845 Brook Street, Rocky Hill, CT 06067
T 860.563.0015
ctgreenbank.com

CONNECTICUT
GREEN BANK

September 29, 2017

Dear Connecticut Green Bank Board of Directors:

Thank you for your flexibility in allowing us to schedule another special meeting of the Board of Directors.

We have scheduled it for Tuesday, October 3, 2017 5:00 to 5:30 p.m. in the Colonel Albert Pope Board Room of the Connecticut Green Bank at 845 Brook Street, Rocky Hill, CT 06067.

On the agenda we have one item:

- **<u>Small Business Energy Advantage</u>** – a proposed partnership with Avangrid and Eversource Energy through the Connecticut Energy Efficiency Fund to support their Small Business Energy Advantage.

If you have any questions, comments or concerns, please feel free to contact me at any time.

We look forward to seeing you next week.

Sincerely,

Bryan Garcia
President and CEO

AGENDA

Board of Directors of the
Connecticut Green Bank
845 Brook Street
Rocky Hill, CT 06067

Tuesday, October 3, 2017
5:00-5:30 p.m.

Staff Invited: George Bellas, Craig Connolly, Mackey Dykes, Brian Farnen, Bryan Garcia, Ben Healey, Dale Hedman, Bert Hunter, Kerry O'Neill, and Eric Shrago

1. Call to order

2. Public Comments – 5 minutes

3. Staff Transaction Recommendations – 25 minutes

   a. Commercial, Industrial, and Institutional Sector Program & Transaction Recommendation – 25 minutes

      i. Private Capital for Small Business Energy Advantage Program* - 25 minutes

4. Adjourn

*Denotes item requiring Board action

Join the meeting online at https://global.gotomeeting.com/join/450141077

Or call in using your telephone:
Dial (872) 240-3212
Access Code: 450-141-077

Next Regular Meeting: Friday, October 20, 2017 from 9:00-11:00 a.m.
Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT

RESOLUTIONS

Board of Directors of the
Connecticut Green Bank
845 Brook Street
Rocky Hill, CT 06067

Tuesday, October 3, 2017
5:00-5:30 p.m.

Staff Invited: George Bellas, Craig Connolly, Mackey Dykes, Brian Farnen, Bryan Garcia, Ben Healey, Dale Hedman, Bert Hunter, Kerry O'Neill, and Eric Shrago

1. Call to order

2. Public Comments – 5 minutes

3. Staff Transaction Recommendations – 25 minutes

   a. Commercial, Industrial, and Institutional Sector Program & Transaction Recommendation – 25 minutes

      i. Private Capital for Small Business Energy Advantage Program* - 25 minutes

Resolution #1

WHEREAS, pursuant to Conn. Gen. Stat. Section 16-24n the Connecticut Green Bank ("Green Bank") has a mandate to develop programs to finance clean energy investment for small business, industrial, and municipal customers in the State;

WHEREAS, recapitalizing the Small Business Energy Advantage ("SBEA") program with private sector capital is a recognized priority in the Green Bank's Comprehensive Plan and is a goal of the CT Energy Efficiency Board and Green Bank Joint Committee;

WHEREAS, The Connecticut Light and Power Company d/b/a Eversource Energy and The United Illuminated Company (together, the "Utilities") have requested the Green Bank's assistance sourcing low cost private sector capital;

WHEREAS, the Green Bank released a Request for Proposals for Small Business Energy Advantage Program Alternative Financing Solutions (the "RFP") on November 14, 2016;

WHEREAS, JP Morgan Chase responded to the RFP with a comprehensive and flexible solution offering the lowest cost capital to recapitalize the SBEA program;

WHEREAS, Green Bank staff has selected JP Morgan Chase's proposal to recapitalize the SBEA program and now recommends that the Green Bank support the recapitalized SBEA facility by creating and managing a special purpose vehicle (the "SPV") for the new fund structure, committing $3 million in an equity contribution to the fund structure (the "Equity Contribution"), and providing up to $750,000 of capital for short-term liquidity purposes (the "Liquidity Capital"), and;

WHEREAS, the Utilities will continue to make funding available from the Connecticut Energy Efficiency Fund ("CEEF") to reimburse interest expenses, loan losses, and administrative costs associated with the recapitalized SBEA program.

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to execute and deliver agreements to establish the Equity Contribution, Liquidity Capital, and SPV with terms and conditions consistent within the memorandum submitted to the Board dated September 21, 2017, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 270 days from the date of authorization by the Board; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.

4. Adjourn

Board of Directors Meeting

October 3, 2017

Board of Directors
Agenda Item #1
Call to Order

Board of Directors

Agenda Item #2

Public Comments

Board of Directors

Agenda Item #3

Staff Transaction Recommendations

CI&I Sector Programs

Board of Directors

Agenda Item #3ai

Staff Transaction Recommendations

CI&I Sector Programs

Small Business Energy Advantage

SBEA Private Capital Goal

- In 2016 and 2017, pursuant to the goals established by the **Joint Committee** of the CT Energy Efficiency Board and the Connecticut Green Bank Board of Directors, Eversource and United Illuminating (the "CT Utilities") and CT Green Bank ("Green Bank") made progress toward one of the "Joint Goals" for the C&I Sector related to the Small Business Energy Advantage (SBEA) program:

"Identify and engage alternative capital sources
to <u>lower the cost</u> of
and <u>increase opportunities</u> for
project financing"

SBEA Program Overview

- Available to commercial and industrial, including municipal and state, customers with an average 12-month peak electricity demand between 10kW and 200kW located in Eversource and UI distribution territory;
  - ≤**$100,000** for commercial and industrial customers and
  - ≤**$500,000** for municipal customers:
- 0% interest to the borrower;
- Up to 48 months in tenor;
- Repaid on the electric bill; and
- For eligible efficiency improvements (both electric and gas measures) including lighting upgrades, HVAC, refrigeration, and gas-saving measures

SBEA Capital Needs & Support

- Small Business Energy Advantage (SBEA) Program commenced in 2000 and benefits from enhancement/support from the Connecticut Energy Efficiency Fund (“CEEF”)
- Loans are currently funded by Utility capital in addition to some CEEF funds approved as loan capital in 2014
- Annual loan volume of approximately $25 - $30 million
- Required “steady state” financing facility of ~$55 million to be reached around year 5, assuming fixed annual loan volume of $28 million

CT Energy Efficiency Fund

Credit Enhancements & Support

- The Conservation & Load Management ("C&LM") Plan set up under Connecticut General Statutes § 16-245m and § 16-32f provides for certain credit enhancements and support to the SBEA program from the Connecticut Energy Efficiency Fund ("CEEF"). These include:
  - Loan loss reimbursement of <u>all losses</u> incurred as part of the SBEA program
  - Interest rate buy-down to 0% so SBEA customers face interest-free loans
  - Recovery of administrative expense
- CEEF is funded by a surcharge on electricity rate payers in CT, along with the Regional Greenhouse Gas Initiative ("RGGI"), and the Independent System Operator-New England's ("ISO-NE") forward capacity market

