



CDFA-Bricker Webinar Series: Incentives & Financing for Green and Sustainable Assets

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Current Landscape of Public Incentives and
Financing Options for Green & Sustainable Assets

Tuesday, March 7, 2023

Current Landscape of Public Incentives and Financing Options for Green & Sustainable Assets



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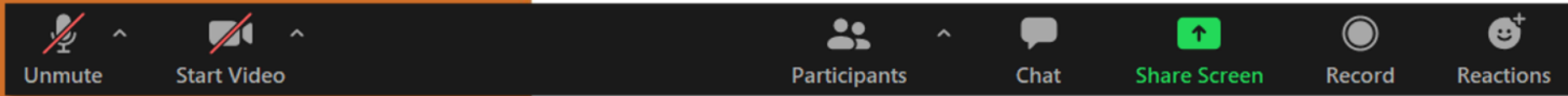
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Panelists



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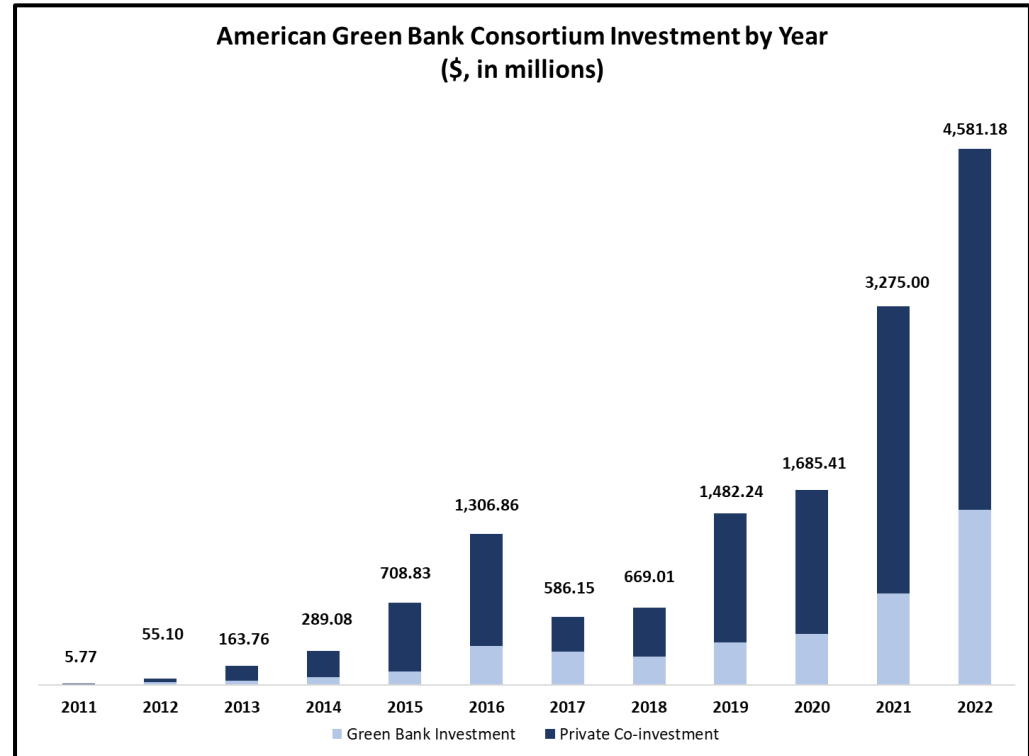
Inflation Reduction Act – Greenhouse Gas Reduction Fund and Climate Pollution Reduction Grants

February 2023

Green Bank partnerships have catalyzed \$14.85 billion of investment in clean energy since 2011

The Consortium comprises 39 clean energy investors and lenders, both active and not yet funded entities, including local and state green banks, community development financial institutions (CDFIs), state-sponsored agencies and other nonprofit organizations. They operate in 28 states, Washington, DC, and Puerto Rico.

