



## CDFA-Bricker Webinar Series: Green Financing 101

**Thank you**

for joining the conversation today. Send us your questions and comments!

# Welcome

The Broadcast will begin at 2:00 PM (Eastern)



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## **Ariel Miller**

Director, Research & Technical Assistance  
Council of Development Finance Agencies

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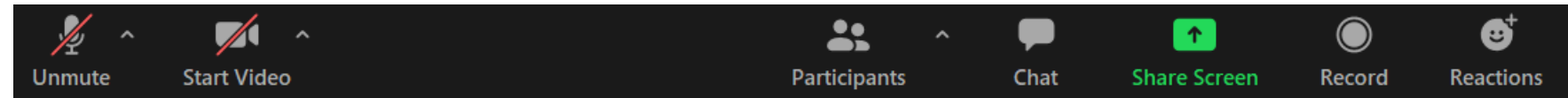
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Submit your questions to CDFA staff



# CDFA-Bricker Webinar Series: Green Financing 101

## Moderator



### **Caleb Bell**

Partner  
Bricker & Eckler LLP

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# Green Financing 101

February 1, 2022

**John Caleb Bell**

*Partner*

Bricker & Eckler



**Bricker & Eckler**  
ATTORNEYS AT LAW

# 2022 CDFA-Bricker Webinar Series

A banner for the CDFA-Bricker Webinar Series. On the left is the CDFA logo (Council of Development Finance Agencies) and the Bricker & Eckler logo. The main text reads "CDFA-Bricker Webinar Series: Financing Green & Sustainable Assets" in blue, with "2-4 PM EST" in orange to the right. Below the main text is an orange bar with the dates "Feb 01 | May 03 | Jul 26 | Sep 27 | Nov 22" in white. On the right side of the banner is a photograph of solar panels under a blue sky with clouds.

 **CDFA**  
Council of  
Development  
Finance  
Agencies

**CDFA-Bricker Webinar Series:**  
**Financing Green & Sustainable Assets**

**2-4 PM EST**

**Feb 01 | May 03 | Jul 26 | Sep 27 | Nov 22**

 **Bricker & Eckler**  
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- Green Financing 101
- Organizing PACE Programs
- PACE and Traditional Lending Institutions
- Solar Projects: Power Siting and Tax Abatements
- Democratization of Power: Power Purchase Agreements and Municipal Utilities

## John Caleb Bell



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# CDFA-Bricker Webinar Series: Green Financing 101

## Panelists



**Abe Wapner**  
Program Director  
Coalition for Green Capital



**Kerry O'Neill**  
CEO  
Inclusive Prosperity Capital, Inc.



**Gwen Yamamoto Lau**  
Executive Director  
Hawaii Green Infrastructure Authority

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**Coalition for  
Green Capital**

# Green Financing 101

February 2022

# CGC is leading expert on green bank model, working for decade to drive clean energy investment

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- CGC, a non-profit, partners with governments, NGOs and market actors to create green banks that scale clean energy investment
- CGC delivers on-the-ground technical expertise to design, launch and operate green banks
- Helped design & create multiple green banks, which have catalyzed over \$5 billion in clean energy investment
- CEO Reed Hundt, former chairman of U.S. FCC
- Supported by major global foundations

# Agenda

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- What is a Green Bank?
- Green Bank Products and Partners
- Capitalization and the Federal Opportunity
- Green Bank Creation Strategies



# The green bank movement began with the Waxman-Markey legislation to increase clean energy investment

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- The term “green bank” emerged in 2009 in the context of the Waxman-Markey federal cap-and-trade legislation.
- Key concepts introduced in the legislation defined the purpose of a green bank as:
  - **Leveraging** private financing to increase deployment of capital to clean energy/energy efficiency projects.
  - **Financing** projects in the form of loans, loan guarantees, debt, and other forms of support.
  - **Teaching the market** by creating consistent and transparent underwriting standards, contract terms, measurement protocols and performance data.
  - **Supporting state and national objectives** by increasing overall financing for qualified clean energy and energy efficiency projects and achieving energy independence from foreign energy sources.
  - **Supporting economic objectives** by creating jobs through the construction and operation of clean energy and energy efficiency projects, and by fostering long-term domestic manufacturing capacity in the clean energy and energy efficiency industries.



## What is a Green Bank?

A green bank uses public capital to mobilize more private investment into underserved green and resilient financing markets to fill market gaps. Green banks have the ultimate goal of enabling private capital partners to enter clean energy markets at scale without green bank assistance.

# Since 2009, green banks have refined their mission and approach to match state and local needs

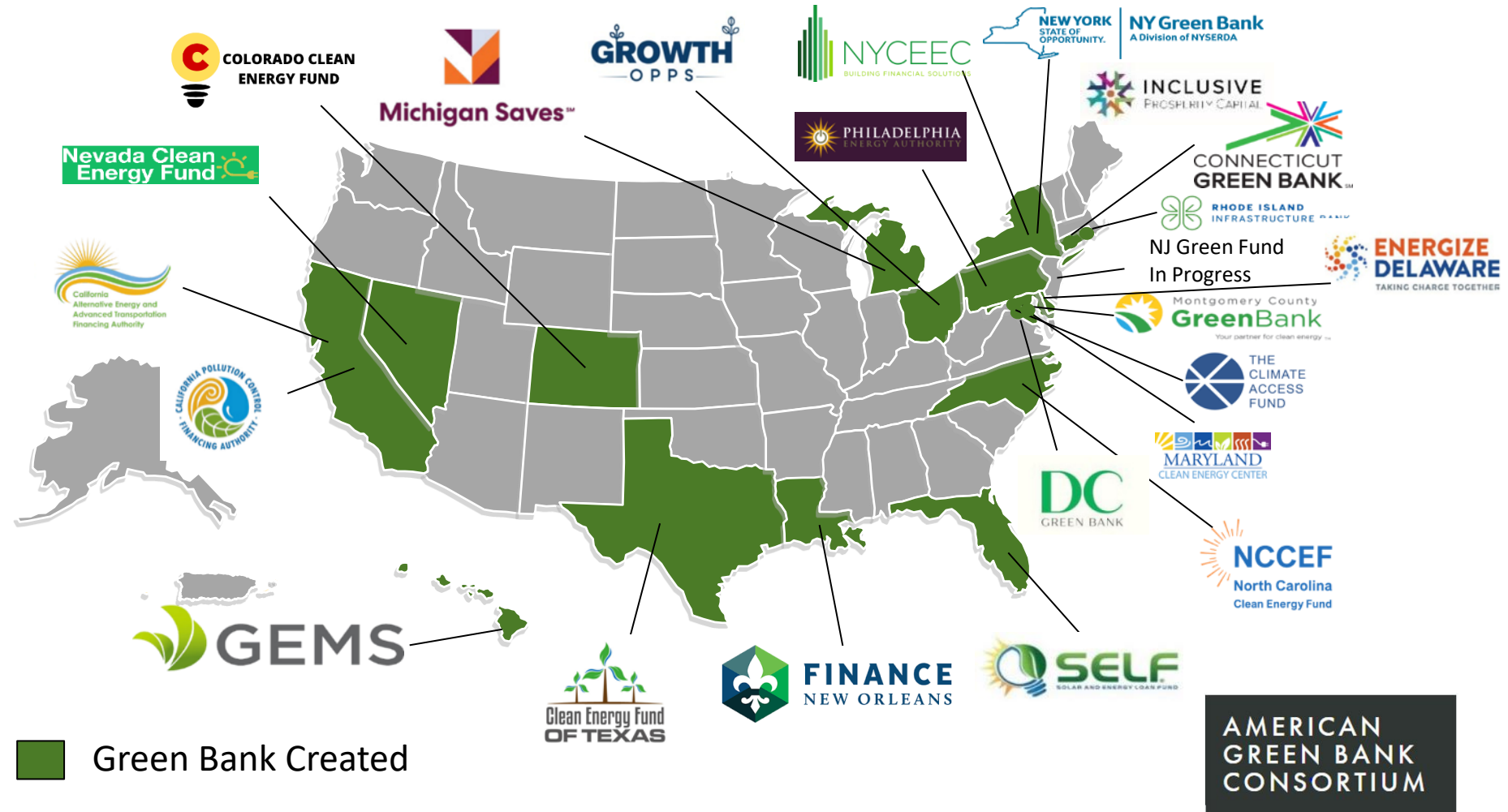
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- In the wake of the failure of federal climate legislation in 2010, green bank activity shifted to the state and local level.
- As they have developed over the past decade, state and local green banks modified the concepts first introduced in 2009 to fit their market, and policy goals, with the capital available.
- Within this diversity, some core features of green banks are still apparent. In CGC's view, core features of green banks are:
  - **A focus on clean energy:** While green banks may have secondary goals, a primary goal of each is the rapid deployment of clean energy assets and climate change mitigation.
  - **Method:** Green banks primarily pursue their missions with financing tools.
  - **Institutional character:** Green banks are distinct from typical clean energy financing programs. Institutions do not have an expiration date.
  - **Mission-driven:** While using the tools of finance, green banks focus on the achievement of their mission over profit maximization.

