime.



**11.0 MILLION**  
tons of CO<sub>2</sub> :  
**EQUALS**

**165 MILLION**  
tree seedlings  
grown for 10 years

OR

**2.2 MILLION**  
passenger vehicles  
driven for one year

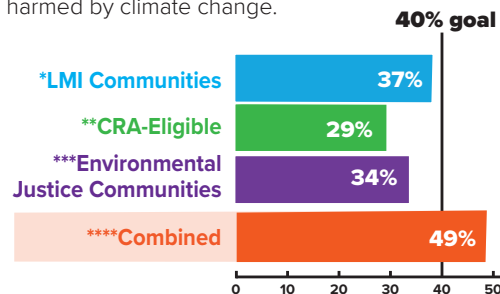
**PUBLIC HEALTH** The Green Bank has improved the lives of families, helping them avoid sick days, hospital visits, and even death.

**\$207.2 – \$468.5 million of lifetime public health value created**



## EQUITY

**INVESTING** in vulnerable communities, The Green Bank has set **goals** to reach **40% investment** in communities that may be disproportionately harmed by climate change.



\*LMI Communities – census tracts where households are at or below 100% Area Median Income.

\*\*Community Reinvestment Act (CRA) Eligible – households at or below 80% of Area Median Income and all projects in programs designed to assist LMI customers.

\*\*\*Environmental Justice Community means a municipality that has been designated as distressed by Connecticut Department of Economic and Community Development (DECD) or a census block group for which 30% or more of the population have an income below 200% of the federal poverty level.

\*\*\*\*Combined Vulnerable Communities include LMI, CRA and EJC.

## highlights & milestones

In FY 2023, our twelfth year of operation, the Green Bank experienced the waning influence from many of the same macroeconomic factors as the prior year (war in Ukraine, pandemic, rising interest rates and inflation) combined with the excitement generated by funds expected to flow from the Inflation Reduction Act.

### **Growth of commercial and residential battery storage —**

With incentives provided through Energy Storage Solutions, family and business early adopters of solar plus storage are implementing battery technologies at their homes and buildings. In the first full year of the program, the initial block of commercial incentives were over-subscribed, leading to the opening of the second tranche of incentives. On the residential side, adoption has been slower as homeowners are learning about the technology. ([See page 12](#))

### **Public interest in investing in the green economy helps**

**Green Liberty Notes sell out —** Through our subsidiary and our partnership with Raise Green, an award-winning online marketplace for impact investing, we continued to issue Green Liberty Notes with interest continuing to grow. In fact, three of our issuances were sold out and oversubscribed. We intend to continue to look for ways for the public to participate in our investments into the green energy economy, including, but not limited to, helping small businesses reduce their energy burden by becoming more energy efficient. ([See page 7](#))

### **MAP leads the way for towns seeking solar —**

Three years ago, we began offering the Solar Marketplace Assistance Program (MAP) to municipalities looking for assistance navigating the process of going solar. In 2023, the first round of projects were energized in Manchester and Portland. These towns are shining examples of communities embracing the energy saving benefits of clean energy. ([See page 14](#))

## C-PACE and Smart-E celebrate 10 year milestones

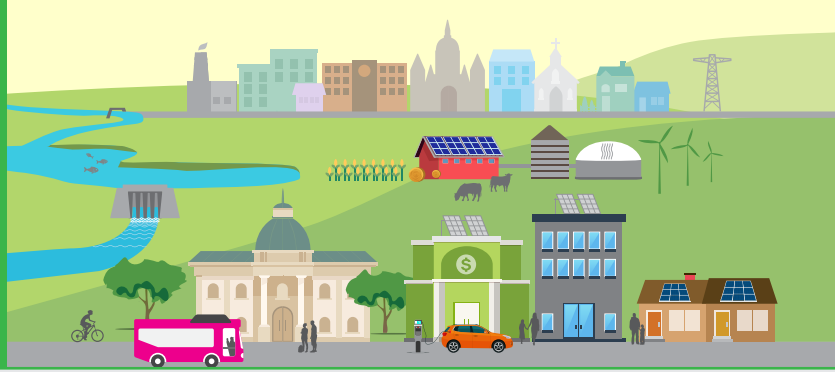
Two of our flagship programs celebrated 10 year anniversaries in 2023. The Smart-E Loan experienced the second largest number of homeowners completing projects using this program ([See page 10](#)). For building owners, C-PACE continued to deploy financing while expanding to add new construction, electric vehicle charging, and more. ([See page 8](#))

### **Building our Environmental Infrastructure team**

— In addition to continued research into the areas covered by the scope expansion into environmental infrastructure, we identified and hired a Director of Environmental Infrastructure Programs and a manager of community engagement. We also started working to expand our Smart-E Loan and C-PACE programs to support environmental infrastructure. ([See page 15](#))

**Supporting green hydrogen —** With an eye toward growing the green economy, per Special Act 22-8, the Green Bank chaired the task force to study hydrogen power. Building upon the unanimously supported recommendations generated by the Hydrogen Task Force, Connecticut passed bipartisan legislation in HB 6851 and adopted measures to support the deployment of hydrogen, including requiring community benefit agreements for all hydrogen projects.

# investment solutions



The Green Bank helps Connecticut thrive by creating opportunities for in-state residents and beyond to participate in our green investment solutions, earning a return on investment that support climate goals or unlocking financing for projects.

## Earn a return and support the green economy

We are dedicated to encouraging more people to invest in the green economy. Starting in 2020 with the launch of our Green Liberty Bonds that sold out, we knew there was demand for more investment opportunities, and have aimed to lower the minimum investment amount from \$1,000.