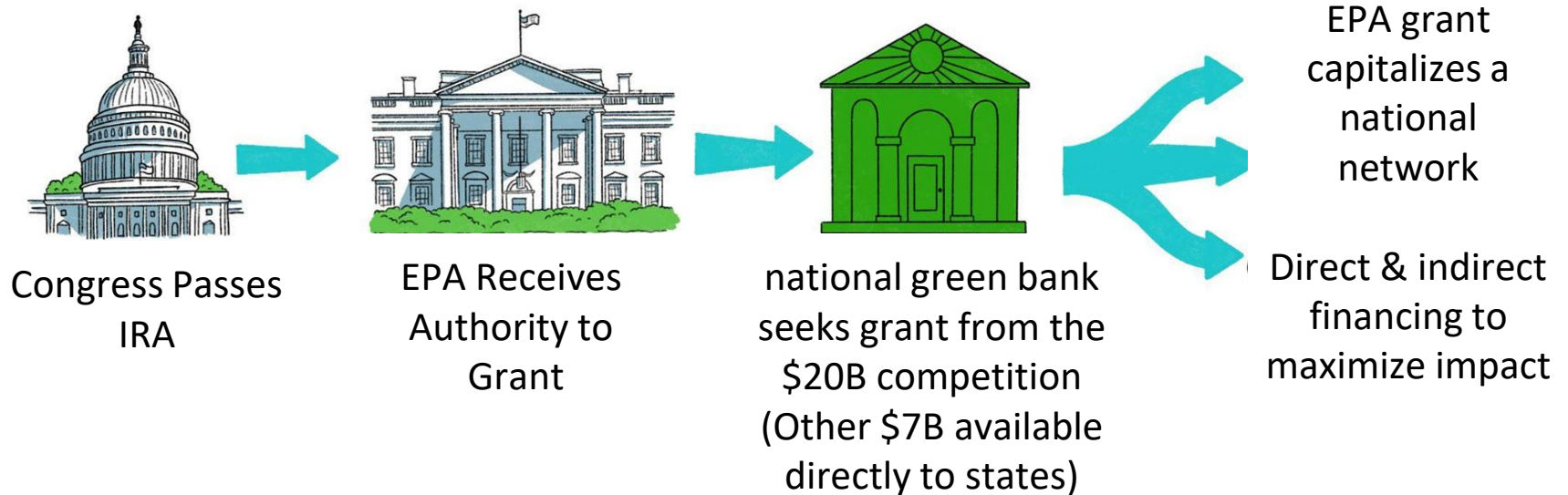
- Active investors in the Consortium in 2022 caused **\$4.64B of investment** in clean energy projects
- Of the \$4.64B, Consortium members contributed **\$1.51B of their own capital**, joining that up with \$3.12B in private capital;
- More than \$1.2B of these investments were in **low-income and disadvantaged communities** for a variety of clean energy projects, such as roof-top and community solar, and energy efficiency upgrades for families and schools.
- Since 2011, **cumulative public-private investment caused by green banks has surpassed \$14.85B.**



Partnership Opportunities

Opportunity 1: \$27B Greenhouse Gas Reduction Fund

Opportunity 2: \$5B Climate Pollution Reduction Grant



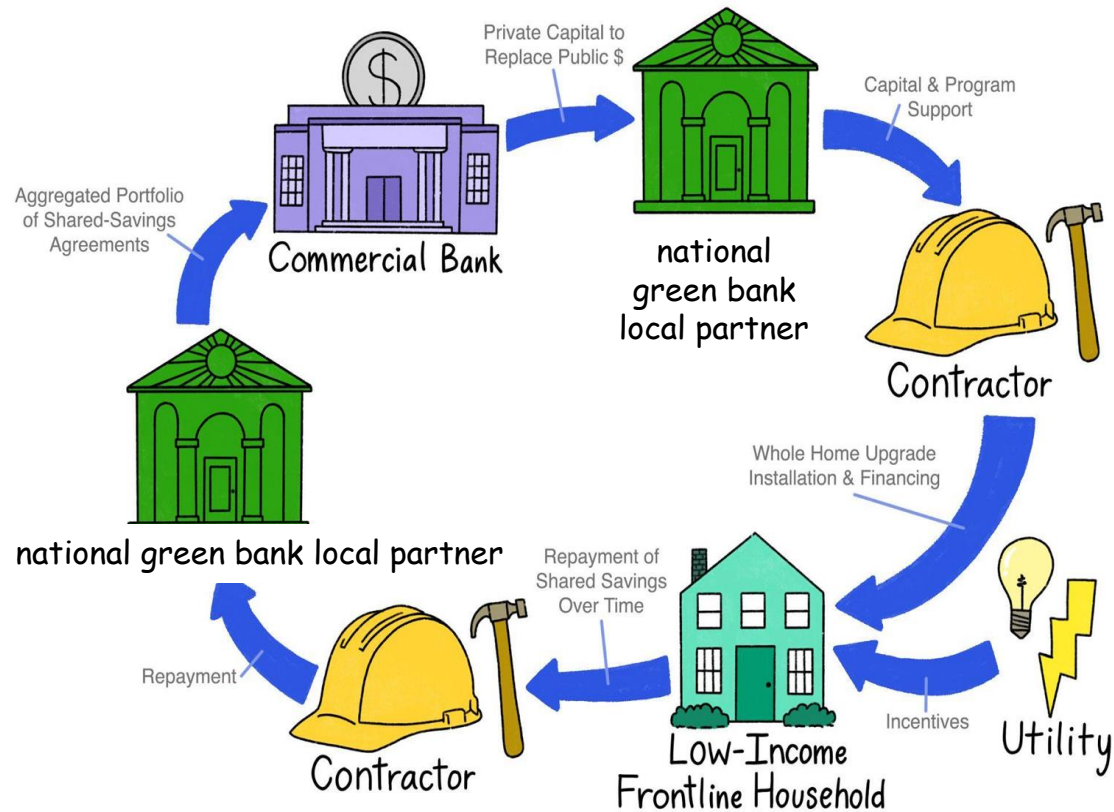
Our Mission: Inclusive clean energy transition

