Better Buildings Residential Network Peer Exchange Call Series: *Diversifying Funding Sources and Building New Revenue Streams (201)*

November 17, 2016

*Call Slides and Discussion Summary*
Agenda

- Agenda Review and Ground Rules
- Opening Polls
- Brief Residential Network Overview
- Featured Speakers
  - Kerry O’Neill, Managing Director, Residential Programs, Connecticut Green Bank *(Network Member)*
  - Andy Frank, Founder & President, Sealed
  - Desiree Sideroff, Vice President Product Manager, Craft3
- Discussion
  - In what ways has your organization diversified and/or grown new revenue streams?
  - What types of financing approaches have you used to make your resources stretch further and help homeowners finance upgrades?
  - What are key considerations when designing and administering financing programs for home performance programs?
  - Other questions about funding, revenue, or financing strategies?
- Closing Poll and Upcoming Call Schedule
Better Buildings Residential Network: Connects energy efficiency programs and partners to share best practices and learn from one another to increase the number of homes that are energy efficient.

Membership: Open to organizations committed to accelerating the pace of home energy upgrades.

Benefits:
- Peer Exchange Calls 4x/month
- Tools, templates, & resources
- Recognition in media, materials
- Speaking opportunities
- Updates on latest trends
- Voluntary member initiatives
- Residential Program Solution Center guided tours

Commitment: Provide DOE with annual number of residential upgrades, and information about associated benefits.

For more information or to join, email bbresidentialnetwork@ee.doe.gov, or go to energy.gov/eere/bbrn and click Join.
Best Practices: Connecticut Green Bank
Public-Private Partnership Models for Residential Financing

DOE Better Buildings Residential Network Peer Exchange Call:
Diversifying Funding Sources and Building New Revenue Streams (201)

November 17, 2016
Sparking a Movement
Green Banks are quickly spreading across U.S.

Green Banks Operating Or Under Development/Consideration

CA  CO  CT  DE  DC  HI  MA  MD  NV  NY  RI  VT  VA
The quasi-public model leverages the power of markets to advance policy goals and create a social good.

The role of a green bank is simple; attract and deploy private capital investment in cleaner and more reliable sources of energy so that clean energy is more accessible and affordable to consumers.
### Solution Blueprint
Getting Results… Inception to Date

<table>
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<tr>
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<th>FY 2000- FY 2011 (CCEF)</th>
<th>FY 2012- FY 2016 (CGB)</th>
<th>FY 2017 Targets (CGB)</th>
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<tbody>
<tr>
<td>Model</td>
<td>Subsidy</td>
<td>Financing</td>
<td>Financing</td>
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<tr>
<td>Years</td>
<td>11.00</td>
<td>5.00</td>
<td>1.00</td>
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<tr>
<td>Energy (MW)</td>
<td>43.1</td>
<td>193.8</td>
<td>86.4</td>
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<tr>
<td>Investment ($MM)</td>
<td>$349.2</td>
<td>$936.9</td>
<td>$393.7</td>
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<tr>
<td>Leverage Ratio</td>
<td>1:1</td>
<td>6:1</td>
<td>10:1</td>
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<tr>
<td>% of Funds as Loans</td>
<td>10</td>
<td>56</td>
<td>80</td>
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Deploying **more** green energy at a **faster** pace while using ratepayer-taxpayer resources **responsibly**

**REFERENCES**
1. Comprehensive Annual Financial Report for FY 2015 for approved, closed, and completed transactions
2. Board approved targets for FY 2017
Smart-E Loan for Homeowners

~$30 MM Loan Capital Available

- **Rates** – 4.49% to 6.99% & special offers (2.99%), unsecured lending
- **Terms** – 5 to 12 years
- **Amount** – $500 to $40,000
- **Underwriting** – 640 FICO or above, 40-45% DTI; CDFI at 580+ FICO and 50% DTI waived for >680 FICO
- **Measures** – predominantly HVAC, hot water, and solar PV… and supports healthy home too
- **Contractors** – over 300 eligible
- **Lenders** – 4 credit unions, 6 community banks, 1 CDFI
- **Credit Support** – $1.8 MM 2nd loan loss reserve to attract ~$30 MM of loan capital; $2.5 MM interest rate buy-down program

www.energizect.com/smarte
Solar PV Lease + EE
Low-to-Moderate Income Homeowners

PosiGen Co-investment: $15 - $20 million fund

Home
(New Haven – Oil Heat)

$59,250 HHI
High Energy Costs
High Energy Burden

Solar PV (Lease)

$55 to $100/month Lease
Solar $ Savings
Moderate Energy Burden

Energy Efficiency (ESA)

$10/month ESA
Energy Savings
<<Additional Savings>>
Solar + EE $ savings

Reasonable Energy Burden
Lessons Learned

▪ **Generating customer demand is biggest challenge** – not financing!
  – We’ve got all kinds of financing options available, still hard to drive uptake. In Multifamily space, technical assistance is critical.