In January 2022, our subsidiary launched Green Liberty Notes as a follow-on to the award-winning Green Liberty Bonds. With a minimum investment of \$100, nearly anyone can earn a competitive return on a one-year maturity note and support small business energy efficiency in Connecticut.

The fifth offering, which closed in February 2023, exceeded its maximum raise of \$250,000 in less than one week and total demand surpassed \$368,000. The sixth offering in April-May was the fourth consecutive offering to exceed the maximum raise amount. Through the six offerings, more than \$1.25 million has been raised from investors across 35 states with more than half in Connecticut. Of these investments, 67% have been \$1,000 or less.



These offerings are made possible through a partnership with Raise Green, a climate tech marketplace for local impact investing based at ClimateHaven in New Haven.

We continued to see repeat investors and familiar names across our state, as well as a growing number of new investors with each offering.

Sign up for notifications at [www.greenlibertynotes.com](http://www.greenlibertynotes.com).

## Supporting solar (plus storage) and energy efficiency for low-to-moderate income homeowners

Posigen has been a longstanding partner when it comes to providing the opportunity for homeowners with low-to-moderate income to become more energy efficient and go solar.

In 2023, the Green Bank increased its existing second lien credit facility with Posigen by \$2.9 million. This facility supports the development of new solar and energy efficiency installations for low-to-moderate homeowners in Connecticut. Additionally, the Green Bank closed a \$6 million tax equity bridge loan with Posigen further supporting their solar and energy efficiency deployment in the state.

To help LMI communities improve their resilience by offering energy storage systems alongside their solar product, the Green Bank also supported PosiGen's plan to evolve their business to include pairing solar with battery storage installation.



Hear PosiGen customers talk about their Solar for All experience at [www.ctgreenbank.com/solar-for-all/](http://www.ctgreenbank.com/solar-for-all/)

# building solutions



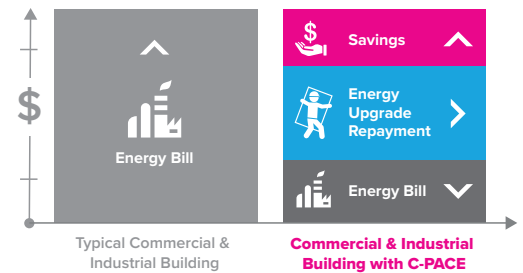
More modern, sustainable buildings means more comfortable environments for workers and customers, and better bottom lines for building owners. As utility costs continue to grow and strain operating budgets, renewables and energy efficiency will remain top of mind.

## 10 years of success for C-PACE

Commercial Property Assessed Clean Energy (C-PACE) continues to be a unique source of financing for building owners making energy efficiency improvements or adding renewable energy sources. Since these upgrades can be made today and paid for over time, owners are seeing savings immediately. In fact, the lifetime cost savings to building owners is nearly \$400 million.

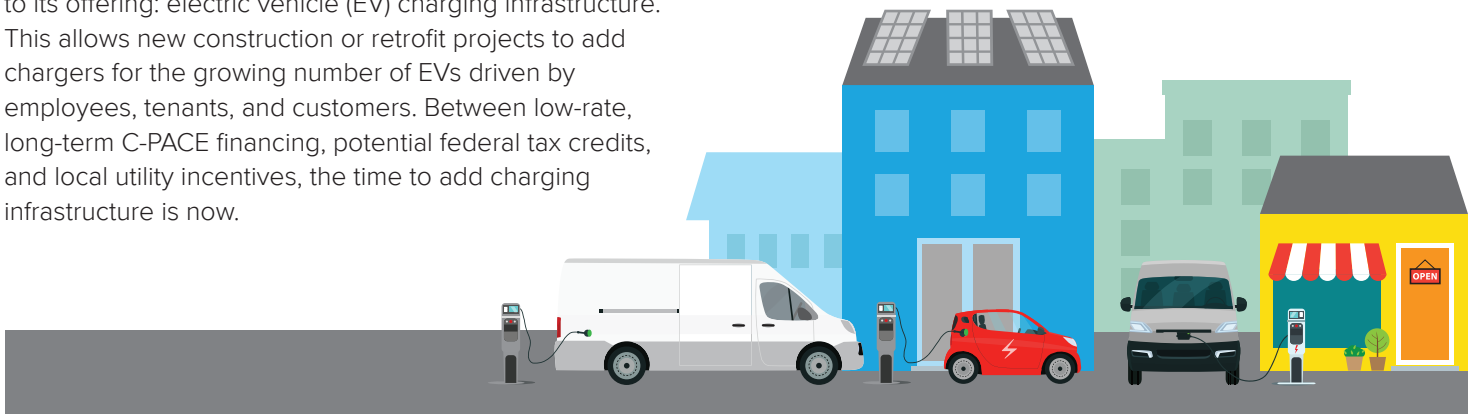
The total number of C-PACE projects has surpassed 384, including properties ranging from industrial facilities to retail and farms. These projects have a total investment of \$266.6 million with Green Bank investment of \$61.7 million, and private investment of \$204.9 million, a leverage ratio of \$4.3 to 1.

In addition to C-PACE, solar power purchase agreements (PPAs) are helping building owners realize significant energy savings. With 212 total PPAs in our portfolio, the energy cost savings produced is more than \$6.8 million annually. The majority of these solar installations are on schools, providing an educational opportunity for the future leaders of the green economy.