2016-2018 CEEF Budget

	2016 ES CT Electric Revenues	2016 UI Revenues	2016 Combined Total	2017 ES CT Electric Revenues	2017 UI Revenues	2017 Combined Total	2018 ES CT Electric Revenues	2018 UI Revenues	2018 Combined Total
Collections (Mill Rate)	$66.7	$15.9	$82.6	$66.8	$15.7	$82.5	$65.8	$15.5	$81.4
ISO New England	$9.7	$2.7	$12.4	$20.2	$5.2	$25.4	$20.4	$4.5	$24.9
RGGI	$16.7	$4.2	$20.8	$17.1	$4.3	$21.4	$17.5	$4.4	$21.9
CAM (Net of Gross Receipts Tax)	$62.0	$14.8	$76.9	$62.1	$14.6	$76.7	$61.2	$14.5	$75.7
TOTAL (Energy Efficiency Revenues)	**$155.1**	**$37.6**	**$192.7**	**$166.2**	**$39.8**	**$206.0**	**$164.9**	**$39.0**	**$203.9**

* In millions.

Natural Gas Energy Efficiency Revenues	2016 Conservation Adjustment Mechanism	2017 Conservation Adjustment Mechanism	2018 Conservation Adjustment Mechanism
Eversource CT Gas Revenues	$20.4	$24.2	$26.9
Connecticut Natural Gas Revenues	$15.9	$16.6	$17.3
Southern Connecticut Gas Revenues	$11.4	$14.1	$14.7
Total Energy-Efficiency Revenues	**$47.7**	**$54.9**	**$59.0**

* In millions.

SBEA Program Overview

CONNECTICUT GREEN BANK

- Pursuant to Joint Goal – CGB and the Utilities:
  - Explored options for funding the SBEA Program with private capital
    - RFP for private capital conducted November 2016
  - Overarching objectives:
    - Obtain lower cost of capital
    - Retain similar origination (unsecured loans, utility bill payment history) and servicing processes (on-bill repayment).
    - Retain CEEF support:
      - interest rate buy-downs (customers loans at 0%) and
      - loan loss reimbursement

JP Morgan Selected from RFP Process

CONNECTICUT GREEN BANK

Terms of JP Morgan financing are as follows:

Features	Terms
Facility term	1 year with ability to renew annually
Facility size	$30m ($27m from JPM, **$3m from Green Bank**) ***Note*: CGB is "1st Money In"**
Cost of capital	• JPM line of credit: [REDACTED] • **Green Bank equity: [REDACTED]**
Undrawn fee	[REDACTED]
Upfront fee	[REDACTED]
IRB	Estimated and **pre-funded for full term** of underlying loans (applicable to JPM capital only)
Event of default (loan losses)	2.5% losses triggers event of default on facility

**As of September 5, 2017*

Green Bank Role

The Green Bank will play a critical role in the recapitalized SBEA structure including:

1. **$3 million of equity** into a newly created SPV structure, plus **up to $750,000 for liquidity purposes**

- JPM specifically requires $3 million to **not** be **debt**
- CGB can recover a capital charge (i.e. interest)
- CGB is “first money in”
- **At “steady-state” CGB equity would rise to ~$5.5m in ~3-4 years (+$750k liquidity facility)**

2. SPV management and administration

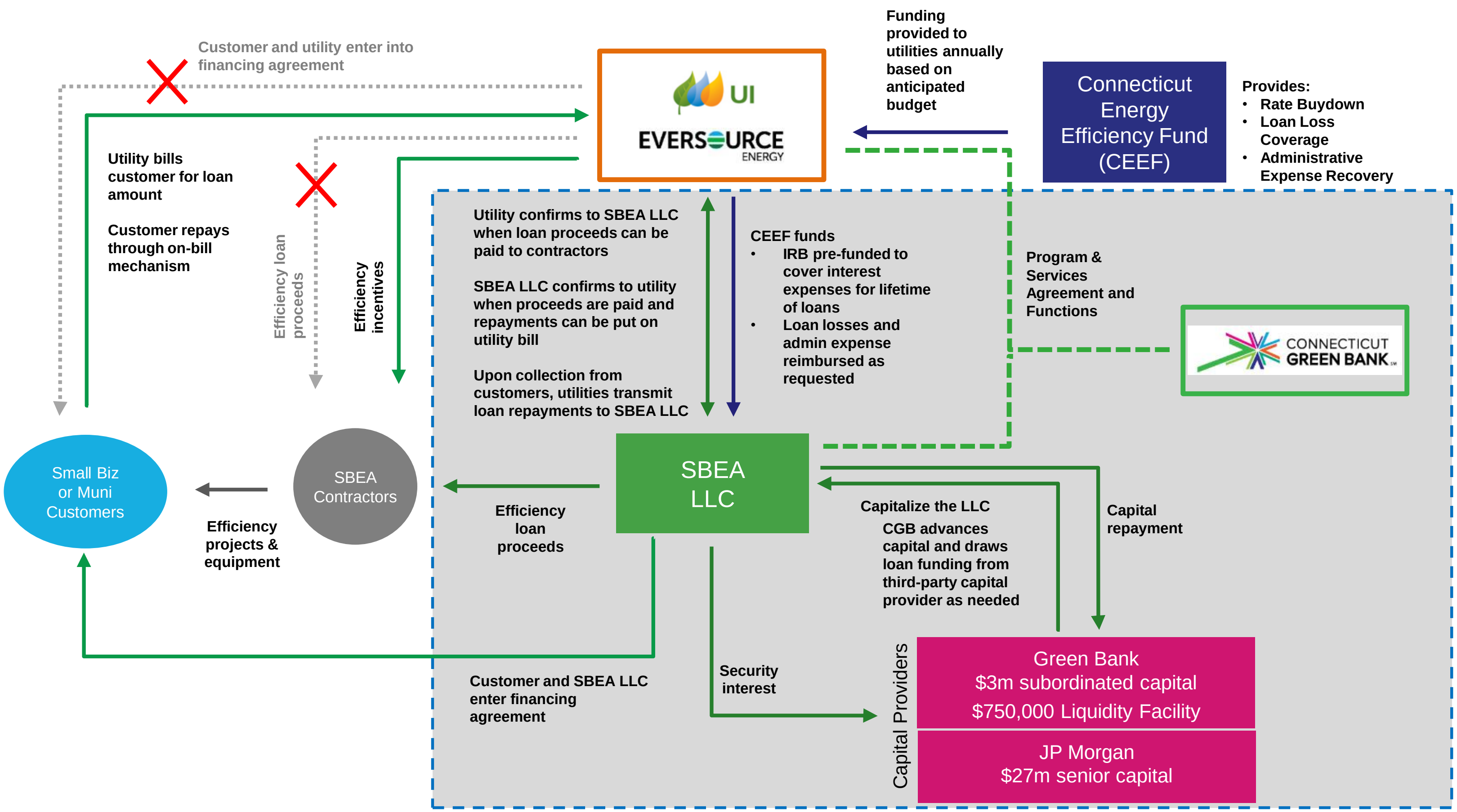
- Cash flow management (SBEA loan disbursements, JPM line of credit draw requests, CEEF funding requests for loan loss recovery, etc.)
- Annual reporting, accounting