▪ **Know your market** – what customer segment, building stock, energy upgrades are you trying to address? Tailor product design to that.

▪ **Leverage channel strategies** – contractors (by type! Insulation companies aren’t same as HVAC as solar, etc.), lenders, municipalities, nonprofits, housing authorities, utilities
  – Corollary... Don’t go it alone, need origination channels!

▪ **Be sure your products work for contractors** – responsiveness (yours, lending partners), disbursement terms, paperwork requirements

▪ **Be sure your products work for financing partners** – need to understand their business models

▪ **Homeowner value prop** – 100% financing, cash flow positive terms are great, but... they’re likely to lock in a shorter term. Don’t stress over not having on-bill – great application/approval process, terms and contractor channel can be just as good.
Thank You

Kerry O’Neill
Managing Director, Residential Programs

www.ctgreenbank.com
Presentation Highlights: Connecticut Green Bank (CGB)

- Switching from a strictly grant-making model to a financing and leveraging model helped CGB increase its impact:
  - **Financing through credit support:** CGB offers a second loan loss reserve ($1.8 million) to allow local lenders (e.g., credit unions, community development financial institutions) the ability to offer unsecured loans at 4.99% to 6.99% (2.99% for more extensive upgrades).
  - **Bundling incentives and leveraging private capital:** In partnership with solar energy company PosiGen, CGB targets low to moderate income homes:
    - CGB provided $5 million into the financing structure, which allowed PosiGen to attract private capital and provide a 10-month energy savings lease that includes lighting and other energy upgrades.
Best Practices: Sealed
PARTNERING WITH NEW MARKET ACTORS

PRESENTATION TO DOE PEER EXCHANGE
• Sealed a NY-based software company that guarantees energy savings

• Have partnered with the New York Green Bank to offer first true “pay with your savings” program (HomeAdvance)

• HomeAdvance lets customers pay what they actually save instead of fixed payment, with Sealed guaranteeing that performance to the bank

• Partnered with New York utilities (National Grid, Con Edison, Orange & Rockland) to reach customers interested in efficiency improvements (comfort primary driver)

• Providing utilities with new revenue streams from engaging customers on efficiency improvements
Why Customers care

“*The key to customer adoption is not the math. It’s fixing a comfort problem inside of the house.*”

50% of US homes report drafty rooms

Homeowners do not believe “energy savings payback” on cash investment (only believe 25% of savings) and do not want to take out a loan.
A better home at an affordable cost.
Accountability and service for the long haul.

Pay less up front and maintain your energy budget while energy savings cover the rest.
In partnership with NY Green Bank

Sealed has launched a $7.5M credit facility to enable customers to adopt residential efficiency projects (e.g. air sealing, insulation, HVAC) paid for up-front by the future energy savings from the projects.

"Sealed is an excellent example of the type of innovative business model that has emerged – and will continue to emerge – as the principles of REV begin to impact the market."

- NY Green Bank President, Alfred Griffin
How energy savings are calculated

- **Your Home**
- **Your Past Energy Usage**
- **Local Weather**

Steps:
1. Your historical usage (adjusted for weather)
2. Your energy savings
3. Your new electricity and heating fuel usage
• Customers receive Sealed bill each month, with optional energy bill consolidation

• Sealed bill offers additional recommendations for customers to improve the efficiency of their home

• Sealed can include utility brand and messaging on the Sealed bill

• Sealed continues to invest in the energy savings of future efficiency improvements, lower customers’ costs
Utility Partnerships

Sealed partnering with utilities to drive the market

1. Marketing-based revenue streams for utilities

2. Contractor network development and management

3. Efficiency Procurement partnership to replace rebates with performance-based incentives
Thank you!

Contact: Andy Frank

www.sealed.com
Presentation Highlights: Sealed

- Homeowners believe about 25% of energy savings that are presented, so a guarantee to pay with those savings is a powerful proposition.
  - Together with the New York Green Bank, Sealed is able to finance the initial cost of the project.
    - Homeowners maintain a similar energy budget to what they are used to, and the difference between baseline and energy savings is used to pay for the upgrades.