## C-PACE charges up the driving experience

Encouraged by 10 successful years, C-PACE continues to evolve to meet the needs of building owners and their communities with also helping the state meet its aggressive goals. In 2023, C-PACE added a new financeable measure to its offering: electric vehicle (EV) charging infrastructure. This allows new construction or retrofit projects to add chargers for the growing number of EVs driven by employees, tenants, and customers. Between low-rate, long-term C-PACE financing, potential federal tax credits, and local utility incentives, the time to add charging infrastructure is now.





# customer stories



## Mystic Aquarium

A Connecticut tourism destination for 50 years, Mystic Aquarium enhanced its reputation as a leader in sustainability in 2023 with the completion of a comprehensive energy project, highlighted by a 272 kW solar system installed by Verogy. In total through energy usage and cost reductions, the Aquarium's estimated savings are \$1.8 million over the expected useful life of the improvements. On an annual basis, the project's arrays will offset the equivalent of about 209 metric tons of carbon dioxide, equivalent to the amount of emissions generated by an average passenger vehicle driven more than 537,000 miles every year.

**Energy Upgrades:** 272 kW roof mounted solar photovoltaic system, HVAC upgrades, lighting, and energy-monitoring equipment

**Projected Energy Savings:** \$1.8 million over the life of the upgrades



"This solar installation is a significant milestone in our continued commitment to environmental stewardship. We are deeply grateful to Verogy and the Connecticut Green Bank for their partnership and expertise. Together, we are making a tangible difference in our community and setting a precedent for future sustainable initiatives."

*Susette Tibus, President and CEO of Mystic Aquarium*

*Photos of Mystic Aquarium provided by Verogy. Photos of Enko and Barker taken by Red Skies Photography.*



## Enko Chem

In May 2023, Enko Chem, Inc. announced the start of a robust clean energy program at its facility in Mystic. The clean energy upgrades began with the installation of energy-efficient lighting on two floors of interior office, lab, and greenhouse space, and will continue with upgrades to the facilities' HVAC systems and the installation of solar.

The projected energy savings over 20 years are upwards of \$10 million including utility incentives, tax credits, and operational energy savings. Led by a team of proven scientists, entrepreneurs, and industry veterans, Enko's innovative science, agile design, and discovery of new modes of action is producing next-generation crop protection solutions that will overcome the critical challenges facing industry.

**Energy Upgrade:** lighting and HVAC upgrades (solar coming soon)

**C-PACE Financing:** \$3.6 million over 10 years

**Projected Energy Savings:** \$10 million over the life of the upgrades

"We are pleased with the package that the Connecticut Green Bank has helped us to implement. Clean energy and efficient energy are critical to environmental sustainability, something Enko is passionate about."

*Jacqueline Heard, Ph.D., MBA, Enko Chem's Founder and CEO, pictured above with colleagues David Wurzer, CFO; Sonny Smith, Finance Director; Peter Stchur, Ph.D. VP Operations, and Earthlight Technologies team members Daniel Kirk, Project Foreman, Germaine Givons (far right) and Amber Sudarsky, (background), both electricians*



## Barker Specialty

Barker Specialty is an innovative, family-owned promotional marketing agency with over 70 years of experience helping customers tell their brand stories. Inspired by their commitment to reducing their carbon footprint, Barker leveraged solar power to save energy at their 6,000-square-foot showroom and headquarters in Cheshire. They had such a positive experience working with the Green Bank and using C-PACE to finance their first rooftop solar photovoltaic system that they used it for a second solar project two years later. The projected total energy savings is more than \$1.5 million over the 25-year effective useful life of the panels.

**Energy Upgrade:** Two roof mounted solar photovoltaic systems (237.4 kW total)

**C-PACE Financing:** \$209,101 over 5 years, and \$447,026 over 12 years

**Projected Energy Savings:** \$1.6 million over the life of the upgrades



"Sustainability is deeply important to our customers and aligns with our longstanding focus on high-quality products. Working with Green Bank on our solar projects has been a wonderful and rewarding experience that helps us achieve our goals for the community and the planet."

*Gerry Barker, President, Barker Specialty*

## home solutions



The Green Bank empowers Connecticut families through accessible and affordable green solutions that provide comfort and security. The Smart-E Loan was designed to make it easy and affordable for homeowners to make energy efficiency and clean energy improvements to their homes with no out-of-pocket cash and at interest rates low enough and repayment terms long enough to make the improvements “cash flow positive.”

### Smart-E Loan

More than 1,240 homeowners took advantage of Smart-E Loans in FY 23, which is made available through a network of local lenders and contractors. This was the second most projects in a year for the program which celebrated its tenth year in 2023. In total, more than 7,500 home energy improvement projects have been completed using Smart-E. These upgrades are estimated to produce lifetime cost savings of more than \$93 million for the homeowners. The Smart-E Loan provides financing for more than 40 improvement measures, including heat pumps, insulation, windows, battery storage, and solar. The majority of projects completed have been HVAC or solar.

In 2024, the Smart-E Loan will begin to cover new environmental infrastructure measures, offering residents even more ways to protect their homes against climate change.

## customer stories



“My home needed a complete replacement of its 20+ year old HVAC systems. I decided to replace my old A/C units and oil heating with a geothermal heating/cooling system and was able to afford it thanks to the SMART-E Loan

programs available from Connecticut Green Bank. They have great rates and made the process of getting a loan very simple. Now I am enjoying an oil free HVAC system that also saves money on my electricity bill. Thank you Connecticut Green Bank and the Smart-E Loan program!”