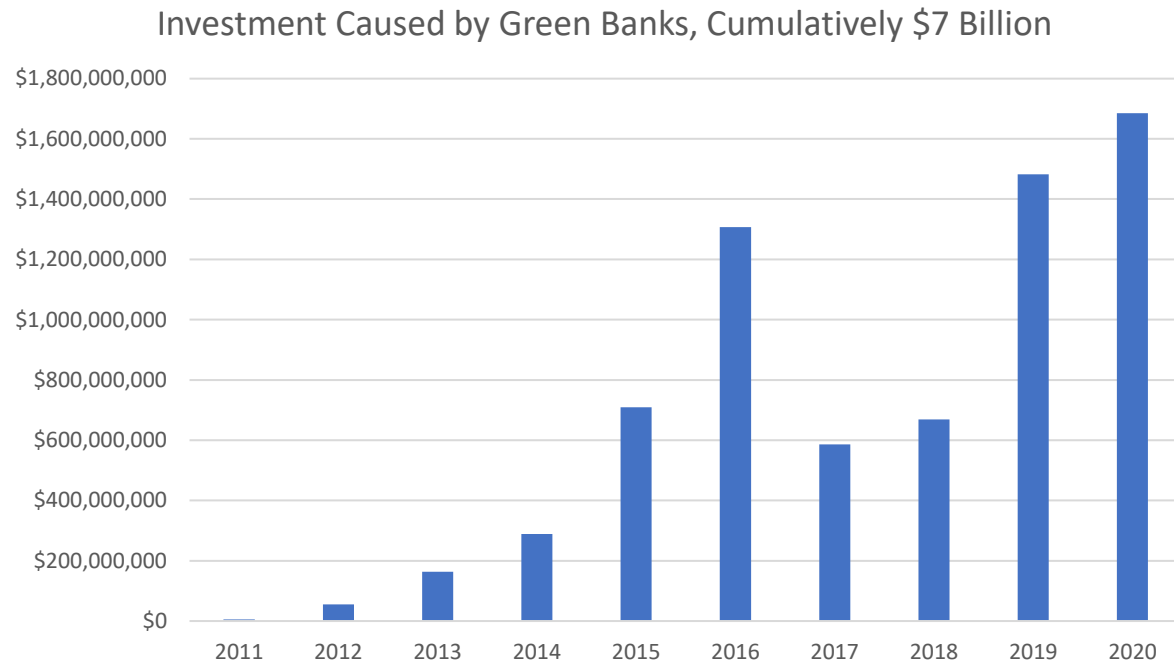
# How are green banks different from clean energy financing programs? They are long-standing and adaptable

Characteristics	Financing Program	Financing Institution
<b>Product development</b>	Products in a program are defined upfront and remain constant.	Products in an institution are defined over time and shift with market demand.
<b>Underwriting terms</b>	Programs use standardized underwriting terms.	Institutions' underwriting terms can be responsive to individual transactions.
<b>Definition of success</b>	Program success is defined based on program reach.	Institutional success is defined based on overall market growth (across technologies and market segments).
<b>Use of capital</b>	Programs seek to deploy allocated capital.	Institutions seek to grow capital.
<b>Duration</b>	Programs are time-limited based on capital available and capital deployed.	Institutions are enduring with no time limit or expiration date.

There are currently 22 green banks spread across 16 states (plus Washington, DC), with more in progress



# Green banks have mobilized over \$7 billion in investment, with majority coming from the private sector



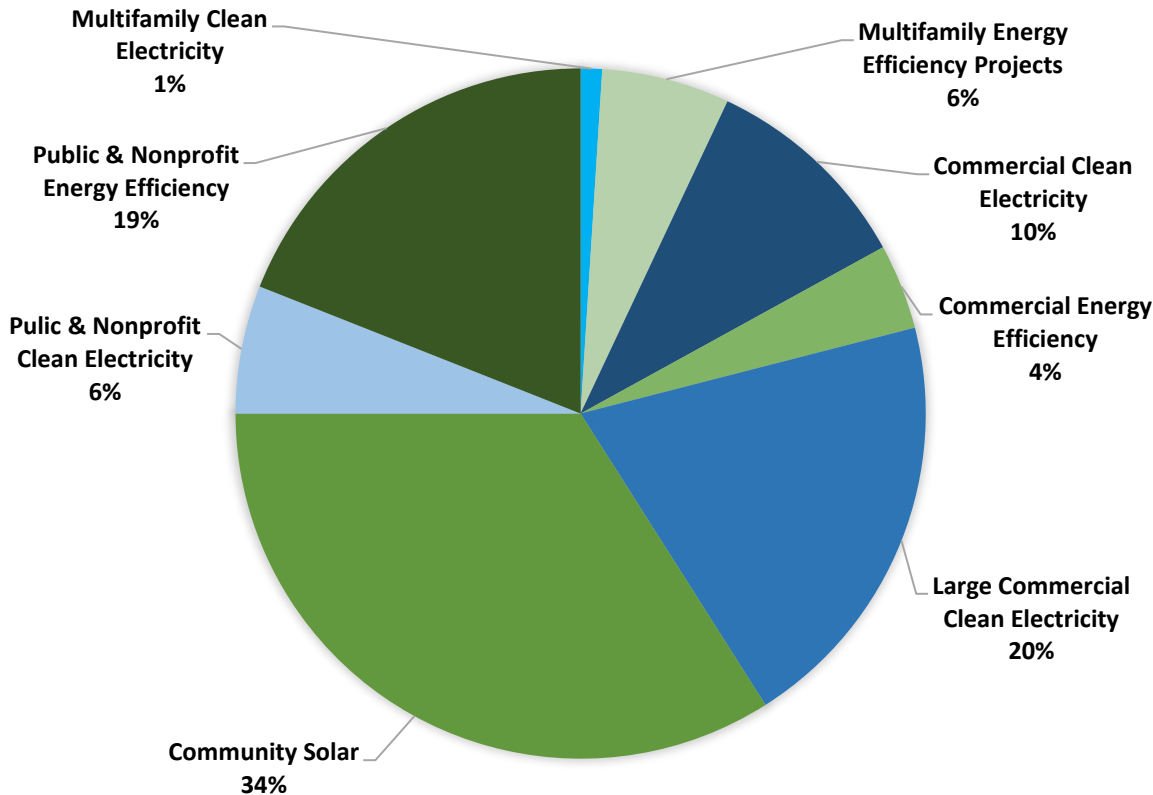
- Despite challenges during the COVID pandemic, demand for green bank services have increased through 2020, tracking the expansion of new green banks.
- This surge in demand is reflected in the fact that green banks caused a record \$1.64 billion in total investment in 2020. This is due to an increase in the number of green banks, and increased investment flows with them.
- 2016 brought with it a fear of tax credits expiring, which decreased some investment in 2017.
- The dip in investment in 2017-2018 was also due to the uncertainty created by the fiscal crisis in Connecticut, leading to the Connecticut Green Banks' balance sheet being reclaimed for other state budget allocations. (The green bank had planned for a certain amount of budget allocations which never materialized).

<b>Total Investment Caused</b>	<b>\$7.0 b</b>
<b>Total Green Bank Investment</b>	<b>\$1.9 b</b>
<b>Total Private Co-investment</b>	<b>\$5.1 b</b>
<b>Mobilization Ratio (Overall Project Investment/Green Bank Investment)</b>	<b>3.7</b>



# Green bank investment has historically focused on solar and energy efficiency

**GREEN BANK INVESTMENT ACROSS \$675M OF PUBLICLY PROFILED PROJECTS, 2019**



Over the last decade, green banks have primarily focused on similar markets across geographies:

- Energy efficiency projects, ranging from multifamily to small and medium public and nonprofit institutions including schools.
- Solar, including:
  - Rooftop solar
  - Community solar
  - Utility-scale solar

# Green banks measure impact differently, but historically focused on GHG reductions and private leverage

Green Bank	Key Metrics	
<b>Connecticut Green Bank</b>	Capital multiplier, greenhouse gas reductions, energy saving, economic development, health impacts	<ul style="list-style-type: none"> <li>Green banks measure impact in different ways, depending on their primary and secondary goals.</li> <li>Most common impact metrics include financial and environmental measurements.</li> <li>While some green banks consider economic development a secondary goal, few use it as the primary metric guidance investment decisions.</li> </ul>
<b>Montgomery County Green Bank</b>	Capital multiplier, greenhouse gas reductions, economic development, community benefits	
<b>NYCEEC</b>	Capital multiplier, greenhouse gas reductions, energy savings, economic development, affordable housing	
<b>NY Green Bank</b>	Capital multiplier, greenhouse gas reductions, energy savings, energy generation	
<b>The Atmospheric Fund*</b>	Greenhouse gas reductions, environmental impacts	

\* The Atmospheric Fund is located in Toronto  
 Source: C40 Cities Establishing a City Green Bank report, 2021

## Green Bank Trend: Environmental Justice & Equity

# Green banks increasingly emphasizing equity outcomes

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### *Select Green Bank Mission Statements (2021)*



Our mission is to confront climate change and **provide all of society** a healthier and more prosperous future by increasing and accelerating the flow of private capital into markets that energize the green economy.



Energy efficiency and clean energy financing for buildings to achieve scale and **be accessible to all.**



To **rebuild and empower underserved communities** by providing access to affordable and innovative financing for sustainable property improvements...We strive to **create positive social, economic, and environmental impacts** by helping people improve the health, safety, and quality of life in their homes while reducing operating costs and greenhouse gas emissions.