3. Capital facility management – ensuring that future capital sourcing requirements are met as the SBEA program evolves

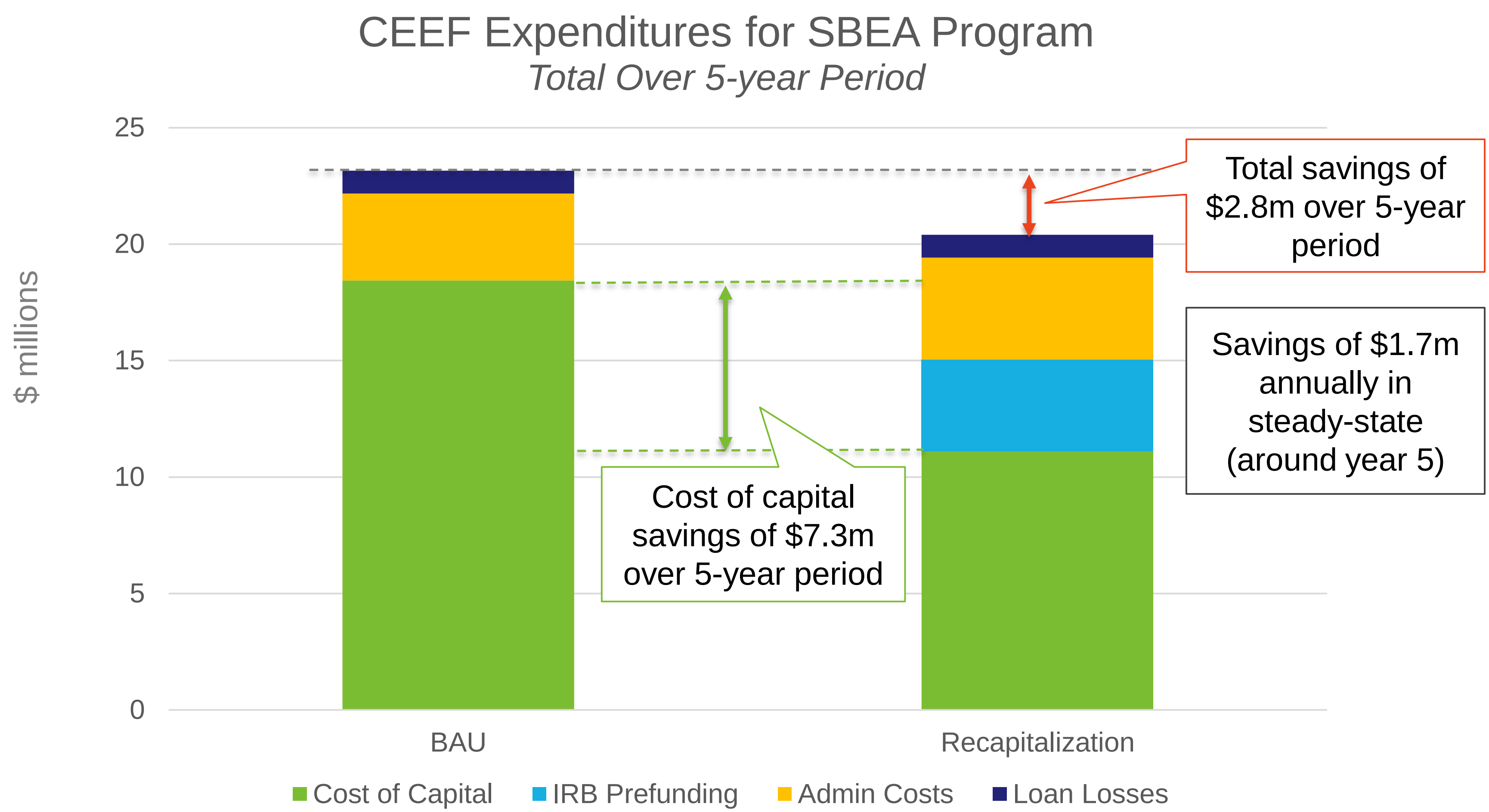
Additional comments:

- Assumes continued CEEF funding for interest rate buy-down and loan loss recovery (i.e. losses to Green Bank and JP Morgan capital will be fully recovered)
- **Steady-state savings of approximately $61,000 per $1 million financed from the recapitalized structure**

SBEA Recapitalized Structure



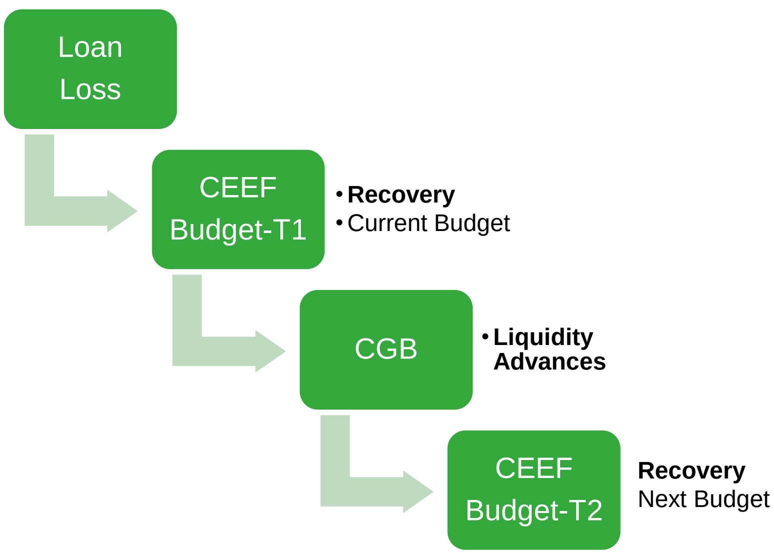
Savings from Recapitalization



CGB Risk Analysis

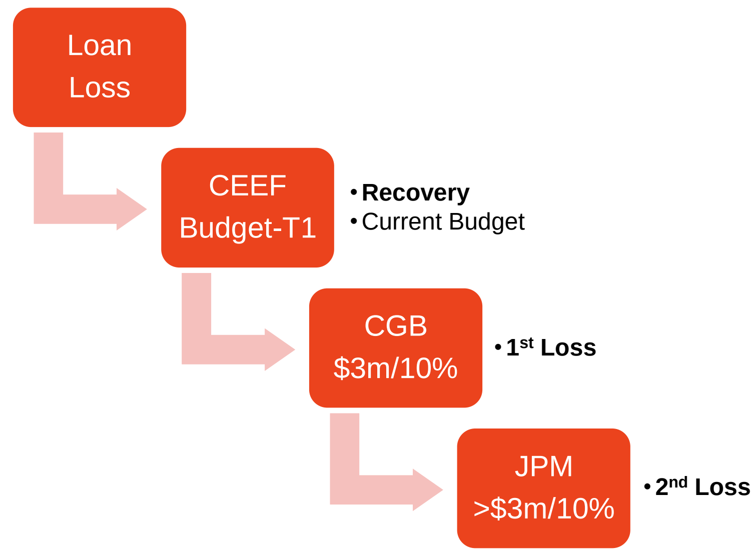
Normal Operations

(No CGB Losses Anticipated)