*Yegor from Westbrook*



“When I bought my house it had an old cast iron radiator system. Not only was this an eye sore but it was also very costly to run in the winter months. With the help of Smart-E Loan I was able to upgrade this system to an ultra high efficiency forced air system that saves me money and space in my house!

Being new to the area it is hard to find contractors you can trust. Through

the Smart-E Loan there is a list of contractors that are eligible to use this program. This provided me with some options to find a quality HVAC professional that I knew I could trust.

Overall, this was a great experience that improved the quality of my life and value of my home. I’m so grateful to have had this opportunity.”

*Nick from Fairfield*



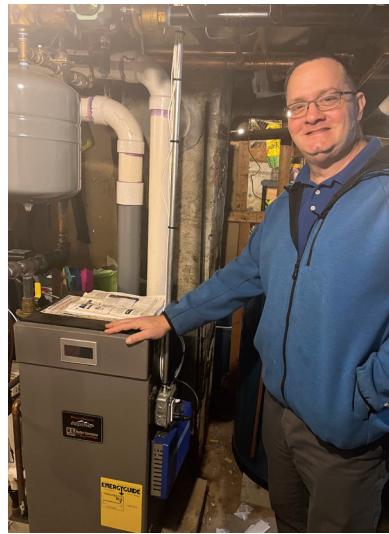


“We recently had the pleasure of participating in the Smart- E Loan program, and it has been an absolutely transformative experience for our new home. Thanks to the program’s exceptionally favorable interest rates, we were able to undertake two significant energy-saving projects (solar and heat pumps) that have not only enhanced the comfort and efficiency of our home but also contributed to a greener, more sustainable environment.

The team behind the Smart-E Loan program was a joy to work with. Their friendly and attentive approach made the entire process smooth and hassle-free. The paperwork was surprisingly straightforward and easy to navigate, thanks to their guidance and support.

We wholeheartedly recommend the Smart-E Loan program to anyone looking to make their home more energy-efficient and eco-friendly.”

*Joe from Trumbull*



“We used the Smart-E program to get our new furnace. The process was so easy and the payments fit into our budget. I am thrilled with the process from start to finish.”

*Cyril and Jennifer from West Haven*



“We purchased a home with a 20-year-old central air conditioning system and we knew once it died, it would no longer be able to be repaired. When we called our HVAC vendor, they recommended a loan through the Green Bank to cover the large expense. Securing a Smart-E Loan from the Green Bank was simple and we were thrilled with the very low interest rates to fund the upgrade to our home. The partnership between our experienced HVAC vendor and the Green Bank allowed us to not only improve our home’s comfort but also ensure a more energy-efficient and eco-friendly solution, all while saving on long-term operational costs. Our HVAC vendor’s recommendation truly made this home improvement project a success. Now we simply pay the cost of the loan alongside our electric bill every month and we are happy to have an upgraded smart system!”

*Katie and Billy from Danbury*



“I used a Smart-E Loan to help upgrade my home heating system in 2022. The Connecticut Green Bank was a great partner throughout the process and met all of my expectations.”

*Ryan from Gales Ferry*





## a market emerges with new storage technology

In its second year, Energy Storage Solutions is uncovering strong demand from commercial property owners and a growing interest from homeowners in this nascent battery technology.

In March 2023, PURA approved the opening of the second Commercial & Industrial (C&I) capacity tranche for the incentive program two years ahead of schedule due to overwhelming demand in the C&I sector. Once installed, interconnected, and operational, these battery systems will not only provide resilience for host customers, but will also pay on-going incentives for a period of 10 years as the batteries send energy to the grid on high demand days, resulting in lower electric rates for all Eversource and UI ratepayers.

In FY 23, 31 commercial projects were approved for incentives through Energy Storage Solutions for a total investment of \$71.3 million (\$20.3 million in incentives and \$50.9 in private investment). These projects are currently in various stages of development with the first ones anticipated to go online in 2024.

For residential customers, the adoption rate has been slower due to a number of factors, including inflation-related rising costs and the need to educate consumers on the relatively new technology. Despite these challenges, the program is showing steady growth year-over-year. In FY 22, residential projects approved for the incentive totaled 21. By the end of FY 23, another 329 projects have been approved.

To learn more, please visit [www.energystoragect.com](http://www.energystoragect.com).

## early adopters of residential solar plus storage

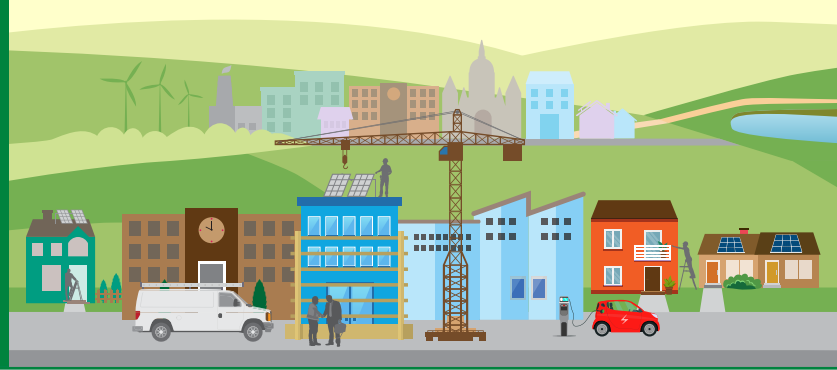
Through solar plus storage, Michael and Jaimee, who live in Hartland, are controlling their energy costs and going green. The couple's reasons for wanting to go solar were two-fold. First, despite some success in reducing their energy usage, the cost of electricity was quickly outpacing their income. Second, they had already replaced one vehicle with a fully electric car and solar was the next step toward getting their energy budget under control while also going green. Add in the benefit of backup power during the occasional outage due to severe weather, which eliminated the need for a fossil fuel generator, and they were ready.