We invest in clean energy and resilience in partnership with local initiatives and organizations to provide **energy security, climate justice, and economic growth.**

## Green Bank Trend: Environmental Justice & Equity

# Focus on equity is driving new types of transactions at existing green banks

### Example: NY Green Bank

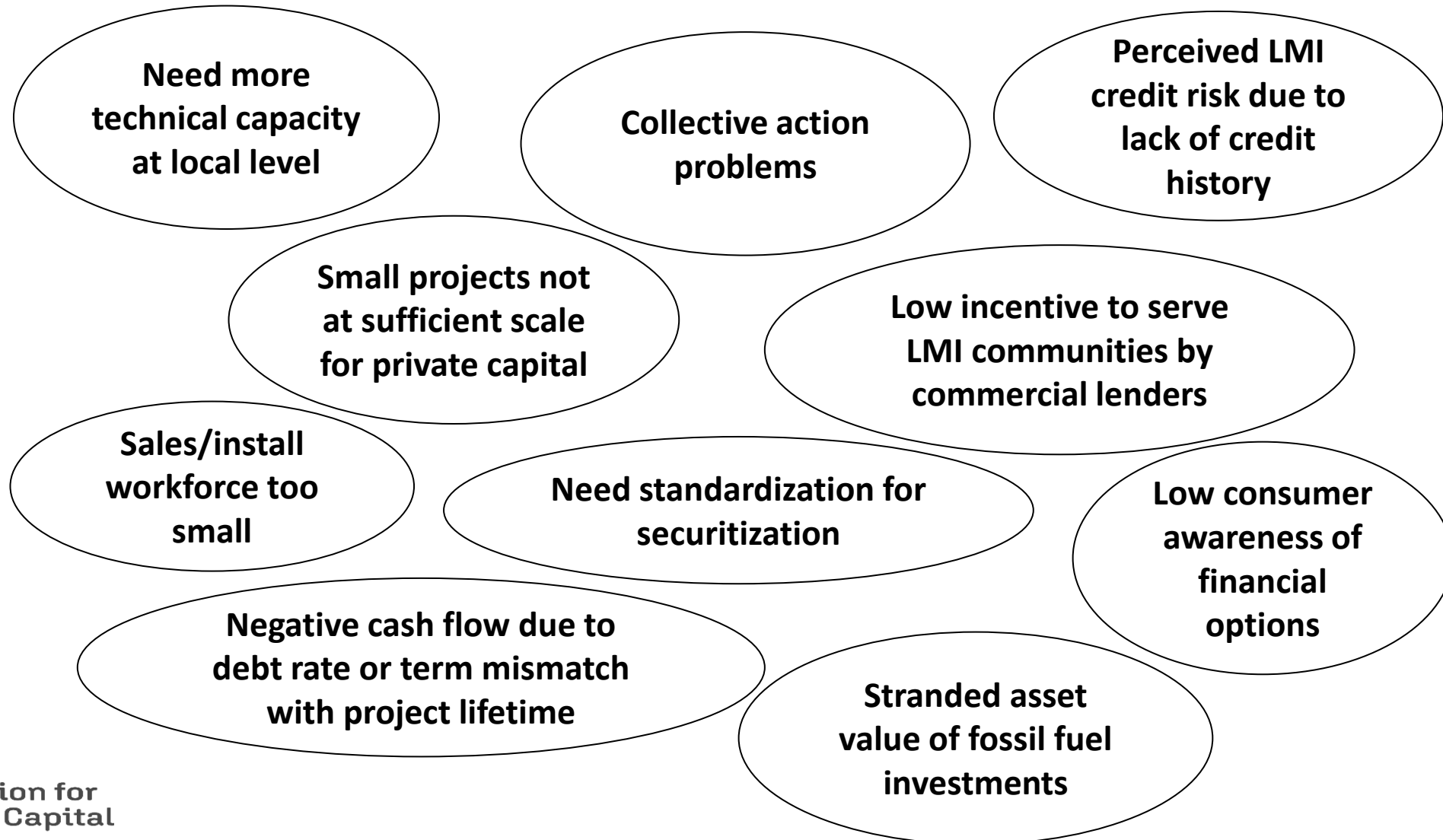
- In its '21-'22 Annual Report, NY Green Bank announced that it has “begun to focus on other areas experiencing financing barriers,” with special reference to financing sustainable infrastructure in “Disadvantaged Communities.”
- In March 2021, NY Green Bank provided a \$500,000 subordinated, multi-draw construction-to-term facility to Workforce Housing Group, who will construct solar installations on 18 affordable housing buildings in Brooklyn, NY that will benefit low- and moderate-income New Yorkers and their communities. The NY Green Bank is providing a construction loan for installation, and the bill savings from the solar installation will pay for free high speed wi-fi for residents. This transaction is part of NY Green Bank’s commitment to deploy \$150 million in affordable housing projects by 2025.
- This transaction develops a scalable, replicable financing structure that capital providers can use to (i) underwrite renewable energy installation at affordable housing properties and (ii) develop a track record for impact-oriented institutional investment in clean energy. NY Green Bank’s participation in this transaction should help demonstrate the feasibility and attractiveness of such investment opportunities and will ultimately help stimulate greater amounts of private sector lending in this market segment.



*Solar panels will be installed on 18 buildings and the savings will pay for WiFi for 240 apartments across Brooklyn. Renderings via Helioscope Solar Designs.*

# Why are green banks necessary? Business and capital barriers to market penetration of proven technologies

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# Green banks knock down barriers for faster and cheaper private market growth with equitable deployment

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## Finance Strategies

- Debt to make project work for investors & consumers (lower rates, longer terms)
- Alternative underwriting criteria to address households with limited credit history
- Credit enhancements to mitigate risk and induce private investment
- Standardize, aggregate & warehouse small projects to access capital markets
- Predevelopment and development capital to lower cost and increase speed of project construction
- Directly finance first-of-kind transactions to lead by example

## Market Creation Strategies






- Standardization of products to enable speed, aggregation and securitization
- Act as first mover to spark deals that require collective action
- Partner with utilities to use non-debt based financing structures to not overburden households with more debt
- Partner with businesses to create and train massive new sales and installation workforce
- Employ innovative structures like C-PACE and on-bill financing products to expand access

# Common green bank products



Product Type	Definition	Green Bank Market Outcome
Credit enhancement	A credit enhancement is anything that improves the chances that financing will be repaid. (e.g. a loan loss reserve)	Encourages lenders and investors to put money into unfamiliar markets, products, or customer segments.
Aggregation & securitization	Aggregation is a strategy used to bundle small- and medium-sized individual projects to a sufficient size so that the task of evaluating the transaction and documenting the arrangements can be cost effective. Securitization allows cash flows (e.g. solar leases) to be transformed into a standardized, tradable asset.	Individual small- and medium-sized projects can be complex to underwrite and originate, and the cost of those activities can be high compared with the small size of the deals. Aggregation facilitates more efficient financing and re-capitalization for further investment. This tool also demonstrates confidence in these assets from the market.
Bridge lending	Bridge lending is a type of gap financing arrangement wherein the borrower can get access to short-term loans for meeting short-term liquidity requirements.	Enables growth of clean energy contractors by minimizing cash flow barriers.
Revolving loan facility	A revolving loan facility is a form of credit issued by a financial institution that provides the borrower with the ability to draw down or withdraw, repay, and withdraw again.	Revolving credit allows borrowers flexible repayments time horizons, supporting the development and expansion of local clean energy contractors.
Market development (grant based)	Market development is a growth strategy that grows demand for clean energy products by increasing education and access.	Increased technical knowledge for local clean energy businesses, consumers, and other market participants.

Source: Definitions for common financial products drawn from Investopedia, supplemented with relevant green bank application

# Common green bank product transaction examples

Product Type	Example Transaction
Credit enhancement	 <p>California (CAEATFA)</p> <p>In 2019, CAEATFA enrolled over 270 home energy efficiency projects and supported \$4.65 million in private capital financing with \$750,000 in credit enhancement. 55% of these projects were in low-income census tracts.</p>
Aggregation & securitization	 <p>Over the course of 2014 and 2015 the CTGB sold an initial C-PACE loan portfolio comprised of 32 energy efficiency and solar PV projects across a dozen municipalities valued at \$30 million to Clean Fund, a Green Bank-approved capital provider for the C-PACE program.</p>
Bridge lending	 <p>In 2021, NY Green Bank provided a \$10M bridge loan to Amp Solar Group to finance interconnection advance deposits, supporting up to 63MW of solar in the state.</p>
Revolving loan facility	 <p>In 2020 Michigan Saves launched a low-to-moderate income (LMI) revolving loan and grant pilot program in partnership with DTE Energy. The combination of a small loan and grant allows LMI customers in DTE's service territory to make energy efficiency improvements that will be paid for by utility savings, with no cash outlay from the customer.</p>
Grants and market development	 <p>In 2020 Energize Delaware was selected to be the grant management agency for the new Empowerment Grant Program (EGP). The EGP monies will be awarded to organizations proposing innovative ways to provide improved efficiency, reliability, and energy saving programs that directly benefit LMI Delmarva Power customers.</p>

# Green bank financial partners and their roles

Investor Type	Example Investor	Transaction Example
<p>Large Commercial Bank</p>	 <p>BANK OF AMERICA</p>	<p>In 2021 Bank of America participated in the largest-ever securitization for a U.S. green bank. The New York Green Bank raised \$314 million in proceeds from Bank of America through this transaction to continue delivering on its mission to address clean energy market financing gaps.</p>
<p>CDFI</p>	 <p>CAPITAL FOR CHANGE</p>	<p>In March 2020, the Connecticut Green Bank and Inclusive Prosperity Capital, Inc. agreed to lend \$7.7 million to Capital for Change (C4C), a Connecticut Community Development Financial Institution in Connecticut</p> <p>In March 2020, the Connecticut Green Bank and Inclusive Prosperity Capital, Inc. agreed to lend \$7.7 million to Capital for Change (C4C), a Connecticut Community Development Financial Institution. C4C has long partnered with the Connecticut Green Bank in the administration of programs and sought the Green Bank’s expertise to source capital to continue to operate as a lender for the energy efficiency fund, the Green Bank’s Smart-E program, and its LIME loan program for multifamily properties.</p>

# How green banks are capitalized: sources and methods

## National Climate Bank

- Federal Legislation creating a National Climate Bank

- Resilience Funds

- Decarbonization Funds

- If the state joins the Regional Greenhouse Gas Initiative (RGGI) and uses auction proceeds to capitalize the Green Bank