- Home with high energy burdens (e.g., heating with oil) provide great opportunities for financing through energy savings, as those savings will result into the largest payback.

- Partnerships with utilities can open up new revenue streams. Paying utilities for how much demand they drive to your program to make it an attractive proposition for utilities.
Best Practices: Craft3
Financing Energy Efficiency
Craft3 is a nonprofit that provides loans to entrepreneurs and individuals

- Since 1994, Craft3 has invested over $400 million in entrepreneurs, nonprofits and individuals.
- Craft3 loans align with our mission of strengthening economic, ecological and family resilience.
- Loans are available in the urban and rural communities of Oregon and Washington.
- 56 employees are located in 8 regional offices.
- Capital we lend comes from investors, including banks, foundations, governments, and individuals.
Craft3 works with businesses, nonprofits and individuals in a variety of sectors

- Clean energy and energy-efficiency
- Manufacturing and value-added processing
- Agriculture and food systems
- Small retail and hospitality
- Essential services
- Land and water conservation/treatment
Home Energy Loans
Overview

- **Founded in 2009** to expand access to energy efficiency in Oregon and Washington.
- Provides **highly-inclusive financing** to homeowners for energy savings projects.
- Implemented through unique “on-bill” relationship with utilities.
  - 4 utilities in OR/WA, multiple partners/products
  - Utility provides pass-through billing, not financing.
  - Craft3 has no shut-off power; utility charges have priority.
  - One loan payment each billing cycle.

**Inclusive Credit**
- Increases energy upgrades/
  (savings, comfort, air quality, durability, etc.)
- Deepens energy savings/
  Reduces GHG emissions
- Strengthens trade allies
  local contractors
- Grows and stabilizes jobs
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<tbody>
<tr>
<td>Loans closed</td>
<td>3500</td>
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<tr>
<td>Dollars lent</td>
<td>45 million</td>
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<tr>
<td>Metric tons of green</td>
<td>9,300</td>
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<tr>
<td>house gases avoided</td>
<td>avoided annually</td>
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<tr>
<td>MMBTUs saved annually</td>
<td>145,245</td>
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<tr>
<td>Average energy savings/project</td>
<td>&gt;20%</td>
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<tr>
<td>Historic losses</td>
<td>&lt;1.5%</td>
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<tr>
<td>Loans to low-income families</td>
<td>20%</td>
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Investing in Home Energy

Tanya Hillis
Seattle, Washington

- Received a Craft3 Home Energy loan totaling $13,450 for oil to ductless heat pump conversion, to seal the basement and attic, and insulate the walls and attic of her Central District house built in 1900.
- Borrower leveraged $3,550 in rebates and incentives for her project.
- Decreased energy use by 30 percent.
- Project would not have been possible without a Craft3 loan.

MEETING OUR MISSION
- Low- or moderate-income homeowner
- $3,550 in rebates and incentives
- 5.6 metric tons of greenhouse gases averted
Thank you

Receiving a loan from Craft3 was life altering. As a single mother of two, every penny counts. Spending one-third less on my gas bill was like getting a raise. I didn’t have the resources to replace my outdated oil furnace. Craft3 allowed me to do that. I couldn’t have done this in any way without them. I am so appreciative.

- Susan Cantor

Desiree Sideroff
Products Manager
www.craft3.org
Presentation Highlights: Craft3

- **On-Bill Financing:** Craft3 provides lower rates for all and a simplified underwriting process.
  - Craft3’s on-bill financing has the **same rate for borrowers regardless of credit scores.** Homeowners with low credit scores are often given higher borrowing rates, which can make upgrades inaccessible for communities in need.
  - Historically, about 3% of loans are mitigated off bill, but **delinquency is not the primary reason**—unoccupied properties that transition into rental properties are just as prevalent as delinquency.

- **Set out communications expectations** with utility partners from the start to ensure that utilities are communicating effectively with customers to avoid confusion about the program.
Explore resources related to diversifying funding sources and building new revenue streams:

- Identify funding and revenue sources for your organization with insights from the Market Position & Business Model – Develop a Business Model handbook.
- Explore this SEE Action Network report on Understanding the Value of Energy Efficiency Financing Programs Funded by Utility Customers.
- Read this DOE publication to help state and local governments understand the role of energy efficiency program administrators, develop successful partnerships with utilities and other program administrators, and take advantage of new opportunities.