"We chose to be among the early adopters of this technology because of the essential savings potential for our family. Over the past year, we have been very passionate in telling others about how well our system has performed and the savings realized, all while moving toward sustainable green energy production."



See more early adopters at <https://energystoragect.com/homeowner-success-stories/>

# annual awards presented



In recognition of their contributions to the deployment of clean energy and demonstrated leadership in their industries in 2022, the Green Bank recognized key partners among the dedicated network of contractors, developers, lending partners, community leaders and home- and building-owners during our eighth annual awards. For 2022, awardees included the first contractors and homeowners in PURA's Energy Storage Solutions program. Award photos can be found at [www.ctgreenbank.com/about-us/news/2022-awards/](http://www.ctgreenbank.com/about-us/news/2022-awards/)



## C-PACE Outstanding Project

**Recipient: Daughters of Mary of the Immaculate Conception**

The Daughters of Mary of the Immaculate Conception in New Britain were honored for their collaboration with Citizens Energy, EcoSolar and Schneider Electric. Together, they leveraged C-PACE financing to establish a microgrid providing backup power that enables the critical care facility to operate even when the electric grid is down. Citizens Energy Corporation (a C-PACE capital provider) financed a microgrid that combines 1.4 megawatt hours of battery storage capacity with 1.2 megawatts of solar generation. This project is an outstanding example of the ability of C-PACE financing to support innovative green energy projects that positively impact our communities and improve resilience.



## C-PACE and Solar PPA Outstanding Project

**Recipient: Mystic Aquarium**

Mystic Aquarium was recognized for its innovation and collaboration to accomplish its efficiency and sustainability goals. (More information about this project is featured on page 9 of this report).



## Outstanding Partner for Solar MAP

**Recipient: Greenskies Clean Focus**

Greenskies Clean Focus is the installation partner for the inaugural round of municipalities participating in the Solar MAP for municipalities. Greenskies was competitively selected to install 11 projects in Branford, Manchester, Mansfield, and Portland, totaling 2.8 MW of solar using our Solar PPA. Greenskies was a key driver in getting these projects completed despite COVID-related supply chain delays.



## Accelerating PACE

**Recipient: Earthlight Technologies**

The Green Bank recognized Earthlight Technologies, headquartered in Ellington, with an Accelerating PACE award for integrating C-PACE into its business model and continuing to demonstrate an innovative and forward-thinking approach to the market.

**Recipient: Greenleaf Energy Solutions**

Greenleaf Energy Solutions, located in Oxford, was recognized for their significant participation within the C-PACE program and ability to drive business growth by integrating Green Bank programs within the sales process.



## Energy Storage Solutions Early Adopters Contractors

Recipient: RWE Clean Energy	Recipient: Sunbug
Recipient: CPower	Recipient: Earthlight Technologies
Recipient: Green Power Energy	Recipient: SAVKAT

These contractors were recognized for being early adopters in their participation and promotion of Energy Storage Solutions to commercial and residential customers.



## Investment Solutions Outstanding Partners

We wouldn't be able to have such an impact in our communities without our financing partners. In particular, we recognized **Amalgamated Bank, Key Bank, Liberty Bank, Mutual Security Credit Union, Nutmeg State Financial Credit Union, and Webster Bank.**

## Smart-E Loan Top Performer

**Recipients:**

- 20/20 Air Mechanical (New Milford)\*
- Air Inc. (Branford)
- Absolute Air Services LLC (Portland)\*
- Aiello Home Services (Windsor Locks)\*
- Benvenuti Oil Company (Waterford)\*
- Call The Bee (Burlington)\*
- Campbell Cooling LLC (Newington)\*
- Call The Bee (Burlington)\*
- Campbell Cooling LLC (Newington)\*
- Celco Heating and Air Conditioning (Bridgeport)\*
- Deitch Energy LLC (Hartford)\*
- Douglas Mechanical Services (Berlin)
- Ductworks HVAC Services (Southington)\*
- East Coast Mechanical, Inc. (Cheshire)
- Glasco Heating & Air Conditioning Inc. (South Windsor)\*
- HARP Home Services (Windsor Locks)
- Homestead Comfort (Ellington)\*
- Link Mechanical Services Inc. (New Britain)\*
- Nutmeg Mechanical Services, Inc. (Manchester)\*
- Omni Mechanical Services (South Windsor)\*
- Onofreo Home Comfort Systems LLC (Milford)
- R&W Heating Energy Solutions LLC (Salem)\*
- Service Stars (Danbury)\*
- State Line Oil and Propane (Granby)
- Tyler Heating, Air Conditioning, Refrigeration LLC (Stratford)
- Viglione Heating & Cooling Inc. (East Haven)\*



The 2022 Top Performers listed in alphabetical order; \* denotes 2021 Top Performer recognition

## community solutions



Municipal and state buildings have options for going solar with no money down. The Green Bank Solar PPA (power purchase agreement) delivers immediate savings on electricity through a third-party owned and operated solar system, while the Solar Roof Lease allows property owners to generate income by leasing their roof space for the Green Bank and its partners to install solar.

### providing a (Solar) MAP for municipalities

The first round of Solar Marketplace Assistance Program (MAP) municipal projects went online in 2023, as Manchester and Portland energized systems.