The Coalition for Green Capital

Mission: Create a national network of clean energy lenders that reaches every Low Income and Disadvantage Community (LIDC). We achieve this by leveraging and partnering with the private sector investors in and with LIDCs to reduce GHG and air pollution at a rapid rate

Our work:

- Expand & strengthen the network of green banks & mission-driven finance institutions
- Prioritize investments in LIDC through the national green bank and community assistance partnerships

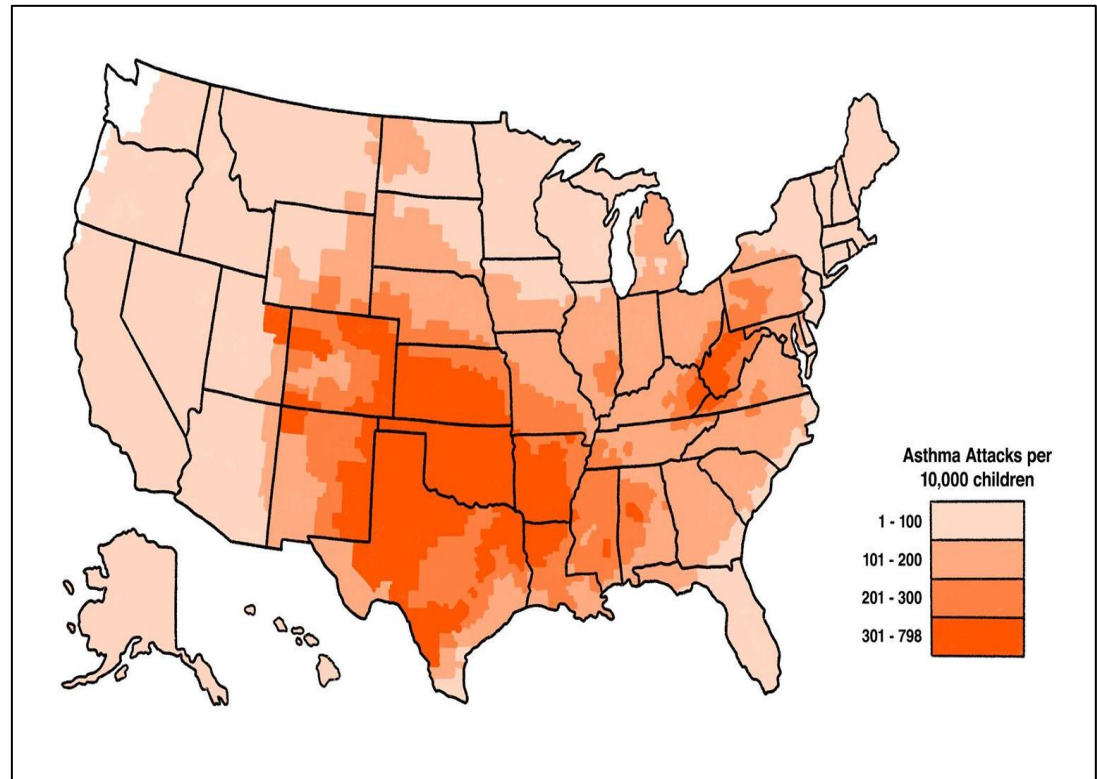


LIDCs must be centered in the clean energy transition

Example: Childhood Asthma

Prioritization for locations with:

- Energy/climate burden
- Emission intensity
- Fossil fuel plants
- Air quality
- High cancer rates
- Poor building quality



The Links Between Air Pollution and Childhood Asthma

Researchers have long linked asthma— a serious and life threatening chronic respiratory disease that affects the quality of life of more than 23 million Americans— with exposure to air pollution. Air pollution can make asthma symptoms worse and trigger asthma attacks. The estimated six million children in the United States with asthma are especially vulnerable to air pollution.

Child asthma cases linked to cities' dirty air

Researchers from George Washington University in the US say it is the first study to estimate the global burden of asthma cases in children resulting from NO₂ emissions in more than 13,000 cities.

<https://www.scidev.net/global/news/child-asthma-cases-linked-to-cities-dirty-air/>

<https://www.epa.gov/sciencematters/links-between-air-pollution-and-childhood-asthma>