## State Funding

- If the state mandates a carbon tax and some portion is used for the Green Bank

- General Funds

- Budget appropriations

- Issuance of a state Green Bond

## Foundations

- Grants

- Program-related investments

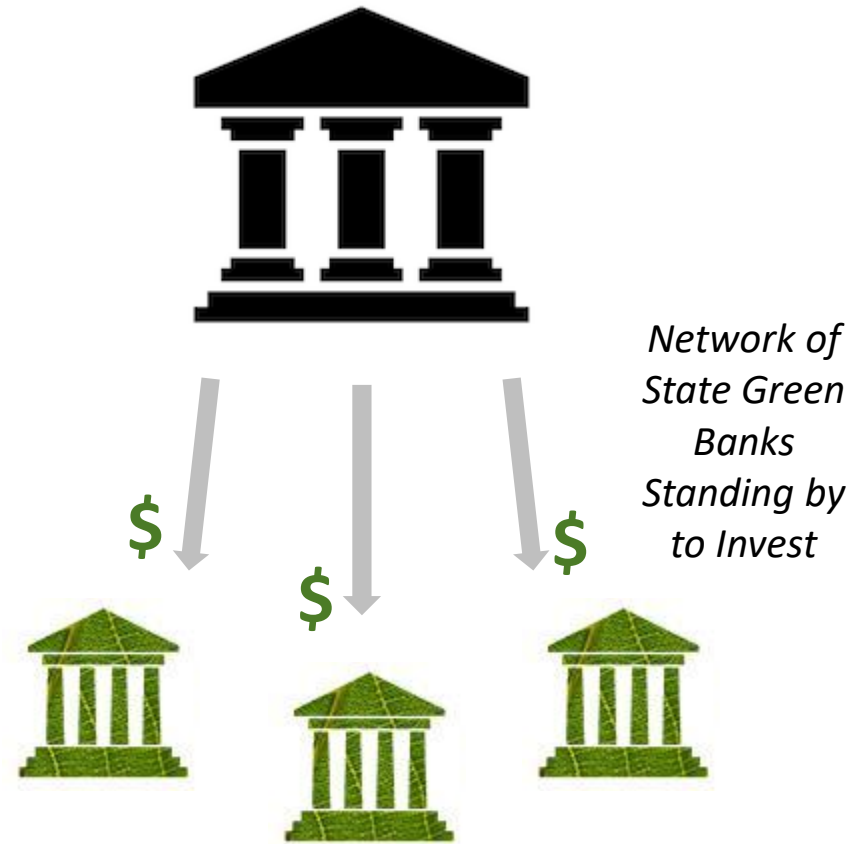
# Biden Administration/House/Senate support national green bank to accelerate sustainable investment

**Climate Package includes \$20 billion for a national climate bank**

- Part of EPA's Greenhouse Gas Reduction Fund
- Will provide capital and technical assistance to a network of state and local green banks to accelerate investment using the green bank model

**Green bank investment can support state and local climate goals**

## Clean Energy and Sustainability Accelerator

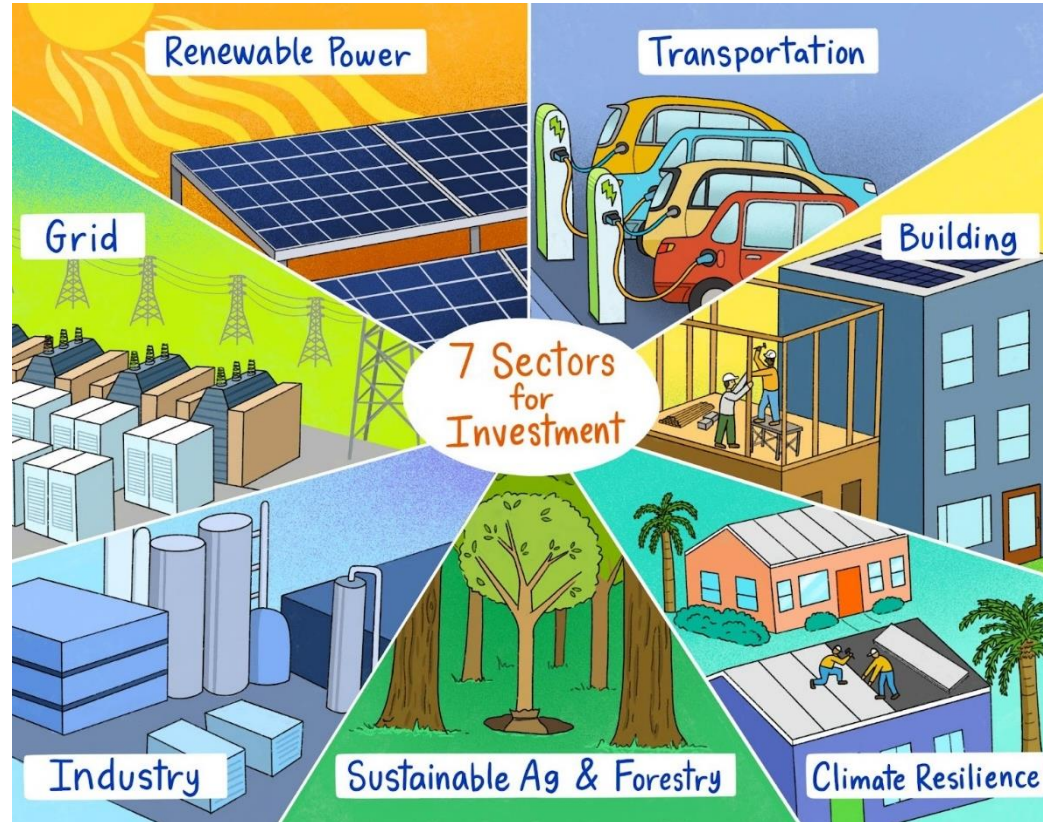




# State-level preparations for federal funding

- State-level allocations from the Accelerator and lending terms are not specified in legislation. However, it will require well-resourced state level green banks in order to receive and deploy large amounts of funds.
- The Accelerator will want to move quickly, with a focus on equity and rapid decarbonization.
  - State-level green banks will need to be prepared to demonstrate their ability to engage “climate-impacted” disadvantaged communities.
- The Accelerator’s legislation defines 7 sectors for investment. State-level green banks should be prepared to demonstrate effective products to be deployed in: renewable power, transportation, building, climate resilience, sustainable agriculture & forestry, industry, and the grid.

## Approved Sectors for Accelerator investment





40% of investment made in disadvantaged communities to create jobs & businesses, lower energy costs

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**As non-profit, Accelerator has unique abilities to target investment for disadvantaged communities**



*Targeted Investment in Disadvantaged, Frontline Through State & Local Partners*



*Create Jobs*



*New Businesses*



*Lower Household Energy Burden*



*Improved Public Health*







# Green bank pathways and strategies for creation






Pathway	Level of Capitalization	Method
<b>Bootstrap Model</b>	• \$1–3 million	Seed funding used to design and implement at most one financial product which the Green Bank can use as proof of concept to then start raising additional capitalization funds in future years.
<b>Lean and Mean Model</b>	• \$10–50 million	Capital used to stand up a Green Bank and roll out one or two programs. As the Green Bank grows, additional capital can be added through foundations, government action, or balance sheet borrowing.
<b>Transformation Model</b>	• \$100 million and more	This level of capitalization would allow the Green Bank to launch multiple financial products in order to transition the state's energy economy to clean energy and recover from COVID-19 through job creation, and safer, more reliable, more resilient, and more equitable energy sources.

# The largest green banks are public or quasi-public entities

## LARGEST GREEN BANKS IN THE U.S.

Green Bank	Year Founded	Form	Initial Capital
 <p>NEW YORK STATE OF OPPORTUNITY. NY Green Bank A Division of NYSERDA</p>	2013	Public	\$1B upfront in ratepayer funds
 <p>CONNECTICUT GREEN BANK</p>	2011	Quasi-Public	\$30M upfront in combination of ratepayer and RGGI funds
 <p>GEMS Hawaii Green Infrastructure Authority</p>	2013	Public	\$140M upfront in ratepayer funds
 <p>DC GREEN BANK</p>	2018	Quasi-Public	\$105M upfront in ratepayer funds

# Smaller green banks (\$5-40mm of initial capital) are mostly private, nonprofit institutions

Green Bank	Year Founded	Form	Initial Capital
	2011	Nonprofit	\$39.2M
	2018*	Nonprofit	\$30M
	2016	Nonprofit	\$14.1M
	2009	Nonprofit	\$7.1M
	2015	Quasi-Public	\$7M

\*Colorado Clean Energy Fund was incorporated in 2018, and capitalized in 2021

# Resources on green banks

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To learn more about green banks, follow the links below:

- [American Green Bank Consortium's 2021 annual report](#)
- [Catalyzing Investment for Environmental Justice](#)
- [Clean Energy and Sustainability Accelerator Overview](#)

Please reach out to CGC if you are interested in learning more about green bank opportunities.



**Coalition for  
Green Capital**

## Thank You

Abraham Wapner, Program Director

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## Panelist



**Kerry O'Neill**

CEO

Inclusive Prosperity Capital, Inc.