CEEF "FAILURE"[1]

(CGB Max Loss [greater of] $3m or 10% of portfolio[2])



[1] Such as a "raid" on the CEEF with understanding that CEEF will not be restored

[2] Plus portion of $750,000 liquidity facility outstanding

SBEA Private Capital Facility Conclusion

Staff recommends approval of this facility as in line with the Green Bank’s clean energy mandate:

- Meets objectives outlined our Comprehensive Plan
- Strengthens the Green Bank’s support of the C I & I sector
- Solves a cost of capital issue for the CEEF
- Solves a capital constraint issue for the Utilities and C I & I customers
- Fulfills goal established by the EEB-CGB Joint Committee to “Identify and engage alternative capital sources to lower the cost of and increase opportunities for project financing”
- Establishes a financing facility that is flexible and expandable
- Offers the possibility for low cost & “green” commercial paper in the future
- Leverages CGB liquidity – not expected to result in CGB capital loss

845 Brook Street
Rocky Hill, Connecticut 06067

300 Main Street, 4th Floor
Stamford, Connecticut 06901

T: 860.563.0015
F: 860.563.4877
www.ctcleanenergy.com

Small Business Energy Advantage

Recapitalization with Private Sector Funds

Due Diligence Package

September 21, 2017

Document Purpose: This document contains background information and due diligence on the recapitalization of the Small Business Energy Advantage program and the organizations involved, including Eversource Energy, United Illuminating, JP Morgan Chase, the Connecticut Green Bank, and the CT Energy Efficiency Board. This information is provided to the Connecticut Green Bank Board of Directors for the purposes of reviewing and approving recommendations made by the staff of the Connecticut Green Bank.

In some cases, this package may contain among other things, trade secrets, and commercial or financial information given to the Connecticut Green Bank in confidence and should be excluded under C.G.S. §1-210(b) and §16-245n(D) from any public discourse under the Connecticut Freedom of Information Act. If such information is included in this package, it will be noted as confidential.

Program Qualification Memo

To: Connecticut Green Bank Board of Directors

From: Bert Hunter, EVP & CIO, Clean Energy Finance; Mackey Dykes, Vice President, Commercial, Industrial and Institutional Programs; Anthony Clark, Senior Manager, Commercial, Industrial and Institutional Programs; Laura Fidao, Senior Manager, Clean Energy Finance

Cc: Bryan Garcia, President & CEO;

Date: September 21, 2017

Re: Recapitalization of Small Business Energy Advantage Program

---

Background & Summary

The Small Business Energy Advantage ("SBEA") program is part of the Energize CT initiative and is jointly managed by The Connecticut Light and Power Company d/b/a Eversource Energy ("Eversource") and The United Illuminating Company ("UI", and together with Eversource, the "Utilities"). The program commenced in 2000 and includes a financing component that provides interest-free loans to commercial, industrial, and municipal customers in Eversource and UI territories undertaking energy efficiency retrofit projects. The general parameters for SBEA loans are: up to 4 years in term; up to $100,000 per electric meter for commercial and industrial customers or $500,000 for municipalities; and repaid on the customer's electric bill.

The program is currently generating annual loan volume of approximately $28 million.[1] The loans are funded through a mix of Eversource and UI balance sheet and funding from the Connecticut Energy Efficiency Fund ("CEEF"). In addition to providing a portion of the capital for the loans, CEEF funding is used to provide an interest-rate buy-down on the utilities' cost of capital (making customer-facing loans interest-free), reimbursement for all loan losses, and reimbursement for administrative expenses associated with running the SBEA program.

The Joint Committee of the CT Energy Efficiency Board ("EEB") and Connecticut Green Bank identified sourcing lower cost capital from the private sector as a priority initiative as a means to alleviate stress to utility balance sheets, reduce CEEF interest-rate buy-down expenses, and increase the loan volumes available to small business, municipal and state efficiency measures through the SBEA program. The Utilities and the Connecticut Green Bank (the "Green Bank") began deliberate work to source private sector capital in 2016 to achieve these goals while maintaining the current successful aspects of the program, including a streamlined process for participating customers and contractors. Continued Utility approval/underwriting of customer loans, on-bill repayment, simple customer agreements, maintaining existing loan term and size limits were all key features to be carried forward to expedite the transition to private capital at beneficial (e.g. low-cost and flexible) terms.

In this context, the Green Bank and Utilities jointly issued an RFP in November 2016. Prior to RFP release, the Green Bank spoke with a variety of market participants to gauge potential interest and requirements to source private sector capital in a manner that would benefit the SBEA program most efficiently. The RFP received responses from 5 capital providers (JP Morgan, Citibank, Webster Bank, Macquarie, M-Core) proposing up to $300 million in potential capacity for SBEA loans through several types of financing structures.

---

[1] As of the end of the 2016 calendar year.

Following thorough assessment by the Green Bank, utilities, and EEB, a proposal from JP Morgan Chase was selected as the preferred option based on its flexibility and low cost of capital. The JP Morgan Chase ("JPM") proposal will provide a line of credit for SBEA loans with potential savings to CEEF of $7.3 million over the initial 5-year period and approximately $1.8 million of savings annually in a steady-state (conservatively assuming fixed loan volume demand of $28 million annually).

Proposed SBEA Facility Description

The proposed financing solution by JPM will result in a $30 million line of credit ($27 million directly from JPM and $3 million in an equity contribution to be provided by the Green Bank) with an initial draw period of 1-year and the ability to renew the facility annually thereafter. The Green Bank will create and manage a bankruptcy-remote special purpose vehicle ("SPV") to fund new SBEA loans which will contract directly with JPM via a Credit & Security Agreement. The Green Bank will govern the SPV via an Operating Agreement and provide $3 million to the SPV under an Equity Support Agreement.

CEEF reimbursement for loan losses and interest rate expenses remains a key component to the success of this program. To be protected in the event of a catastrophic "CEEF failure" (e.g. a significantly diminished or loss of ratepayer funds), JPM requested that the interest expense reimbursement be prefunded for the full term of the underlying loans upfront. JPM also requested a 10% loan loss buffer, which will be met in the form of the Green Bank's $3 million equity contribution within the capital stack.

Cost of capital:

Source	Interest Charge on Capital Drawn for SBEA Customer Loans	Closing Fees	Undrawn Fee
JPM	[redacted]	[redacted]	[redacted]
Green Bank	[redacted]	[redacted]	[redacted]

To maintain the streamlined operation of the SBEA program and minimize operational disruptions, the new facility will be set up to retain key customer-facing components of the existing SBEA program, including the current underwriting process based on historical bill payment status, on-bill repayment, and loan disbursements being made directly to the contractor.