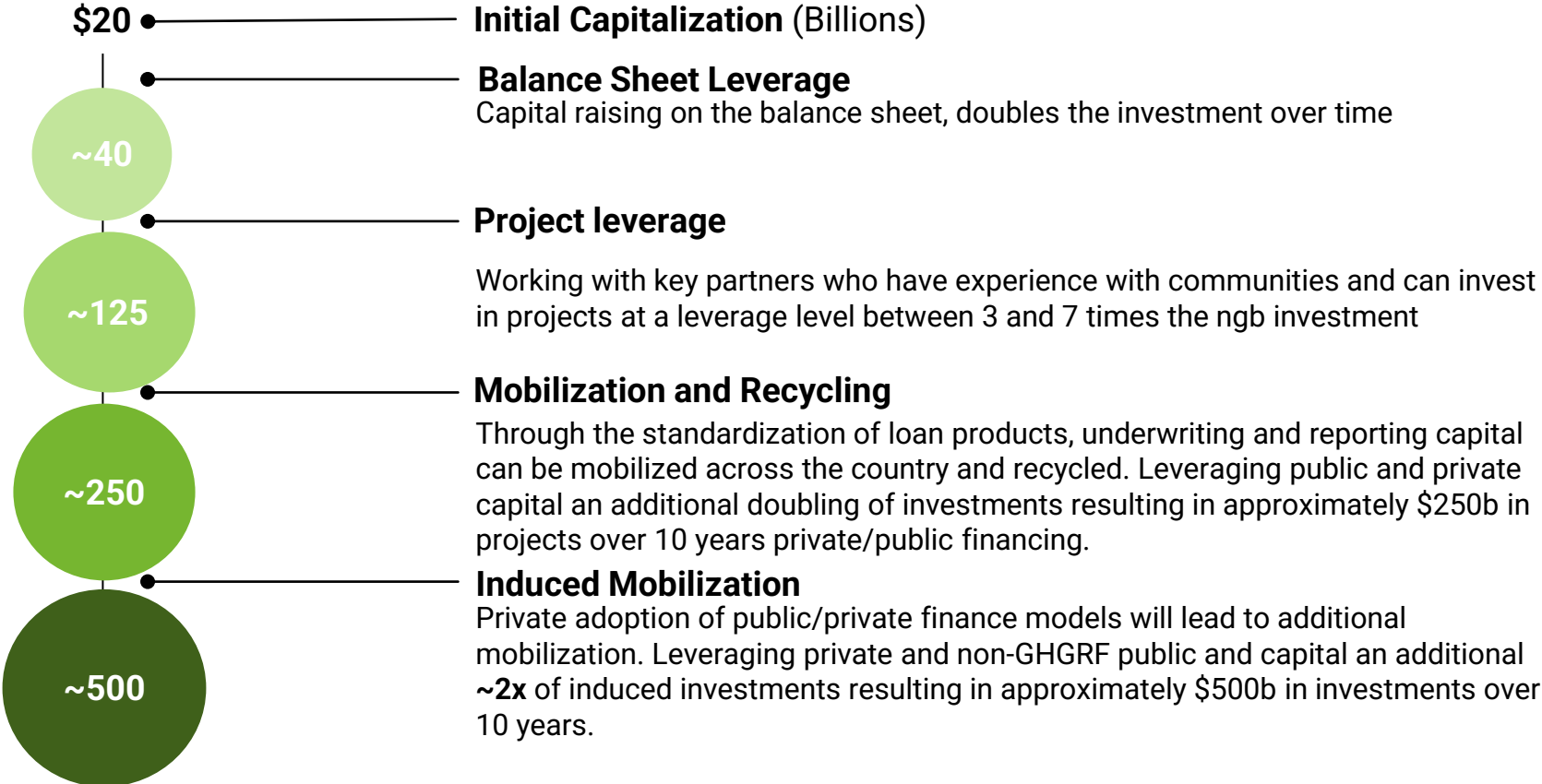
Green Banks perform a wide range of activities that provide additionality to the clean energy market

Barrier to Investment	Green Bank Solution	Examples
Perceived project risk	Credit enhancement	Provide a loan loss reserve can mitigate risk and allow investment to flow at longer term of lower rate
Inefficiencies of scale	Aggregation & warehousing	Aggregate small projects to meet scale to attract private capital
First-of-kind transaction	Technical assistance	Put in technical legwork that comes with closing more labor-intensive innovative transactions
Marginal economics	Co-investment	Lend to project, in senior or junior position, to improve overall economics for investors and customers

“To reduce or avoid greenhouse gas emissions or other forms of air pollution”

Assume equal investment in	GHG emissions/pollution reduction
Heat pumps	Low
Distributed storage	Low
Distributed solar	Medium
Community solar	Medium/High
Building retrofits	Medium/High
Transmission	High
Transportation electrification	Higher
Accelerated fossil conversion	Very High

Initial capital, illustrative leverage, and mobilization



How we want to partner with you

- Partners will provide a schedule showing their intended use of ngb funds over a five-year period, expected private sector participation, expected GHG reduction results, and target markets.

Type of Capital	Terms
Operating Grant	\$10 million or 10% of the total of scheduled investments spread over 5 years (whichever is greater, up to \$100 million)
Loan Capital	Term: 15 years Rate: 2%
Equity-like Instruments	Equity as needed to enable partner to fulfil investment schedule

Green Banks + CDFIs = LIDC centered clean power platform

- Green Banks and CDFIs have synergistic relationships
- For example, Connecticut Green Bank, Amalgamated Banks, and Capital for Change (CDFI) partnered to finance energy efficiency improvements for homeowners. This partnership has resulted in more than \$100 million in energy improvements
- Green Banks are purposed-built organizations to address greenhouse gas emissions. They provide a skill set that can support CDFI's expertise in community lending.
- ngb will expand existing partnerships and create new partnerships to ensure that LIDCs receive investment and health benefits from reduced emissions

MAY 8, 2020

Financial partnership expands energy-efficiency loan pool for Connecticut homeowners

Capital for Change, Amalgamated Bank, Connecticut Green Bank team up to boost successful loan program

WALLINGFORD, Conn. (May 8, 2020) – An innovative collaboration among three financial entities has set the stage for more Connecticut homeowners to gain access to energy-efficiency loans while reducing costs up to 20 percent for many utility ratepayers.