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# INCLUSIVE PROSPERITY CAPITAL

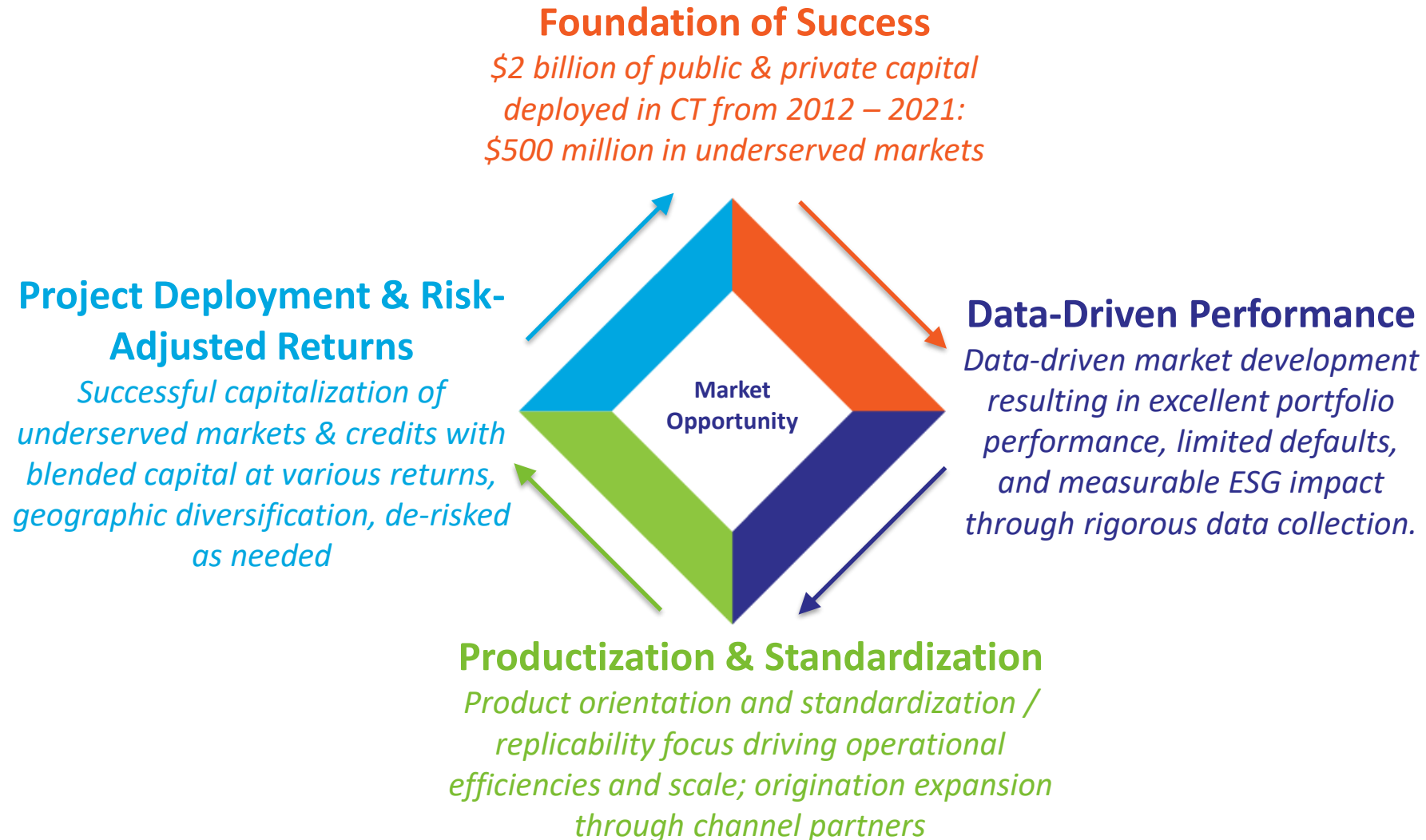
## IPC OVERVIEW AND APPROACH TO GREEN BANKING

A MISSION-DRIVEN CLEAN ENERGY INVESTMENT PLATFORM,  
INVESTING IN UNDERSERVED COMMUNITIES AND MARKETS

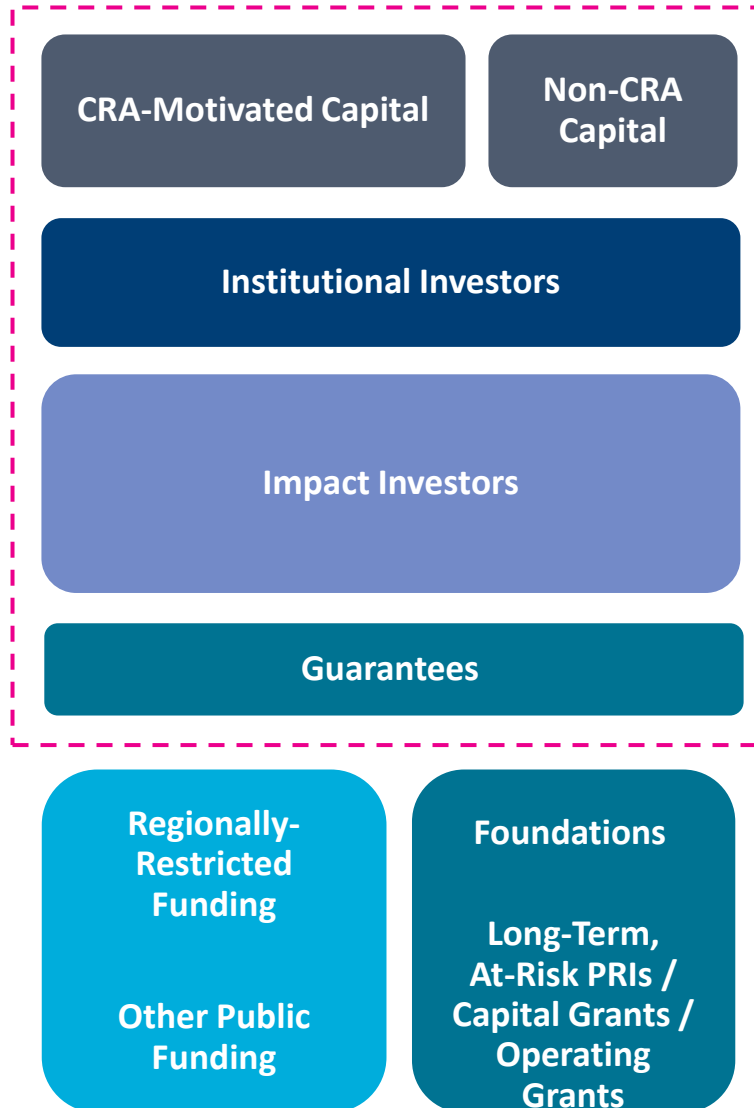
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FEBRUARY 1, 2022



# Market Development



# Blended Capital for Sustainability



Philanthropy & public investment uniquely positioned to kick-start and leverage billions of dollars of climate investment

Layer on impact investments at market returns as well as commercial capital

Grants can pair with capital grants, PRI, and guarantees

Operating grants to build climate finance capacity has multiplier effect

## What IPC Offers Partners & Investors

- **Scale**: Aggregating small, underserved markets/projects into larger, more liquid, investment portfolios and productized platforms.
- **Public-private orientation**: Green bank roots mixed with private capital investors & markets
- **Investment expertise**: Finance, program, admin staff grounded in deal structures across technologies that “work” for underserved markets
- **Origination focus**: Channel partner approach, including deep partnerships with leading low-income clean energy stakeholders, CDFIs and credit unions and their trade networks.
- **Impact**: Sustainability, climate justice, & social impact focus
- **Returns**: Targeted risk-adjusted return profiles matching investor requirements

**IPC platform, anchored by scaled PRI/equivalents, philanthropic support, and large investment in fund infrastructure, can be leveraged to quickly scale clean energy investing in underserved markets**

## 3-Yr Investment to Build Foundation for National Scale

- **Platform Infrastructure: structured finance, transaction management, underwriting, legal, insurance, accounting, treasury, tax, IT/tech platforms, compliance, operations, asset management set up to handle multiple products, jurisdictions and investors**
  - ❖ 18 full-time employees, 4 open positions
  - ❖ “Intangible asset” representing \$2M of corporate investment
  - ❖ 30+ corporate entities, mix of not-for-profit and for-profit subs
  - ❖ \$6M operating budget for FY22, 11 separate investors
- **Standardized, Scaled Operations: management team with deep expertise is tech-enabled, productized businesses that experience rapid scale**
  - ❖ Customized technology platforms for application, origination and reporting – significant ongoing investment
  - ❖ Culture of continuous improvement, process, streamlining



## Our Programs

- **Lending** – IPC lends to qualified, mission-aligned, organizations. IPC’s capital is flexible and can be leveraged or used to de-risk complex capital stacks.
  - **De-Risking Other Lenders** – IPC deploys financial resources (e.g., PRI, credit guarantees, mezzanine debt) in innovative ways, lending directly or catalyzing our partners lending by pledging our resources to them.
- **Asset Ownership** – IPC develops, acquires and owns distributed and community scale solar & storage assets aggregating smaller projects, harder to underwrite credits. A key differentiator of our investment platform.
- **New Structure Lending** – IPC specializes in lending into new and innovative structures, underwriting, and technologies.
- **Product, Program, and Process Design** – IPC strives for the most standardized approach possible, including transparency around terms, conditions, and pricing. We help governments, lenders, CDFIs, nonprofits and others, design their own program or “white-label” ours, providing the tools and guidance necessary for administration, including ongoing market support.

➤ **Green Banks / Government** – IPC provides product solutions, co-product development, and capital to de-risk and fund projects or programs.



➤ **Solar and Energy Efficiency Developers** – Financing to meet business needs, including working capital.



➤ **Non-Profits and Mission Aligned Lenders** – Green products to help others accomplish their mission.



➤ **Housing Portfolio Owners and Lenders** – Flexible lending terms specifically designed to meet the needs of this sector.



➤ Several relationships and models in development including for profit and nonprofit private developers, HFAs, and CDFIs and other lending intermediaries.