The Town of Manchester cut the ribbon on the installation of solar systems at seven municipal buildings, including six schools. These systems are projected to save the town more than \$100,000 annually in energy costs and more than \$2.1 million over the term of the PPA.

The Town of Portland also celebrated this year as the solar system at Brownstone Intermediate School went online. The 67 kW system is projected to save the Town more than \$10,000 annually in energy costs and more than \$206,000 over the term of the PPA.

Solar developer Greenskies Clean Focus was responsible for the installation of the Manchester and Portland systems, and Inclusive Prosperity Capital, a non-profit organization, partners with Green Bank to own and maintain these systems.

In 2020, the Green Bank introduced the Solar MAP to make it easier for municipalities to access renewable energy and achieve energy savings at their buildings. Solar MAP provides technical assistance through every step of the process so towns and cities can realize all the cost-saving benefits of going solar with fewer challenges and roadblocks. Through the PPA, the municipality purchases the electricity generated by the solar array, and locks in low electricity cost so the cash flow is positive in year one.



*"I appreciate all the work and collaboration that it has taken to get this far and am excited that we are positioned to have lower energy costs for years ahead," said Matt Geary, Manchester's school superintendent. "But more important is how this benefits our students. Investing in clean, renewable energy is one more way we can ensure a better future for them."*



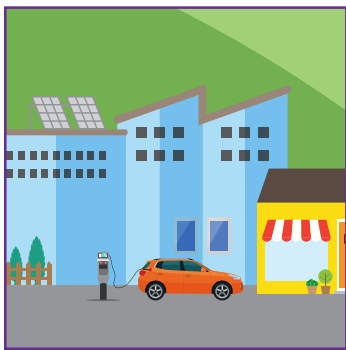
*"We are thrilled to have this new solar system installed and active in Portland. Being able to help the environment while at the same time saving on our energy costs is an enormous win-win for everyone." said Ryan Curley, First Selectman, pictured here cutting the ribbon during a school assembly honoring the project and those involved.*



# environmental infrastructure

## scope expansion

In July 2021, the signing of Governor Lamont's House Bill 6441, with bipartisan support, advanced the green bank model to include environmental infrastructure, which encompasses structures, facilities, systems, services, and improvement projects related to water, waste and recycling, climate adaptation and resiliency, agriculture, land conservation, parks and recreation, and environmental markets such as carbon offsets and ecosystem services.



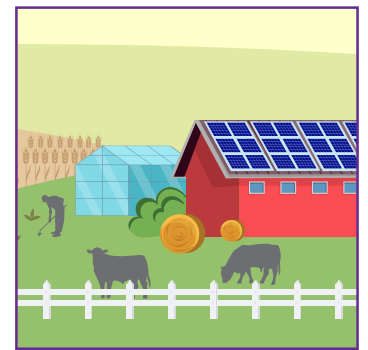
**Environmental Markets**



**Land Conservation**



**Parks and Recreation**



**Agriculture**

Our expansion into environmental infrastructure has continued. In 2023, in addition to the primers on agriculture, land conservation, and parks and recreation, we published a guide on environmental markets and a primer on water. All of these documents can be found at [www.ctgreenbank.com/strategy-impact/planning](http://www.ctgreenbank.com/strategy-impact/planning). A primer for waste and recycling is planned for 2024.

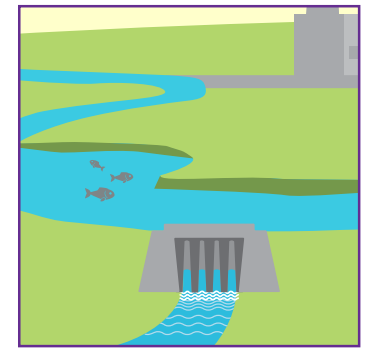


**Leigh Whelpton**

*Director of Environmental Infrastructure Programs*

In addition, the nationwide search for the organization's first director of environmental infrastructure programs, which began in the summer of 2022, concluded with the announcement in April 2023, that Leigh Whelpton had been selected. Leigh will oversee the development and implementation of strategies that raise revenues and enable the investment and deployment of environmental infrastructure in the state with a focus on decarbonization, climate adaptation and resiliency, and vulnerable communities.

Prior to the Green Bank, Leigh served as Executive Director of the Conservation Finance Network (CFN), having been with the organization since its founding in 2012. CFN increases the pace and scale of social and ecological resiliency efforts by expanding the capacity of practitioners to utilize innovative and effective funding and financing strategies. The Green Bank has engaged closely with CFN over the years as part of their nationally networked community of practice.



**Water**



**Waste and Recycling**

## Leadership for families facing rising energy costs



**Lonnie Reed**  
Green Bank Chair



**Brenda Watson**  
Board Member

Energy is not cheap in Connecticut, a painful truth addressed in the article, [“Study: Connecticut ranked fourth in the nation for most expensive energy costs overall.”](#) Since Connecticut households spend more on electricity and natural gas than they would in nearly any other state, there is a significant burden on our families. Home heating oil and transportation fuel also consume a significant amount of what Connecticut families spend on energy. And fluctuating energy prices have made it even more challenging for families to budget and plan for these expenses.

While rising energy costs have been difficult for everyone to handle, these costs disproportionately impact low-income and moderate-income families in Connecticut, whose energy costs make up a significant portion of their monthly expenses. That’s why providing tools and resources to families feeling the strain of rising energy costs is so important.