The collaboration is among Capital for Change Inc., Connecticut's largest full-service, nonprofit community development financial institution; Amalgamated Bank; and the Connecticut Green Bank.

"This new financial model is one of the few – if not the only – such arrangements in the United States helping to boost the growth of unsecured loans supporting consumer energy-efficiency and solar loans," said Bert Hunter, Chief Investment Officer and Executive Vice President at the Green Bank.

"The model has proven to be a unique means of maximizing the leverage of ratepayer capital in achieving the state's energy goals," Hunter said.

"We're deeply pleased to participate in what we believe is a new financial model for positive community development," said Calvin B. Vinal, President and CEO of Capital for Change Inc., Connecticut's largest full-service, nonprofit community development financial institution.

"This will allow us to make more funds available for energy-efficient and solar housing improvements in Connecticut," Vinal said. "Participating

Green Banks + State Authorities = LIDC centered clean power platform

- State Authorities are expanding into green bank related programs and services
- For example, the Illinois Finance Authority manages the state's Climate Bank
- Several states have expanded the authority of agencies to participate in green bank like lending. These structures allow for an increase in the leverage of public-private partnerships
- State Authorities can also participate in direct and indirect lending

Illinois takes bold climate action Office of Governor
JB Pritzker

Illinois' new clean energy law puts consumers and climate first

With Governor Pritzker's signature, Illinois is the first state in the Midwest to set an aggressive timetable for reaching 100% renewable energy by 2050. This historic new law will make investments in the green energy economy, while providing a just transition for those impacted by the shift to clean energy. This landmark climate law is backed by environmental advocates, labor leaders, grassroots groups, and renewable energy developers.

Here's how Illinois is taking bold action to combat the climate crisis and protect consumers:

DECARBONIZATION Phases out coal & natural gas by requiring emissions reductions — mandating zero emissions for private coal by 2030 and municipal coal and natural gas by 2045.	RENEWABLE ENERGY AND LABOR STANDARDS Puts Illinois on the path to 100% clean energy by 2050, doubles the state's investment in renewable energy, and enacts strong labor standards on renewable energy projects.	WORKFORCE DEVELOPMENT AND JUST TRANSITION Creates multiple new workforce development programs to prepare workers and support communities as we transition to a clean energy economy.
EQUITY Makes equitable investments in Illinois' new clean energy economy and advances environmental justice.	CONSUMER PROTECTIONS Protects consumers by eliminating customer deposits and late fees for low-income residents and online payment fees for all customers.	ETHICS AND ACCOUNTABILITY Creates strongest-ever ethics requirements and oversight for public utilities, state officials and state employees.
TRANSPORTATION Puts 1 million electric vehicles on the road by 2030, provides \$4,000 EV rebates for consumers and helps fund a statewide charging network.	ENERGY EFFICIENCY Extends energy efficiency goals until 2040 and establishes new program to reduce energy usage & phase out carbon in public schools.	FAIR RATEMAKING Ends unfair formula rates and transitions to a new performance-based system with more scrutiny by the ICC.

We want to partner with you!

- Mission driven lender looking to expand into sustainable finance?
- CDFI, development finance authority, credit union, or bank looking to partner with a growing network?
- Interested in developing and implementing a climate plan for the clean energy transition in your state, municipality, or tribe?
- Want to support the national green bank movement?

Connect with us at nenha@coalitionforgreencapital.com or follow our website www.coalitionforgreencapital.com and social media for updates.

Current Landscape of Public Incentives and Financing Options for Green & Sustainable Assets



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ATTORNEYS AT LAW

BIL AND IRA



Bipartisan Infrastructure Law = Grants

Inflation Reduction Act = Tax Credits, Rebates and Grants

Important Areas of Overlap:

Public Transit Improvements

Clean School Buses

Electric Vehicle Infrastructure

*** PW&AR = Prevailing Wage and Apprenticeship Requirements***

Public Transit and Commercial Vehicles



BIL has provisions for Public Transit and Clean School Buses
IRA has provisions for Clean Commercial Vehicles

- BIL provides funding to upgrade fleets of school buses
 - \$5 billion over five years from 2022 through 2026
 - 50% to zero-emission school buses
 - 50% to clean school buses
 - Up to 100% of purchase price
 - Replacement Buses
 - Charging/Fueling Infrastructure
- IRA has 2 different provisions (next slide)
 - Commercial Clean Vehicles
 - \$1 billion dollars to replace Type 6 and 7 Heavy Duty Commercial Vehicles

Energy Efficient Commercial Vehicles



- IRA Provisions:

- Qualified Commercial Clean Vehicles – §45W

- \$7,500 cap for vehicles **UNDER** 14,000 lbs

- \$40,000 cap for vehicles **OVER** 14,000 lbs

- Credit equals lesser of:

- 15% of purchase price if hybrid vehicles; 30% if fully alternative fueled vehicles

- The increased cost compared to a similar combustion vehicle i.e. the “incremental cost”

- \$1 billion dollars to replace Class 6 and 7 Heavy-Duty Commercial Vehicles

- Competitive grants and rebates available to be used for the incremental cost of replacement; costs for planning activities, along with the purchasing and operating of any necessary infrastructure; and workforce development

Electric Vehicles Infrastructure



Charging Stations

- **BIL:**
 - Clean School Bus program allows for payment of infrastructure costs
 - Created National Electric Vehicle Infrastructure Formula Program
- **IRA:**
 - §30C - 30% of cost of charging station infrastructure if PW&AR are met
 - Max: \$100,000 per station
 - Must be in low-income or rural area
 - Direct Payments eligible to tax-exempt entities (transferrable)
 - Infrastructure used for operating replaced Class 6 and 7 vehicles

Advanced Technology Vehicle Manufacturing Loan Program

- \$3 billion to Department of Energy
- Loans to incentivize and increase the domestic manufacturing of clean vehicles and vehicle components

Domestic Manufacturing Conversion Grants

- \$2 billion to Department of Energy
- Grants to fund the retooling of production lines to spur creation of more clean vehicles

Advanced Manufacturing Production Credit

- Meant to increase the domestic production and sale of components for clean energy projects
- Expands 5 years of direct payment to generally non-eligible entities if an election to receive the payments is properly made

Investment Tax Credit (ITC)



- Credit amount based on the upfront costs of a project
 - Reimbursable or Transferable
- Base Rate – 6% of costs; 5x increase to 30% if PW&AR are met
 - Additional incentives available to increase credit amount up to 70% of a project's costs
- Applies to solar projects, small wind projects, microgrid controllers, combined heat and power facilities, certain biogas property, and electrochromic glass (smart glass)
- Only available for projects beginning construction by December 31, 2024
 - Replaced by technology neutral, zero-emissions clean energy investment tax credit in 2025

Production Tax Credit (PTC)



- 10-year credit based on the amount of energy produced each year
 - Reimbursable or Transferable
- Base Rate: .005/kWh; increased 5x to .026/kWh if PW&AR are met
 - Incentives are available to increase credit amount by up to 20%
- Applies to facilities producing energy by means of solar, wind, qualified hydropower, and geothermal systems
- Only available for eligible projects beginning construction by December 31, 2024
 - Replaced by technology neutral, zero-emissions clean energy production tax credit in 2025

Prevailing Wage and Apprenticeship Requirements

- Prevailing Wage Requirements:
 - Must be in compliance with the terms of the Davis-Bacon Act
 - Applies to laborers and mechanics who work on the project, not clerical staff
 - Required during initial construction of project **PLUS** repairs and alterations during the credit period
- Apprenticeship Requirements:
 - Must Be in Compliance with:
 - Required Percentage of Labor Hours (12.5% in 2023; and 15% onward),
 - Ratio Requirements (as set by Department of Labor or a state agency), and
 - Participation Requirements (at least 1 apprentice for each subcontractor with 4 employees or more)

RECORD KEEPING IS EXTREMELY IMPORTANT TO ENSURE RECEIPT OF THE MAXIMUM AMOUNT OF CREDIT ELIGIBLE FOR A PROJECT

Projects Funded with Tax-Exempt Bonds



Example: \$100,000 Solar Farm seeking an ITC

- **No Tax-Exempt Funding Used:**
 - Does not meet PW&AR: **\$6,000**
 - Meets PW&AR: **\$30,000**
- **Maximum 15% Deduction to Amount of Eligible Credit** (project fully financed by tax-exempt bonds)
 - Does not meet PW&AR: **\$5,100**
 - Meets PW&AR: **\$25,500**
- **10% Deduction** (project partially financed by tax-exempt bonds)
 - Does not meet PW&AR: **\$5,400**
 - Meets PW&AR: **\$27,000**
- The maximum 15% deduction for funding projects via tax-exempt financing applies to the PTC and the forthcoming technology-neutral versions of the ITC and PTC that become effective on January 1, 2025

Bonus Incentives for ITC and PTC



- **Domestic Content (10%)**
 - All iron and steel used for project
 - Percentage of costs of manufactured materials for projects
 - 2022-2024 = 40%; 2025 = 45%; 2026 = 50%; 2027- on = 55%
 - Possible Exception - not required to meet if it would increase overall project costs by 25% or more
- **Low-Income Community (10-20%)**
 - The IRS has released initial guidance on how to qualify
- **Energy Community (10%)**
 - A brownfield site
 - area affected by unemployment greater than the national average and has had significant employment related to coal, oil, or natural gas
 - (i) a census tract containing a coal mine that has closed since December 31, 1999, (ii) a census tract containing a coal-fired electric generating unit that was retired after December 31, 2009, or (iii) a census tract that is adjacent to a tract described in (i) or (ii)