Loan agreements will be signed between the customer and the SPV rather than with the Utilities as is the current practice, and loan disbursements will be made from the SPV directly to the contractor rather than from the Utilities to the contractor.

In negotiations with JPM, JPM expressed the commercial position that they reasonably expect to renew the facility annually unless there are any significant changes in credit and risk profile. While there is no written assurance of facility renewal, this commercial arrangement between banks and borrowers is not usual unless a longer-term commitment is secured. JPM's requirement for annual renewal, however, came about as a result of the decision by the Utilities to not seek a regulatory backstop in the event of "CEEF failure" (as described above). Given the dynamics of the up to 4-year Utility customer loan terms (meaning that a portion of the loans remains outstanding for up to four years) even under assumptions of fixed loan volume demand, the facility will grow over the initial four years until it reaches a steady-state in year 5. Under the terms with JPM, facility capacity can be increased at this annual renewal point without any additional charges, or on an as needed basis for an Amendment Fee not to exceed $3,000.

As facility capacity expands, the 10% subordinated capital requirement will also increase. At present the Green Bank is committing to the $3 million required for the first year, which will continue to be recycled into the facility in subsequent years as customer loans are repaid. Upon facility renewal and assuming the facility capacity grows, this 10% subordinated obligation will increase as well. The Green Bank may elect to increase its capital commitment at this point or could source capital from other private sector sources at a market rate.

Green Bank Role

The Green Bank role in this new financing structure will include:

1. Capital Facility Management
2. SPV Management and Administration (loans, cash management and capital facility)
3. Provision of $3 million in an equity contribution to fund customer loans and provide liquidity cushion

Capital Facility Management

The Green Bank will manage the recapitalized SBEA facility and meet any future capital sourcing requirements that arise as the SBEA program evolves. In the near term, such management is likely to include amending the facility size or extending the facility past JP Morgan's current proposed one-year commitment. In the longer term, such management may include securing a follow-on facility as loan volumes grow and supporting an even lower-cost solution such as a commercial paper (short term, low interest rate bond) facility.

SPV Management and Administration

The operational requirements of the SPV will be crucial to a smoothly running SBEA loan program. Key loan administration, cash management and capital facility administration duties will include:

- Issuing loan proceeds to contractors for approved SBEA projects;
- Requesting draws from JP Morgan into the SPV to cover new loan requests in a timely and cost-efficient manner. Draws from JP Morgan require three days' notice and must be at least $500,000 in increments of $100,000 thereafter. The SPV will maintain a buffer to ensure capital availability while minimizing undrawn fees;
- Handling loan repayments from the utilities which will be recycled into new loans and managed to support the aforementioned buffer requirement;
- Paying monthly interest, principal (if appropriate) and quarterly undrawn fees to JP Morgan; and
- Managing the interest rate buy-down prefunding account to ensure it meets JP Morgan requirements and are topped-up with CEEF funds as required.

The SPV will also provide administrative support, including loan tracking, working with the Utilities' Special Billing team to report delinquencies and defaults, request reimbursement from CEEF for loan losses, and any accounting reporting requirements for the SPV entity.

Provision of Capital into SPV for Funding and Liquidity

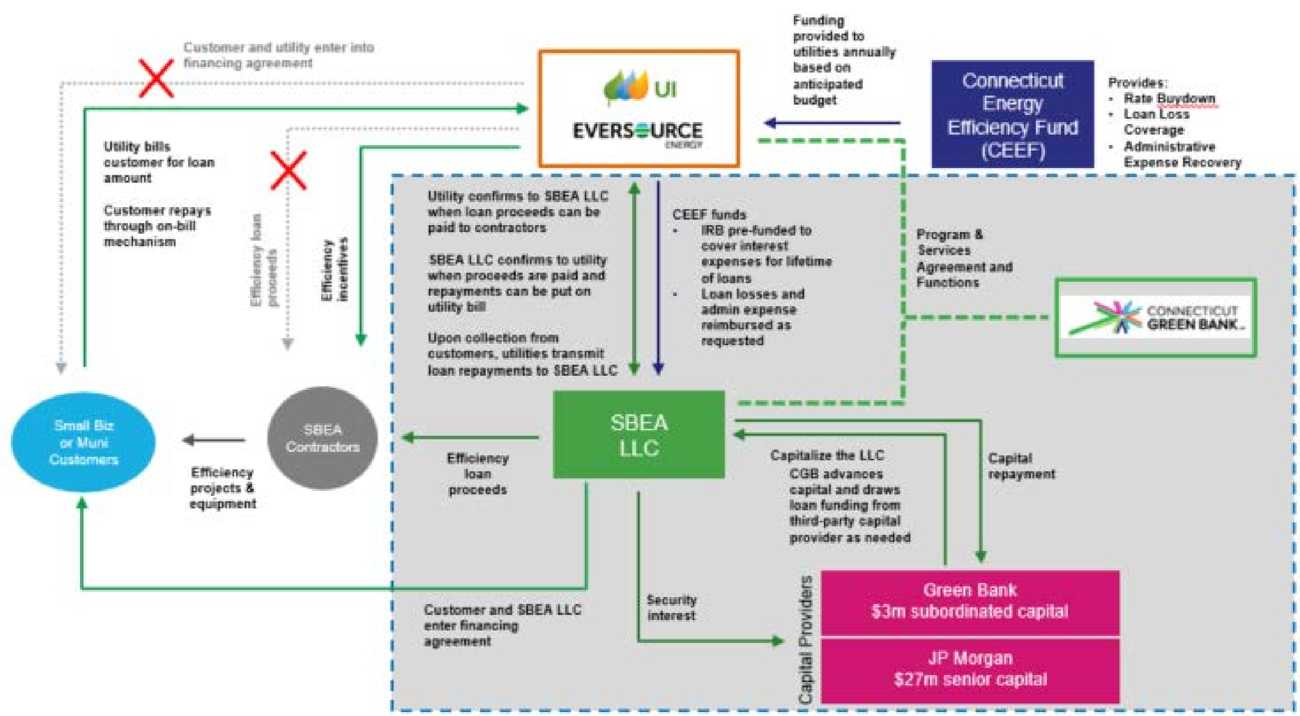
The Green Bank will invest $3 million into the SPV as an equity contribution to be used for funding SBEA customer loans. The Green Bank's capital contribution will be used as first-in capital for the SPV and will remain committed in the SBEA facility. The current proposed charge for the Green Bank's capital is [redacted].

Green Bank capital has been structured to address liquidity needs such as mitigating timing considerations with respect to CEEF funds to cover interest rate buydowns and loan losses and smoothing capital availability for customer loans against the size and increment requirements for draws from the JP Morgan facility.