One innovative step the State of Connecticut took to address this need was establishing the nation’s first state-level green bank in 2011. Green banks can make energy-saving technology more accessible and affordable for families by offering innovative financing and generating new markets. These innovations can make a real difference.

Through the Solar for All program, a partnership between the Connecticut Green Bank and PosiGen Solar, more than 4,500 low-income families were able to access energy efficiency upgrades and go solar, saving more than \$2.8 million in electricity costs – on average more than \$600 per family. This includes nearly 840 projects in Bridgeport for a cost avoidance of \$500,000. This average savings

becomes even more significant when macroeconomic factors, such as the War in Ukraine, drive up electricity rates. The first half of 2023 saw electricity rates increase by roughly \$0.12/kWh, and the average Solar For All household is now seeing savings on their bills for that period of about \$800. Generally, going solar and improving the energy efficiency of one’s home can help reduce the cost burden and ease inflationary pressures.

Along with Solar for All, there are several other ways that the Connecticut Green Bank is working with the state to help families shoulder this burden. **They include:**

- Determining how the state’s Residential Renewable Energy Solutions program can be leveraged to support families living in affordable housing. Helping these low-income tenants realize the economic benefits of clean energy makes the impact of solar across our state more equitable.
- Managing Energy Storage Solutions, which enables homes and businesses to install battery backup systems, to also include special incentives for families in vulnerable communities.
- Supporting the state in its goals to expand electric vehicle infrastructure, which will help to alleviate the burden of transportation costs on families. The Green Bank finances electric vehicle charging equipment costs for businesses through the C-PACE program and homeowners through the Smart-E program.

The Green Bank’s programs also support businesses and complement other state initiatives, resources, and organizations. Those include Operation Fuel, which provides energy assistance to families struggling to pay for their home heating fuel, and Energize Connecticut, which provides information on all the incentive and financing programs managed by the state’s utilities and the Green Bank.

Additionally, the recently passed federal Inflation Reduction Act incentivizes the adoption of heat pumps and other efficient technologies that reduce energy usage. Reduced energy usage will help families reduce energy costs as prices increase.

The cost of energy in Connecticut may be lamentably high, but the state has been confronting this issue in proactive and creative ways that also protect our families, businesses, and communities.

## officers & board

## letter from the Governor

### Officers

**Bryan Garcia**, President & CEO

**Mackey Dykes**, Vice President of Financing Programs

**Brian Farnen**, General Counsel and Chief Legal Counsel

**Bert Hunter**, Executive Vice President & Chief Investment Officer

### Board of Directors\*

**Lonnie Reed**, Board Chair, Documentary Filmmaker & Former State Representative

**Robert Hotaling**, Deputy Director at DECD, as Ex Officio

**Hank Webster**, Deputy Commissioner at CT DEEP, as Ex Officio

**Bettina Bronisz**, Assistant Treasurer for Debt Management Office of the Treasurer, as Ex Officio

**Dr. Joanna Wozniak-Brown**, Climate & Infrastructure Policy Development Coordinator at OPM, as Ex Officio

**Adrienne Farrar Houël**, Founder, President & CEO of Greater Bridgeport Community Enterprises, Inc.

**Dominic Grant**, Director of Investment, Dirt Capital Partners

**John Harrity**, Former President, Connecticut State Council of Machinists

**Matthew Ranelli**, Board Secretary, Partner, Shipman & Goodwin, LLP

**Thomas M. Flynn**, Senior Director, Private Equity Services Operation Group, Alvarez & Marsal

**Brenda Watson**, Executive Director, Operation Fuel

*\*As of 07-11-2023*

We are a state of creators, makers, innovators, and entrepreneurs — a powerful force for good in our country. This rings true for our state's energy industry, and the Connecticut Green Bank team is leading the way as a national example.

Since I've been in office, I have taken every opportunity to tout our first-in-the-nation Green Bank, which has and continues to serve as a model for the federal effort to establish a national green bank through the Greenhouse Gas Reduction Fund and its National Clean Investment Fund. The innovative, talented Green Bank team has proven time and time again that not only does the model work, but it creates positive change for our communities, families, small businesses, and those disproportionately impacted by the effects of climate change and rising energy costs.

The wide range of projects and the many lives touched by the Green Bank never ceases to amaze me. Communities like Manchester added solar PV systems at seven municipal buildings, including six schools, saving the town more than \$100,000 annually in energy costs. Mystic's Enko Chem, Inc. will save upwards of \$10 million over 20 years through energy efficiency improvements and solar energy. The Solar for All program reached more than 4,500 low-income families, helping them access energy efficiency upgrades and go solar while saving more than \$2.8 million in electricity costs — on average more than \$600 per family.

The numbers speak for themselves. Since its inception in 2011, the Green Bank has helped reduce energy costs for more than 60,000 Connecticut families and 7,000 businesses while supporting the creation of tens of thousands of jobs across our state, helping cut carbon emissions and improving public health.



**Ned Lamont**  
*Connecticut Governor*

I'm excited to see what is in store for the Connecticut Green Bank over the next year. As we look to expand affordable housing options in Connecticut, we must make every effort to do so in a sustainable manner. Thanks to Connecticut's expansion of the definition of a residential customer related to solar energy generation in Public Act No. 21-48, the Green Bank is expanding its

Solar Marketplace Assistance Program to help fill the market gap and usher in more projects in the affordable housing sector.