### > Multifamily Housing & Nonprofits

- ❖ **Term loans and debt facilities** (Catalyst)
- ❖ **Pre-development and bridge loans** (Navigator, contractor bridge financing)
- ❖ **Working capital and credit facilities**

### > Single Family Residential

- ❖ **Credit facilities and lending programs for single family LMI originators** – (de-risking structures for solar financiers, Smart-E)

### > Commercial

- ❖ **Solar ownership platform** – Power purchase agreements for distributed and community solar (Solar PPA)
- ❖ **Solar debt**
- ❖ **Solar + storage debt** – and broader resiliency underwriting
- ❖ **Bridge Loans** – bridging incentives, interconnection, other needs
- ❖ **Mezzanine Debt** – for project finance



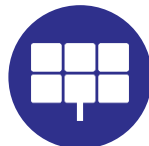
Multifamily



Single Family



Community Solar



Houses of  
Worship



Town Hall



School



Library

# Multifamily and Non-Profit



## Multifamily & Non-Profit Market Assessment

- Many older properties are need of capital improvements that include HVAC systems, energy efficiency improvements, and health and safety challenges
- Smart energy improvements can significantly reduce energy and other operating costs for owners and residents, even for distressed properties
- Health & safety issues must often be addressed before energy improvements can be implemented
- Funding and education is needed to assess, design, and implement
- Financing must often accommodate restrictions and covenants on existing debt, for all ownership types and existing capital structures.
- Address challenges for mid-cycle properties





## **Navigator Pre-Development Loan**

- ❖ A simple, unsecured pre-development line of credit that funds analysis and design of energy and health & safety improvements for multifamily properties using owner-selected and managed professional service providers.

## **Catalyst Term Loan**

- ❖ Loan supports energy improvement projects for low- and moderate-income multifamily properties and community-based non-profit organizations. It provides unsecured financing for new construction and renovation projects, including:

## **Solar Power Purchase Agreement (PPA)**

- ❖ Provides multifamily owners the opportunity to go solar with no money down and lock-in PPA electric rates (fixed or escalating options) for up to 25 years.
- ❖ A great option for housing authorities and non-profits who want to go solar, but are unable to monetize solar and other tax credits.

## **Credit Facilities and Working Capital**

- ❖ IPC develops tailor made financing programs that can serve as necessary capital to move markets forward, including working capital, lines of credit, bridge loans to incentive programs, and other necessary credit facilities for our partners.



## Single Family Residential – Smart-E



## Problem We're Solving – Scaling Green Home Upgrades

### Homeowners

- ❖ Don't know who to trust
  - What to install
  - How to find a good contractor
- ❖ Challenged to pay for upgrades

### Lenders

- ❖ (Many) don't know green consumer lending
- ❖ Don't know how to get started
- ❖ Collateral and Risk

### Contractors

- ❖ Need convenient and affordable financing options
- ❖ Need working capital to handle multiple jobs with financing

### Governments

- ❖ Need all hands on deck to meet policy goals, particularly private capital partners

## Smart-E Loan for Homeowners – National Platform

Smart-E mobilizes the **lending capacity of local lenders**, a **vetted contractor network**, and the **experience** of trusted program partners to scale clean energy home upgrades in a **national residential loan platform** using a **proven, standardized product** that supports **underserved borrowers**.

### Backers & Partners



### Program Snapshot

- ❖ Over \$250M loans, 23,000 homeowners in 3 states (CT, MI, CO)
- ❖ 16 community lenders
- ❖ 1,000+ contractors across all trades – solar, efficiency, HVAC and more
- ❖ Excellent portfolio performance

## SMART-E LOAN PRODUCT

- Residential **unsecured loan** product for homeowners
  - ❖ 1-4 unit, owner-occupied residential properties
- **Low-interest** financing with **flexible terms**, enabled by **loss reserve**
  - ❖ All customers get the same interest rate, no matter their FICO

Term	5-Years	7-Years	10-Years	12-20-Years
<b>Rate</b> (not to exceed)	4.49%	4.49%	4.99%	5.49%

- **Easy** application through **local lenders**
  - ❖ 580+ FICOs
  - ❖ DTI up to 50% (screen waived with FICOs of 680+)
- 40+ energy improvements
  - ❖ Heating and cooling, solar, insulation, windows, etc.
- \$500 - \$40,000 **loan amounts** available
  - ❖ 25% of loan for “other”
- Progress payments built into the loan
  - ❖ 1/3 upon closing, 2/3 upon proof of completion



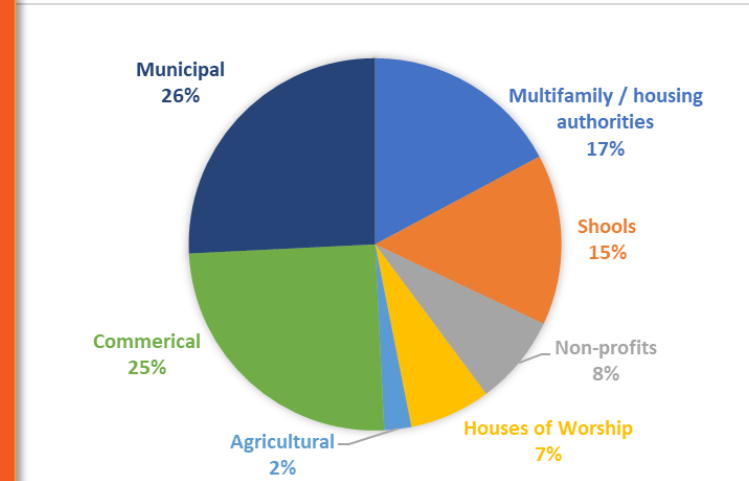
# Commercial Financing Programs



## Solar Power Purchase Agreement

Allows property owners to use solar with no money down, delivers immediate savings on electricity

- ❖ IPC develops, owns, maintains, and warrants system performance
  - ❖ Non-profits and municipalities can utilize tax credits through third party ownership structures
- ❖ System size: Minimum of 50 kW DC
- ❖ Appropriate for non-profits, municipalities, affordable housing, houses of worship, housing authorities, and other mission aligned properties, including commercial.
- ❖ Serving all incomes, including community solar with LMI subscribers.
- ❖ Owner purchases electricity generated by the system at an agreed upon rate for up to 25 year; buyout option at end of year 5.



Images by Benjamin C. Robertson Silver Tree Films



### Commercial Solar Portfolio Debt

- ❖ IPC can price requests for debt for commercial solar portfolios of distributed projects upon request
- ❖ Markets Served: all, but focused on housing portfolio owners and project developers in markets with good solar economics
- ❖ Income Levels Served: all, expertise in low-income housing, houses of worship, lower income communities



### Community Solar Debt / Community Owned Community Solar

- ❖ IPC provides debt capital to community solar projects that are breaking new ground and making solar accessible to all
- ❖ Markets Served: all
- ❖ Income Levels Served: all, but with a focus on low- and moderate-income communities and subscribers





### ► Solar + Storage / Virtual Power Plant Financing

- ❖ Solar + storage solution for resiliency in low-income communities
- ❖ Markets Served
  - ❖ Multifamily affordable housing
  - ❖ Scattered site single family
  - ❖ Community centers
  - ❖ Municipal buildings
  - ❖ Other community resilience assets
  - ❖ (Community owned) community solar
- ❖ Terms
  - ❖ Long-term, technology and solution dependent
- ❖ Resiliency
  - ❖ Insulate vulnerable communities from energy insecurity
  - ❖ VPP is a tool for connecting communities through energy efficiency, usage, and storage
  - ❖ At scale, can change grid dynamics



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PROSPERITY CAPITAL

# Appendix

## Supplemental Materials

## Catalyzing Investment for Climate Justice

BIPOC communities and organizations, low-income neighborhoods, credit-challenged borrowers, have so far been largely excluded from the clean energy transition. IPC develops market tools and democratizes access for communities historically excluded from energy finance.

- **BlocPower** – Scalable facility and first capital to support transformative MBE in heat pump and urban electrification transition.
- **PosiGen** – Bridge capital for residential solar installs in LMI and communities of color.
- **Elevate Energy** – Structured contractor line of credit to support capacity building for small diverse contractors in Chicago and Detroit.
- **EnerWealth** – Grant, admin and investment support for M&WBE community solar contractor developing projects for rural Southern Black farmers and communities.
- **Solar Stewards** – Partnered with M&WBE firm on Social REC revenue stream for BIPOC solar.
- **Mission Energy** – Partnered on solar development benefiting low-income communities.
- **Buffalo Accelerator** – Placed-based community development work, including local CDFI, to both identify and scale market transformation opportunities for clean energy and resilient upgrades.
- **Inclusiv/Smart-E** – Partnering to bring standardized unsecured loan program to Inclusiv members around the country, starting in AZ, NM and TX.

### ▶ Case Study

- ❖ Success Village Coop (Bridgeport CT) needed to lower their escalating energy costs. IPC worked with Success to structure project savings to pay for critical upgrades.
  - ❖ 964 units, WW2 workers housing, central heating plant circa 1960's, with annual heating costs: \$1.8M
- ❖ IPC Provided:
  - ❖ Technical Assistance: Governance support from UHAB, preliminary engineering and development TA from IPC team
  - ❖ Pre-Development Loan: \$150K for engineering analysis, design, development and funding of new heating systems
  - ❖ Health & Safety Loan: \$165K for removal of asbestos for phase 1 pilot
- ❖ Estimated implementation cost: \$20 Million







### Case Study

- ❖ Fleet Development (Oregon) was seeking a long-term financing partner for solar projects on a portfolio of USDA-RD and HUD-supported affordable housing properties.
- ❖ IPC structured a term debt solution that incorporated multiple revenue streams and can be scaled across their portfolio.

#### Terms:

- ❖ \$834K project cost, \$348K loan
- ❖ 12 years Financing
- ❖ First-priority asset lien on installed equipment
- ❖ Energy + operating savings
- ❖ Aggressive unsecured lending rate





## Mission Case Study

- ❖ In 2020, Inclusive Prosperity Capital partnered with Mission Energy to make energy improvements possible for their customers utilizing the Solar Power Purchase Agreement. This is just one example of how Green Banks partnering together can make communities stronger, greener, and more resilient.