Since such short-term liquidity capital needs could result in a capital requirement in excess of the $3 million specifically required pursuant to the JPM term sheet, **staff is requesting an additional $750,000 allocation for these purposes**. All uses of Green Bank capital will be compensated by CEEF at the same [redacted] noted above for the $3 million equity infusion for the SPV.

Figure 1 below depicts the overall structure of the proposed recapitalized SBEA program with new components of the proposed Green Bank arrangements depicted in the grey area.

Figure 1: Recapitalized SBEA structure. Area in grey represents new components to the structure.



CEEF Background and Operations

In 1998, the Connecticut General Assembly passed Public Act 98-28 which created the Connecticut Energy Efficiency Fund. Every three years the Utilities submit to the Department of Energy and Environmental Protection (DEEP) for approval and subsequently to the Public Utilities Regulatory Authority ("PURA"), for funding the Conservation and Load Management Plan ("C&LM Plan") in accordance with Connecticut General Statutes Section §16-245m. The C&LM Plan outlines their implementation plan for cost-effective electric and natural gas energy-efficiency programs and market transformation initiatives using CEEF funds. The C&LM Plan and CEEF spending is reviewed before submittal to DEEP by the Energy Efficiency Board ("EEB") which is an appointed group of 15 members from public and private entities. Utilities are thus incented, via regulatory oversight, to optimize the deployment of energy efficiency measures in their given service territories.

The C&LM Plan provides, in part, for certain credit enhancements and support to the SBEA Program from CEEF funding. CEEF is funded by: (1) a 3 mill rate charge on electricity rate payers in Connecticut, (2) the Conservation Adjustment Mechanism ("CAM", an additional charge from both electric and gas customers), (3) funds from the Regional Greenhouse Gas Initiative ("RGGI"), and (4) funds from the Independent System Operator New England's ("ISO-NE") forward capacity market. The estimated CEEF budget for 2016 through 2018 is illustrated in Figure 2 below.

Figure 2: 2016-2018 CEEF Budget from both Electric and Natural Gas Revenue Sources

	2016 ES CT Electric Revenues	2016 UI Revenues	2016 Combined Total	2017 ES CT Electric Revenues	2017 UI Revenues	2017 Combined Total	2018 ES CT Electric Revenues	2018 UI Revenues	2018 Combined Total
Collections (Mill Rate)	$66.7	$15.9	$82.6	$66.8	$15.7	$82.5	$65.8	$15.5	$81.4
ISO New England	$9.7	$2.7	$12.4	$20.2	$5.2	$25.4	$20.4	$4.5	$24.9
RGGI	$16.7	$4.2	$20.8	$17.1	$4.3	$21.4	$17.5	$4.4	$21.9
CAM (Net of Gross Receipts Tax)	$62.0	$14.8	$76.9	$62.1	$14.6	$76.7	$61.2	$14.5	$75.7
TOTAL (Energy Efficiency Revenues)	**$155.1**	**$37.6**	**$192.7**	**$166.2**	**$39.8**	**$206.0**	**$164.9**	**$39.0**	**$203.9**

* In millions.

Natural Gas Energy Efficiency Revenues	2016 Conservation Adjustment Mechanism	2017 Conservation Adjustment Mechanism	2018 Conservation Adjustment Mechanism
Eversource CT Gas Revenues	$20.4	$24.2	$26.9
Connecticut Natural Gas Revenues	$15.9	$16.6	$17.3
Southern Connecticut Gas Revenues	$11.4	$14.1	$14.7
Total Energy-Efficiency Revenues	**$47.7**	**$54.9**	**$59.0**

* In millions.

CEEF is a "virtual" fund (i.e. not held by a legal entity formed specifically for the purposes of the CEEF) which sits on the Utilities' balance sheets and is allocated to specific programs per the approved C&LM Plan. From 2013 through 2015, the Utilities have used an average of approximately $162,000 per year of CEEF funds for reimbursement of loan losses. Over this same period, they also received an average of $2.8m per year for the interest rate buy-down. The CEEF funding used for the SBEA program is a small percentage of the approximately $230 million average annual overall CEEF budget over this same period.

The Utilities budget annually in advance for the anticipated SBEA loan losses, interest rate expenses, and administrative costs. In the proposed recapitalized SBEA program, annual CEEF budget requirements will be estimated by the Green Bank and reviewed/approved by the Utilities. The three principal SBEA-related costs for the CEEF budget and their application in the proposed recapitalized SBEA program are described below.

- **Interest rate expense**:
  - **JPM capital**: Budget for JPM's portion of interest expenses will be estimated annually in advance based on expected loan volume and LIBOR for the year. On a quarterly basis, the SPV will request anticipated interest expenses associated with loan volumes to be funded using JPM capital in that upcoming quarter. The amounts actually required (based on actual loan volume and updates to LIBOR expectations) can be adjusted or topped up on a monthly basis via additional requests to draw funds from CEEF if needed. The prefunded interest expenses will sit in an account controlled by the SPV and will be disbursed to JPM on a monthly basis as interest expense is actually incurred.
  - **Green Bank capital**: Green Bank interest will be incurred and drawn from CEEF on a monthly basis. It will flow through the SPV to the Green Bank once requested from CEEF.
- **Loan losses**: Once a loan has been declared written off by the utilities, the full outstanding repayment requirement will be drawn from CEEF. Timing-wise these draws would be included in the monthly draw request to CEEF for interest expense.
- **Administrative costs**: Administrative expenses will be drawn from CEEF as part of the monthly draw request on an as-incurred basis.

In the event that the overall annual CEEF budget allocated to the SBEA program is not sufficient in any given year, the Green Bank will provide short-term liquidity capital (at the same [redacted] capital charge as the other Green Bank capital being used by this facility) so that operations can continue uninterrupted. Any deficit would then be included in and reimbursed to the Green Bank as part of the subsequent years' CEEF budget allocation process. The above mentioned operational details and cash flow requirements will be memorialized in a Funding Agreement to be signed between the SPV and utilities.

Strategic Plan

Is the program proposed, consistent with the Board approved Comprehensive Plan and Budget for the fiscal year?

The proposed SBEA recapitalization is cleanly aligned with the first of the Green Bank's statutory purposes cited in the Comprehensive Plan to develop programs to finance clean energy investment in municipal and small business projects. Developing a recapitalization solution for the SBEA through a Utility / Green Bank Small Business Partnership is highlighted as a priority objective in the Public-Private Partnership section of the Comprehensive Plan and included as an area of strategic importance for the CI&I team. In addition, sourcing an alternate and lower cost source of capital for the SBEA program is one of the EEB / CGB Joint Committee's goals incorporated into our Comprehensive Plan.

Ratepayer Payback

How much clean energy is being produced (i.e. kWh over the projects lifetime) from the program versus the dollars of Green Bank ratepayer funds at risk?

Assuming SBEA program activity and project volume is similar to recent years, the lifetime energy savings for one year's worth of projects will be approximately 507 million kWh realized by placing approximately $3 million of Green Bank ratepayer funds at risk.