Additionally, through bipartisan-supported legislation that I advanced in 2021, we will see the Green Bank advancing critical environmental infrastructure projects across Connecticut throughout the next year. Our state already plays a significant role in addressing the challenges of a changing climate, and with the Green Bank leading the charge in implementing projects that support climate adaptation and resilience, we will protect what we love about our home state, and continue to be a force for good in Connecticut and across the United States.

# financial highlights

## STATEMENT OF NET POSITION

Cash and cash equivalents - unrestricted	\$ 41,785
Program loans & other long term assets	115,477
Capital assets, net	72,589
Cash and cash equivalents - restricted	22,364
Other assets	39,419
<b>Total assets</b>	<b>\$ 291,634</b>
Deferred amount for pensions	\$ 7,302
Deferred amount for OPEB	6,354
Deferred amount for asset retirement obligations	2,027
<b>Total deferred outflows of resources</b>	<b>\$ 15,683</b>
Current liabilities	\$ 20,956
Long term liabilities	75,945
Pension liability	17,633
OPEB liability	18,042
<b>Total liabilities</b>	<b>\$ 132,576</b>
Deferred amount for pensions	\$ 6,177
Deferred amount for OPEB	11,460
Deferred amount for leases	15,700
<b>Total deferred inflows of resources</b>	<b>\$ 33,337</b>
<b>Net position, unadjusted</b>	
Invested in capital assets	\$ 5,363
Restricted Net Position:	
Non-expendable	57,282
Restricted - energy programs	19,123
Unrestricted Net Position	59,636
<b>Total net position, unadjusted</b>	<b>\$ 141,404</b>
<b>Net position, adjusted</b>	
Unrestricted Net Position	\$ 59,636
Contingent liabilities - programs and projects <sup>1</sup>	(90,897)
<b>Total net position, adjusted</b>	<b>\$ (31,261)</b>

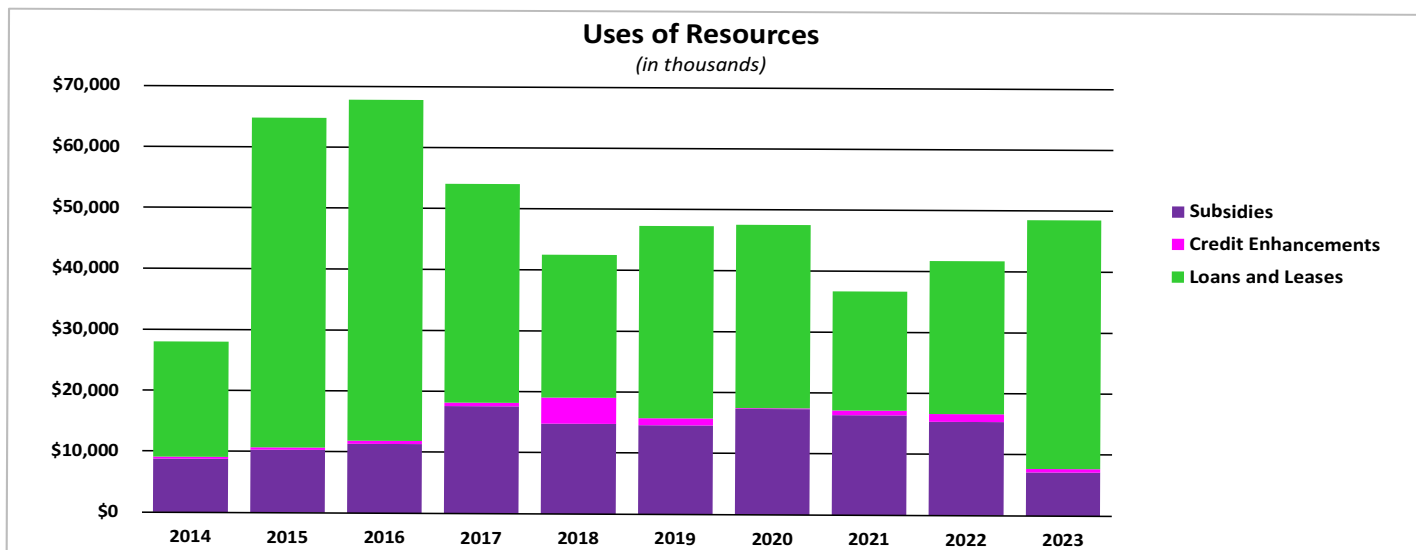
<sup>1</sup> See Note III (B.) to Connecticut Green Bank's 2023 audited financial statements for further detail.



For the year ended June 30, 2023:  
(in thousands)

## STATEMENT OF REVENUE, EXPENSE AND CHANGES IN NET POSITION

<b>Revenues</b>	<b>\$ 63,947</b>
<b>Operating Expenses:</b>	
Grants and incentive programs	\$ 7,738
Program administration expenses	14,658
Cost of goods sold - energy systems	1,328
General and administrative expense	3,503
Depreciation and amortization expense	3,475
Provision for loan losses	1,534
<b>Total Operating Expenses</b>	<b>\$ 32,236</b>
<b>Operating Income</b>	<b>\$ 31,711</b>
Non-operating revenue (expense)	(1,098)
Distributions	(348)
<b>Total Non-Operating Revenue (Expenses)</b>	<b>\$ (1,446)</b>
<b>Net Change</b>	<b>\$ 30,265</b>



For more details on the financial statements, including comparative results, please access the [Annual Comprehensive Financial Report \(June 30, 2023\)](https://www.ctgreenbank.com/strategy-impact/reporting-and-transparency/#toggle-id-1) at <https://www.ctgreenbank.com/strategy-impact/reporting-and-transparency/#toggle-id-1>



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