- ❖ Who is Mission Energy?
  - Mission Energy provides turnkey solar and energy efficiency project development, funding, and implementation services for nonprofit organizations. IPC has partnered with Mission Energy to provide capital for their solar and energy efficiency projects.
- ❖ **Terms:**
  - \$1,244,945 loan
  - 394.11 kW DC solar PV array
  - Projected savings
    - 624,830 kWh





▶ IPC structured a \$5M credit facility for BlocPower to launch its first financing product in their target market of owners with few financing options

- ❖ Markets Served
  - ❖ Nonprofits, including houses of worship, multifamily properties, small & medium commercial properties
- ❖ Product
  - ❖ Equipment lease for heat pumps and other energy efficiency improvements
- ❖ Case Study – St. Bart’s Episcopal Church:
  - ❖ Installation of a 74-ton Daikin heat pump system to replace an aging oil boiler system
  - ❖ \$514K project cost, \$258K loan
  - ❖ Forecasted lifetime savings of 8,166 MMBTU
  - ❖ Forecasted annual customer savings of \$8,500
  - ❖ Forecasted 70% reduction of GHG emissions





# CDFA-Bricker Webinar Series: Green Financing 101

## Panelist



**Gwen Yamamoto Lau**

Executive Director  
Hawaii Green Infrastructure Authority

**Thank you**

for joining the conversation today. Send us your questions and comments!

See all of CDFA's resources online at [www.cdfa.net/resources](http://www.cdfa.net/resources)

# CDFA – BRICKER WEBINAR SERIES: Green Financing 101

Hawaii Green Infrastructure Authority

February 1, 2022



# Hawaii Green Infrastructure Authority

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- Constituted in November 2014, Act 211 (SLH 2013) provided a framework to establish a State administered clean energy financing Authority
- Capitalized with the net proceeds of a \$150.0 million Green Energy Market Securitization (“GEMS”) Bond

# HGIA's "WHY"

---

## Objective:

Make clean energy investments accessible and affordable to Hawaii's underserved ratepayers; stimulate private investments and leverage innovative tools to mitigate risks and reach new markets.



***"Ohana means family.  
Family means nobody gets  
left behind."***

# Goals

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## Original 2014 Goal:

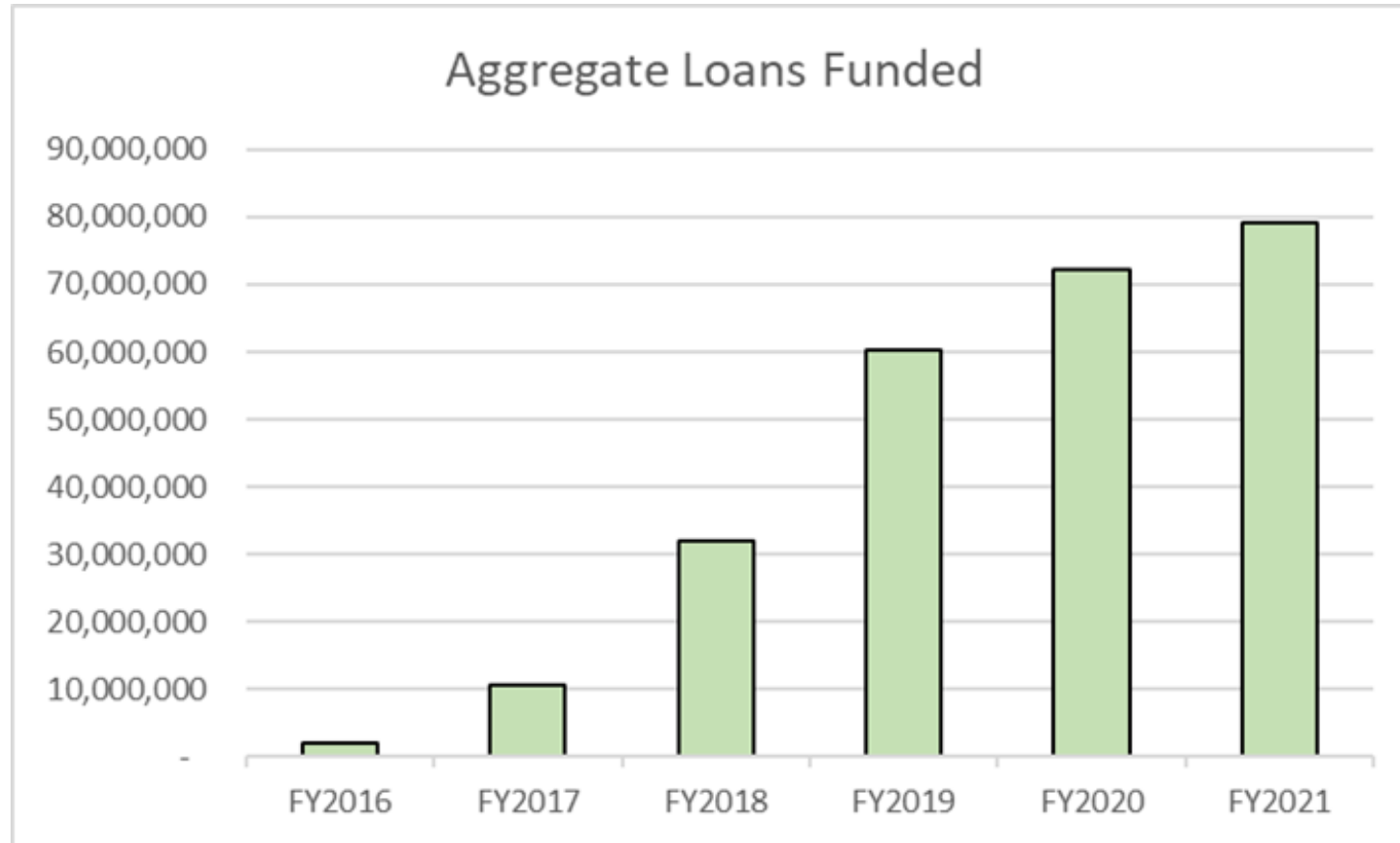
At least 51% of the funds to be used to finance LMI households and nonprofits

## Current Goal effective 9/1/2019:


100% of the remaining funds to be used to finance underserved ratepayers defined as LMI homeowners, renters, nonprofits, small businesses and multi-family rental projects

# Loans Funded to Date

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# On-Bill Repayment Mechanism

**HGIA's "HOW"**

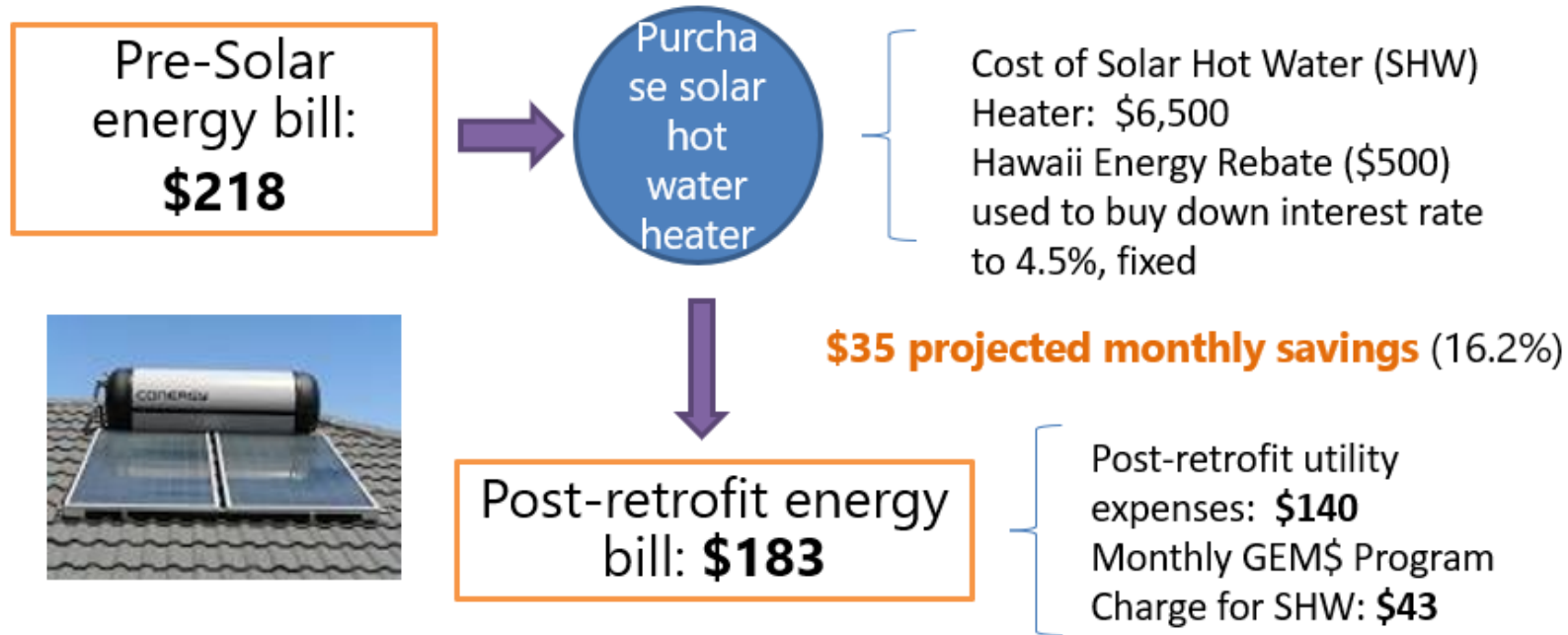
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# Green Energy Money \$aver (“GEM\$”) On-Bill Program

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- Eliminates credit barriers
- Immediate estimated utility bill savings
- Obligation tied to the utility meter (allows for transfer from tenant to tenant)
- Payments conveniently made via monthly electric utility bill