- While you’re there, see the latest Proven Practices post on Incentivizing Home Upgrade Actions.
- The Solution Center is continually updated to support residential energy efficiency programs—member ideas are wanted!
To attract private lenders to lend for energy efficiency projects, target institutions that already have a consumer lending program and make the business case by speaking their language:

- Unlike unsecured loans (e.g., which can be used for vacation), an unsecured loan for upgrades enriches the credit quality of the borrower by increasing the value of their home.

- Nationwide, other lenders report relatively low loss rates for energy efficiency lending.

Use partnerships to reach lenders: Utilities may have existing relationships with lenders and can provide that crucial introduction.
Presentation Highlights: Engaging Contractors

- Contractors are a critical aspect of any upgrades program. Be mindful of their needs and provide education to ensure contractors are also working to promote your financing:
  - For business, contractors often prefer the instantaneous (mattress-sale type) credit. **Spend the time educating contractors on the benefits of providing well-packaged loans** that are more attractive to the homeowner and will ultimately enhance their business.

- In designing your financing structure, **make sure your process helps contractors** and their business needs as well.
  - Online applications and electronic document signing **make it a fast and simple process.**
  - If possible, **provide advanced progress payments** to contractors.
Peer Exchange Call Series

We hold one Peer Exchange call the first four Thursdays of each month from 1:00-2:30 pm ET

Calls cover a range of topics, including financing & revenue, data & evaluation, business partners, multifamily housing, and marketing & outreach for all stages of program development and implementation

Upcoming calls:

- November 24: No Call – Thanksgiving
- December 1: America’s Next Top Energy Model: Tools and Best Practices (101)
- December 8: Oh, the Weather Outside is Frightful: Energy Efficient Manufactured Homes (301)
- December 15: Hibernation Mode: What Smart Thermostats Can Do for You (301)

Send call topic ideas to peerexchange@rossstrategic.com
See the Better Buildings Residential Network Program website to register
Addenda: Attendee Information and Poll Results
Call Attendees: Network Members

- BAM Superior Solutions
- Building Performance Institute
- City of Cambridge
- City of Irvine
- City of Plano
- Civic Works
- CLEAResult
- Connecticut Green Bank
- Davis Energy Group
- Efficiency Vermont
- Efficiency Maine
- Energy Efficiency Specialists
- Enhabit
- Home EnerChi, LLC
- International Center for Appropriate and Sustainable Technology (ICAST)
- Michigan Saves
- Montgomery County Department of Environmental Protection
- National Housing Trust/Enterprise
- Vermont Energy Investment Corporation (VEIC)
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<th>Call Attendees: Non-Members (1 of 2)</th>
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<tr>
<td>• Akin &amp; Associates</td>
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<td>• Architectural Nexus</td>
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<td>• Arup North America, Ltd.</td>
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<td>• BA Consult</td>
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<td>• Bank of Montreal</td>
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<td>• Carolina Smart Homes</td>
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<tr>
<td>• City of Ann Arbor</td>
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<tr>
<td>• CivicSpark</td>
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<tr>
<td>• Craft3</td>
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<tr>
<td>• Energy Analytics</td>
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<tr>
<td>• Environmental Design / Build</td>
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<tr>
<td>• George Washington University</td>
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<td>• Greenbanc</td>
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<td>• Hawaii Energy</td>
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<td>• Montana Department of Public Health &amp; Human Services</td>
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<td>• National Association of Realtors (NAR)</td>
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<td>• Rocky Mountain Institute</td>
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<td>• Rothschild Doyno Collaborative</td>
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<td>• Rethinking Power Management LLC (RPM)</td>
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<tr>
<td>• Sealed</td>
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<td>• South-central Partnership for Energy Efficiency as a Resource (SPEER)</td>
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Call Attendees: Non-Members (2 of 2)

- Hawaii State Energy Office
- Sustainable Connections
- Sweet Sustainable Solutions
- Tennessee Valley Authority
- The Local Government Commission
- Tierra Resource Consultants
- UpGrade Athens County (UpGrade Ohio)
- V3 Power
- Ventura County Regional Energy Alliance (VCREA)
Opening Poll #1

- Which of the following best describes your organization’s experience with diversifying funding sources?
  - Limited experience/familiarity – 38%
  - Some experience/familiarity – 35%
  - Very experienced/familiar – 12%
  - No experience/familiarity – 11%
  - Not applicable – 4%
Closing Poll

- After today's call, what will you do?
  - Seek out additional information on one or more of the ideas – **91%**
  - Make no changes to your current approach – **9%**
  - Consider implementing one or more of the ideas discussed – **0%**
  - Other (please explain) – **0%**