Direct Payments and Credit Transfers



- **Direct Payments – for tax-exempt entities**
 - Encourages ownership of clean energy projects by State and Local Governments, Non-Profits Organizations, and other Tax-Exempt Entities
 - File a return as directed by the Secretary of Treasury to receive eligible amount of credit
- **Credit Transfer – for taxpaying entities**
 - One time ability to transfer credit for cash
 - Must be to un-related taxpayer
 - Credit cannot be transferred again by the recipient
 - Payments received from the sale are not included in gross income
 - The credit buyer cannot deduct the price it paid for the credit from its gross income

Energy Efficient Commercial Buildings Deduction – §179D



- Tax deduction for energy efficient improvements that reduce the overall energy consumption
 - Improvement types – lighting, heating/cooling and ventilation systems, hot water systems, and building envelopes (roof, windows, exterior)
- Available for new construction and building renovations
 - Minimum energy consumption decrease of 25% required
- Base rate: \$0.50/sqft; base rate increases 5x to \$2.50/sqft if prevailing wage and apprenticeship requirements met
 - For every additional % decrease (from 25% to 50%), the credit rises by \$0.02/sqft (or \$0.10/sqft)
 - Cap: \$1/sqft or \$5/sqft
- If building is owned by tax-exempt entity, an agreement can be made to transfer the amount of the project's 179D deduction to the designer of the energy efficient system

Air Pollution at Ports



- \$3 billion dollars in rebates and competitive grants
 - Eligible entities: Port Authorities, governments with jurisdiction over a port, air pollution control agencies, and limited private entities
- Available until September 30, 2027
- Available for:
 - Development of action plans to address air pollution at ports
 - Purchase and installation of zero-emission equipment and technology for use at or to directly service one or more ports
 - Available to cover the costs of conducting relevant planning and permitting in connection with the purchase and installation AND for developing certain climate action plans

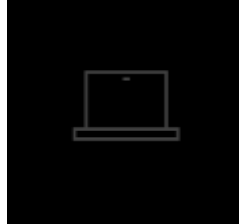
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Public Incentives & Financing Options

CDFA Webinar – March 07, 2023

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A MULTI-TRILLION DOLLAR PROBLEM



Buildings account for 40% of carbon emissions globally and as much as 70% in U.S. cities

Federal, State and Local Governments, to address this problem, are enacting policies that incentivize and/or mandate costly energy upgrades to buildings. These policies are amplifying a market need that already exists

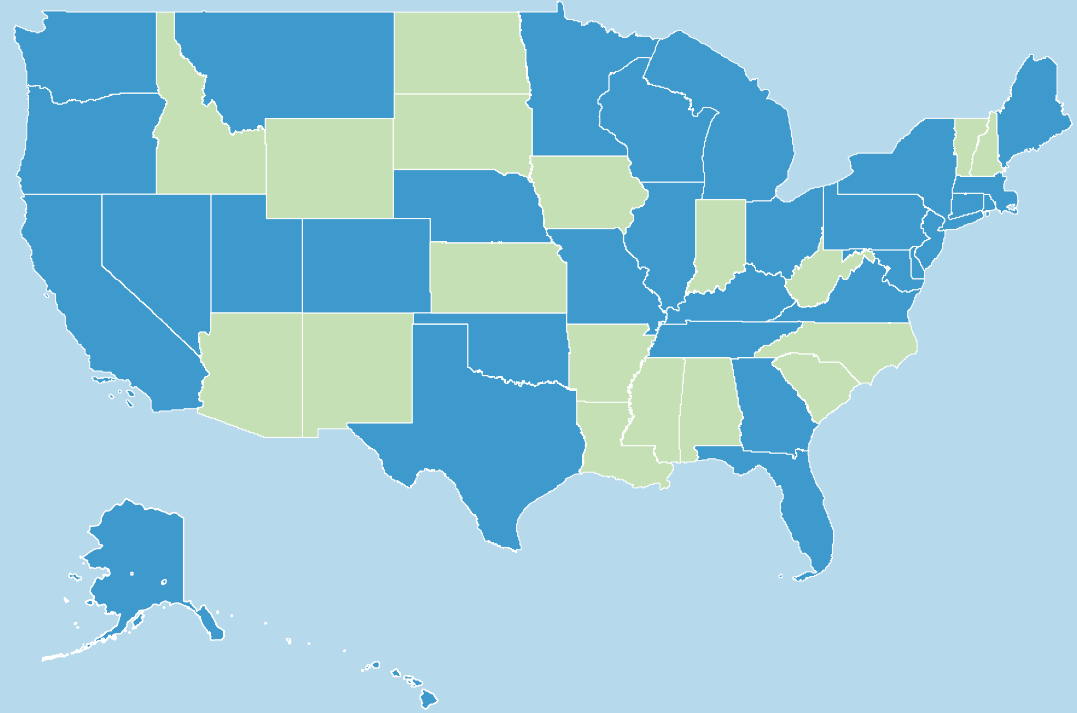
Building owners need access to technical assistance and long-term, no money down financing for necessary upgrades


FASTPACE

Our FASTPACE platform enables banks, credit unions and CDFIs to offer Commercial PACE (C-PACE) alongside their existing financial products, quickly and easily.