# Utility bill: Before & after solar installation

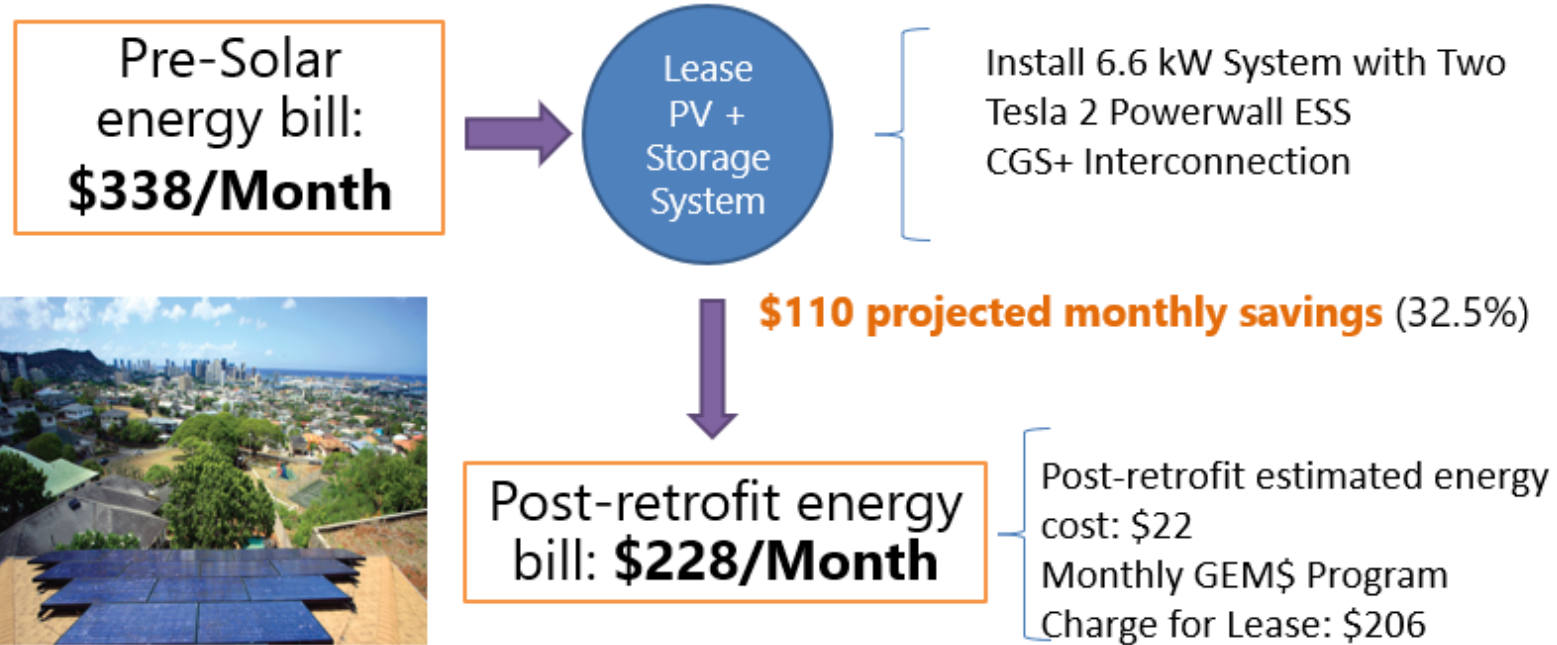


Projected Utility Bill Savings: **\$8,400**  
(over 20-year system lifetime)  
**Plus** Estimated **\$4,200** in Tax Credits  
**Total Estimated Benefits: \$12,600**



1

# Utility bill: Before & after solar installation

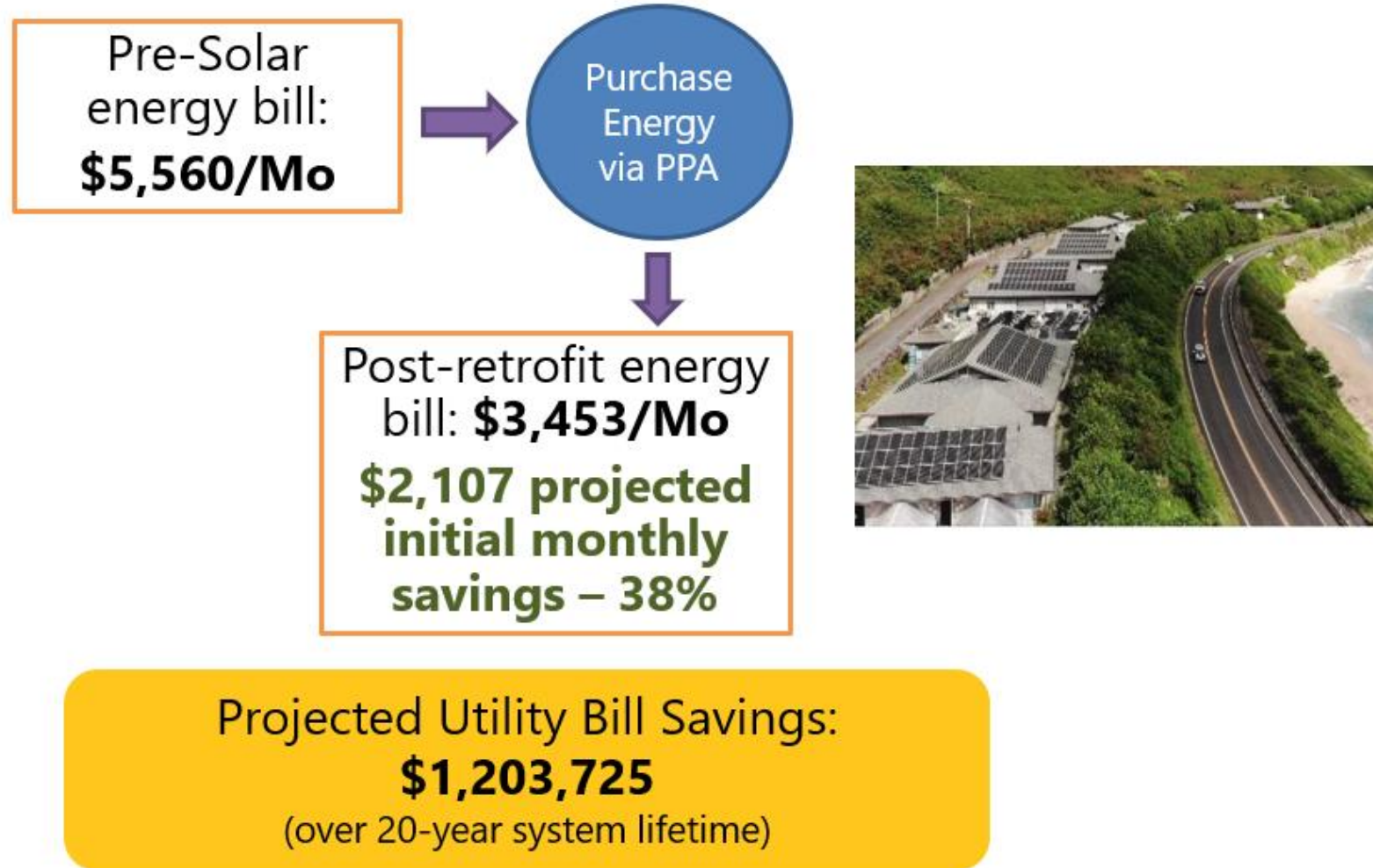


Estimated Energy Savings: **\$24,658**  
(over 20-year life of PPA)  
**Estimated Energy Savings: \$37,291**  
(of exercise purchase option and purchase price = GEM\$ Loan Balance)



1

# Utility bill: Before & after solar installation





# Kahauiki Village Micro-Grid Financing Solution

**HGIA's "HOW"**

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# Exciting Elements of K-Village

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- Innovative approach to responding to the state's homeless crisis
- Groundbreaking initiative that maximizes public and private resources
- No low-income housing tax credits, no Section 8 Project-Based subsidies, no HHFDC financing
- Multiple Phases aggregating 153 homes
- Rents lower than comparable projects





# Scary Elements of K-Village

---

- Innovative approach to responding to the state's homeless crisis
- Groundbreaking initiative that maximizes public and private resources
- No low-income housing tax credits, no Section 8 Project-Based subsidies, no HHFDC financing
- Multiple Phases aggregating 153 homes
- Rents lower than comparable projects



# Hurdles to Overcome

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- No historical cash flow to determine feasibility of proforma financial projections
- No Project-Level permanent lender, HHFDC or low-income housing tax credit investor involved to closely monitor project's ongoing financial viability
- No project based subsidies to increase tenant demand
- First Phase consisted of 30 homes. Micro-grid infrastructure to support 153 homes. Project costs "front-loaded" and supported by only 20% of the total projected units
- Desire to minimize the cost of power to the project







**What's Next?**

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# State Small Business Credit Initiative

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- HGIA to administer approximately \$40.0 million to launch:
  - Collateral Support Program
  - Loan Participation Program
    - CDFI
    - Catalytic Projects



# Property Assessed Financing

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- Bill introduced to authorized property assessed financing in Hawaii
  - Clean energy
  - Clean water
  - Hurricane readiness
  - Resiliency

**PACE**



# Thank you

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For more information, please contact:  
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for joining the conversation today. Send us your questions and comments!

**Questions?**



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Tuesday, February 22, 2022 @ 2:00 PM - 3:00 PM Eastern

### **Intro Revolving Loan Fund WebCourse**

March 28-29, 2022 @ 12:00 PM - 5:00 PM Eastern

### **Advanced Revolving Loan Fund WebCourse**

March 30-31, 2022 @ 12:00 PM - 5:00 PM Eastern

Register online at [www.cdfa.net](http://www.cdfa.net)



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and comments!



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