Ratepayer Fund Terms and Risks

What are the terms and maximum risk exposure of ratepayer funds for the program?

There are two pools of ratepayer funds incorporated into this proposal to recapitalize the SBEA program from both the Green Bank and CEEF.

Green Bank:

The Green Bank proposes an initial contribution of $3 million in an equity contribution to the recapitalized SBEA structure, at an annual capital charge of [redacted] on capital drawn down for SBEA customer loans. The Green Bank will also commit additional capital of up to $750,000 to be used for timeliness/liquidity purposes within the structure. Anticipated usage would be for instances where:

- Annual CEEF budget allocation made by the utilities falls short of the actual requirement which could result from unanticipated loan volume, increased LIBOR rates necessitating higher interest expenses on JPM's capital, or higher than expected losses, as examples. Green Bank will be fully reimbursed for any usage of its capital for these purposes as part of the subsequent years' CEEF budgeting process.
- Funding expected form the JPM committed capital is not available due to an urgent need (JPM requires three days' notice prior to draw requests being funded), in which case the Green Bank temporary funding would be reimbursed by the subsequent JPM draw request.

It is expected that that the Green Bank's $3 million be loaned out first and remain in circulation prior to JPM capital usage (given the nature of the subordinated position). As is common for lines of credit, interest will only be received for capital that has been drawn to finance SBEA customer loans.

This Green Bank capital will be backstopped by CEEF funds for any losses. Green Bank capital would only be at risk in the event that there is catastrophic failure of the CEEF (as explained above) which could impair the CEEF's ability to reimburse Green Bank for losses, interest expenses, or administrative expenses. If this were to occur, the Green Bank would expect that upon remediation of any CEEF failure (including the creation of any CEEF successor) the Green Bank would be reimbursed for outstanding costs.

CEEF:

The CEEF funds are currently being used to support the existing SBEA program and will continue to be used in a similar manner (interest rate expense, loan losses, and administrative expenses) under the recapitalized SBEA structure. The only differences will be the redirection of CEEF funds to the SPV and the requirement to prefund JPM's interest rate expenses which serves to bring part of the CEEF financial requirement forward in time.

The total CEEF usage over the first 5 years of the recapitalized SBEA program is estimated to be $20.4 million, compared to a requirement of $23.2 million under the 'business as usual' scenario where CEEF loans continued to be financed from the utilities' balance sheets. This results in a savings of $2.8 million over this 5-year time frame, and translates to approximately $1.7 million of savings annually once the facility reaches a 'steady state' around the fifth year (and is no longer subject to one-time costs associated with set-up or closing costs). This cost savings includes the funding for the interest expense prefunding required by JPM. It is worth noting that on a pure cost of capital basis, CEEF would save $7.3 million over the initial 5-year period, though steady-state savings are similar with or without the JPM prefunding requirement as the prefunding is not an additional cost to CEEF but rather a shifting in timing of the commitment.

The usage of CEEF funds within the SBEA program is specifically for the purpose of absorbing loan losses and thus it can be reasonable expected that CEEF funds will be used for this purpose and unrecoverable to ratepayers. Historical loan losses have been around 1% of annual loan volumes.

Financial Statements

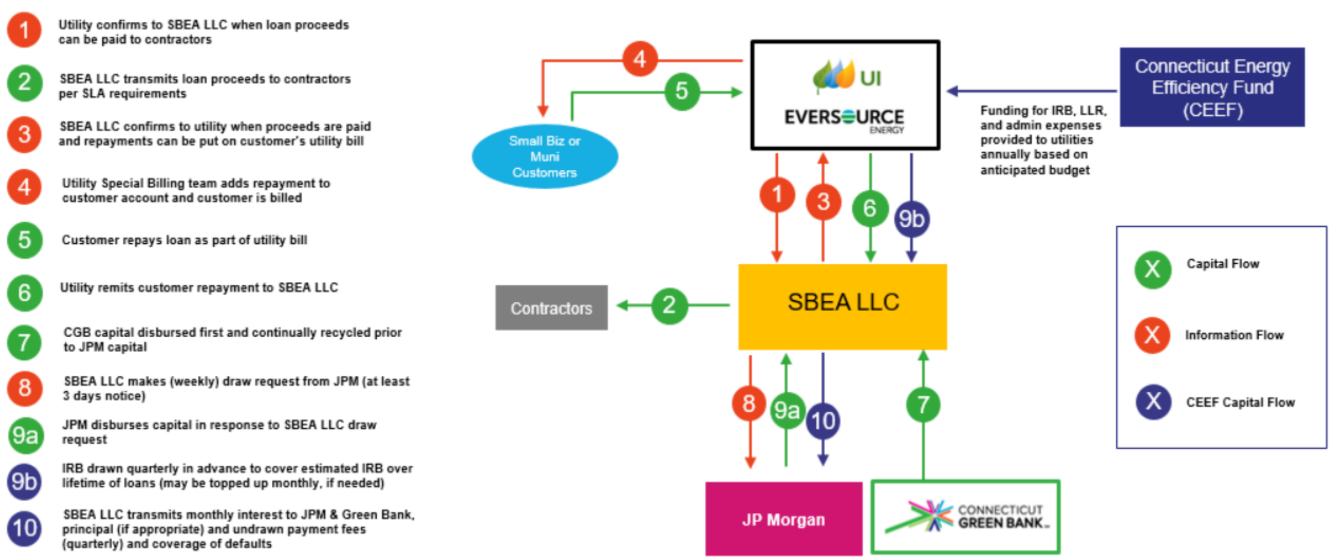
How is the program investment accounted for on the balance sheet and profit and loss statements?

Advances of funds to the SPV debt are accounted for by a reduction in the Green Bank Cash and Cash Equivalents Account (Current Asset on the Balance Sheet) and a corresponding increase in "Capital Contribution – [SBEA]" (Non-Current Asset on the Balance Sheet).

Capital Flow Diagrams

(Representative and Indicative of Final Structure)

Figure 3: SBEA Steady-State Operations and Cash-Flows of Recapitalized SBEA Program



Target Market

Who are the end-users of the engagement?

SBEA loans are available to small business, industrial, and municipal customer located in Eversource or UI territory within the State of Connecticut who have an average 12-month peak electricity demand between 10kW and 200kW. In recent years, UI has rationed loan funding to to municipal customers given constraints on their balance sheet. The proposed SBEA recapitalization will likely provide the most benefit to municipal customers whose projects are larger on average and, in UI territory, have been hampered by limited available loan funding.

Program Partners

Program partners include:

- JP Morgan Chase
- CT utilities: Eversource and UI

JP Morgan Chase

Description

One of the largest global financial services firms with assets of over $2.5 trillion and a significant global footprint in investment banking, asset management, retail and commercial banking, along with private wealth management.

Strategic Needs Addressed by the Proposed Program & Experience with Similar Programs

During the Green Bank's initial discussions with potential capital partners, JP Morgan was quick to display its interest in working with the Green Bank and utilities to come up with a solution that worked for the parties involved. JP Morgan's response to the RFP not only provided the lowest cost capital but also included a two-phased approach allowing for the evolution of the SBEA from an initial line of credit into a commercial paper facility, accessing capital at even lower interest rates.