Allectrify Your Community

Allectrify Your Community is a service we offer to states and municipalities that provides technical assistance to building owners and community lenders to “activate the market” for energy upgrades in the small commercial sector.



FASTPACE 
by allectrify



INFLATION REDUCTION ACT (IRA)
& INFRASTRUCTURE INVESTMENT AND JOBS ACT (IIJA)

FEDERAL FUNDING OPPORTUNITIES

Program	Funding	IRA/IIJA	Sunset
Greenhouse Gas Reduction Fund 1 (Sec. 60103)	\$20B	IRA	2024
Greenhouse Gas Reduction Fund 2 (Sec. 60103)	\$7B	IRA	2024
Home Energy Performance-Based, Whole-House Rebates (HOMES) (Sec. 50121)	\$4.3B	IRA	2031
State-Based Home Energy Efficiency Contractor Training Grants (Sec. 50123)	\$200M	IRA	2031
High-Efficiency Electric Home Rebate Program (Sec. 50122)	\$4.5B	IRA	2031
25C Energy Efficient Home Improvement Tax Credit (Sec. 13301)	CBO: \$12.4B over 10 yrs	IRA	2032
45L New Energy Efficient Home Tax Credit (Sec. 13304)	CBO: \$2B over 10 yrs	IRA	2032
179D Energy Efficient Commercial Buildings Deduction (Sec. 13303)	CBO: \$362M over 10 yrs	IRA	None
Building Codes (Sec. 50131)	\$1B	IRA	2029
Weatherization Assistance Program (WAP)(Sec. 40551)	\$3.5B	IIJA	2022
State Energy Program (SEP) (Sec. 40109)	\$500M	IIJA	2026
Energy Efficiency and Conservation Block Grant Program (EECBG) (Sec. 40552)	\$550M	IIJA	2023
EE Revolving Loan Fund (RLF) Capitalization Grants (Sec. 40502)	\$250M	IIJA	2022
Smart Grid Investment Grant (SGIG) Program (Sec. 40107)	\$3B	IIJA	2026
Building Codes Implementation (Sec. 40514)	\$225M	IIJA	2022

Things to Keep In Mind

- **Funding opportunities are being announced on an ongoing basis**
 - Good to have an “off-the-shelf” proposal for key priorities related to clean energy deployment and decarbonization
- **Different programs have different rules & reporting requirements**
 - In general, federal funding used for technical assistance (as opposed to financing energy projects directly) has less onerous reporting requirements
 - Look out for Davis Bacon, American Iron and Steel, National Historic Preservation Act, etc.
- **Short timeline and understaffed federal agencies incentivize collaboration on competitive awards**
 - Collaboration is also possible (and encouraged) on formula awards like EECSBG



TWO COLLABORATIVE OPPORTUNITIES
TO ACCESS FEDERAL FUNDING

ENERGY UPGRADE ASSISTANCE & COMMUNITY LENDER ACCELERATOR

- **Technical assistance for owners and managers of small to medium sized commercial buildings (SMBs)**
 - Multifamily buildings, small businesses, healthcare and long-term care centers, charter schools
- **Technical assistance for community lenders so they can offer long-term financing for mandatory energy upgrades**
 - Community banks, credit unions, CDFIS
- **Benefits**
 - Sustainable pipeline of energy improvement projects, which leads to:
 - Emissions reductions at scale
 - Sustainable job creation
 - Wealth-creation opportunities for women, veteran and minority owned businesses
- **Sources of Funding**
 - Numerous, including EECBG

ZERO EMISSIONS TECHNOLOGY ACCELERATOR

- Emerging coalition of States, Municipalities, Tribal Governments and “eligible entities” interested in coordinating to pursue federal funding.
 - \$7B US EPA Zero Emissions Technologies Competition
- Focus on buildings, including residential and the “missing middle” of small and medium-sized commercial, multifamily and community buildings
 - Emphasis on solar PV, storage, heat pumps, and zero-emissions heating and cooling

QUESTIONS

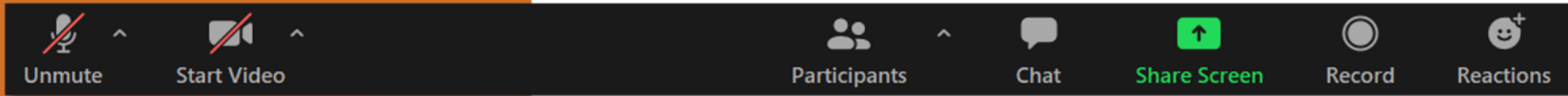
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CDFA Tribal Finance Webinar Series: Tribal Community-Driven Economic Development Solutions

March 14, 2023 | 2:00 PM - 3:30 PM Eastern

CDFA // BNY Mellon Development Finance Webcast Series: Exploring 501(c)(3) Bond Finance for Nonprofit Organizations

March 21, 2023 | 2:00 PM - 3:00 PM Eastern

CDFA Federal Policy Conference

April 11-12, 2023 | Washington, DC

Contact Us



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