Throughout the negotiation process on the term sheet and continued discussions with the utilities, EEB, and EEB C&I Committee, JPM has continued to display flexibility and willingness to work with all parties involved to provide a workable financing solution for the SBEA program.

JP Morgan's large balance sheet also means that the SBEA facility can continue to grow without capital constraints as demand for the interest-free loans rises, particularly amongst municipal customers who have been limited particularly by capital-constrained UI.

Leadership & Board of Directors

- Chairman & CEO: Jamie Dimon
- Chief Risk Officer: Ashley Bacon
- Chief Financial Officer: Marianne Lake
- General Counsel: Stacey Friedman
- Board of Directors: Linda Bamman, James Bell, Crandall Bowles, Stephen Burke, Todd Combs, James Crown, Jamie Dimon, Timothy Flynn, Laban Jackson Jr, Michael Neal, Lee Raymond, William Weldon

Competitive Selection and Award

- **Cost of Capital** – lowest cost capital solution
- **Special Capabilities** – proposed most flexible solution incorporating a line of credit and ability to evolve into a commercial paper facility once loan volumes reach critical mass.
- **Strategic Importance** – JPM displayed an eagerness to be involved in the financing of energy efficiency loans and acknowledged an interest in being involved in the first 'green' commercial paper facility should the recapitalized SBEA facility evolve in that manner
- **Timing –** JPM has displayed a willingness to move at the pace dictated by project partners, specifically the utilities

Financial Condition/Funding Sources & Stability

Financial highlights from JPM's annual report are as follows:

Financial Highlights

As of or for the year ended December 31, (in millions, except per share, ratio data and headcount)	2016	2015	2014
Reported basis[a]			
Total net revenue	$ 95,668	$ 93,543	$ 95,112
Total noninterest expense	55,771	59,014	61,274
Pre-provision profit	39,897	34,529	33,838
Provision for credit losses	5,361	3,827	3,139
Net income	$ 24,733	$ 24,442	$ 21,745
Per common share data			
Net income per share:			
Basic	$ 6.24	$ 6.05	$ 5.33
Diluted	6.19	6.00	5.29
Cash dividends declared	1.88	1.72	1.58
Book value	64.06	60.46	56.98
Tangible book value (TBVPS)[b]	51.44	48.13	44.60
Selected ratios			
Return on common equity	10%	11%	10%
Return on tangible common equity (ROTCE)[b]	13	13	13
Common equity Tier 1 capital ratio[c]	12.2	11.6	10.2
Tier 1 capital ratio[c]	14.0	13.3	11.4
Total capital ratio[c]	15.2	14.7	12.7
Selected balance sheet data (period-end)			
Loans	$ 894,765	$ 837,299	$ 757,336
Total assets	2,490,972	2,351,698	2,572,274
Deposits	1,375,179	1,279,715	1,363,427
Common stockholders' equity	228,122	221,505	211,664
Total stockholders' equity	254,190	247,573	231,727
Market data			
Closing share price	$ 86.29	$ 66.03	$ 62.58
Market capitalization	307,295	241,899	232,472
Common shares at period-end	3,561.2	3,663.5	3,714.8
Headcount	243,355	234,598	241,359

(a) Results are presented in accordance with accounting principles generally accepted in the United States of America, except where otherwise noted.
(b) TBVPS and ROTCE are each non-GAAP financial measures. For further discussion of these measures, see Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures and Key Financial Performance Measures on pages 48-50.
(c) The ratios presented are calculated under the Basel III Advanced Fully Phased-In Approach, and they are key regulatory capital measures. For further discussion, see "Capital Risk Management" on pages 76-85.

Risks and Mitigation Strategies

Credit Risk: Credit risk of underlying loan customers is fully borne by CEEF absorbing all loan losses. JP Morgan Chase as the senior lender within the recapitalized SBEA structure remains a low risk given the size of its balance sheet and long history of operating through a variety of extreme market events.

Origination Risk: The utilities originate and approve customer SBEA loans based on historic bill repayment history. The utilities have a light-touch underwriting process in place based on bill repayment history and have noted continued strong demand for the SBEA loans by customers. UI has had to cap loan volumes for its municipal customers given high demand and restricted balance sheet availability. It is anticipated that loan origination will continue to remain steady and is likely to continue to climb as the program is reinvigorated with private sector capital.

Political Risk: Political risk in the form of a raid by the State of Connecticut on CEEF funds for budgetary purposes is a viable concern for this program. JPM's request to prefund the interest expenses and requirement of a 10% loss buffer reduces their CEEF-related risks. Green Bank capital will be at risk in the event of CEEF failure though the Green Bank would make reasonable efforts for reimbursement or compensation from CEEF or a CEEF successor entity if possible.

Participation of JP Morgan Chase and Senior Lender(s): As long as the credit risk of the SBEA program remains as it is currently (i.e. fully backstopped by CEEF), we expect JPM to be able to renew the facility annually. JPM has also expressed an interest in evolving the SBEA facility via a commercial paper facility in the future once loan volumes can support this structure as evidence by the second-phase portion of their RFP response.

In the event that JPM did not want to renew the facility and the credit profile of the SBEA structure remains as is, the Green Bank has no reason to believe there would be issue finding an alternative capital provider given the strength of responses received during the RFP process. In the event that the credit profile of the SBEA structure does change, such as if the CEEF fund is no longer available to provide loan losses, the Green Bank expects that other capital providers (or even JPM) would be willing to provide capital under modified terms and conditions given the added risk. The utility on-bill repayment aspect of the SBEA loan program provides added confidence to capital providers given that utility bills are generally viewed as a required operating expense by small business, industrial, and municipal customers who would pay above other bills to keep the lights running.

.

Resolutions

WHEREAS, pursuant to Conn. Gen. Stat. Section 16-24n the Connecticut Green Bank ("Green Bank") has a mandate to develop programs to finance clean energy investment for small business, industrial, and municipal customers in the State;

WHEREAS, recapitalizing the Small Business Energy Advantage ("SBEA") program with private sector capital is a recognized priority in the Green Bank's Comprehensive Plan and is a goal of the CT Energy Efficiency Board and Green Bank Joint Committee;

WHEREAS, The Connecticut Light and Power Company d/b/a Eversource Energy and The United Illuminated Company (together, the "Utilities") have requested the Green Bank's assistance sourcing low cost private sector capital;

WHEREAS, the Green Bank released a Request for Proposals for Small Business Energy Advantage Program Alternative Financing Solutions (the "RFP") on November 14, 2016;

WHEREAS, JP Morgan Chase responded to the RFP with a comprehensive and flexible solution offering the lowest cost capital to recapitalize the SBEA program;

WHEREAS, Green Bank staff has selected JP Morgan Chase's proposal to recapitalize the SBEA program and now recommends that the Green Bank support the recapitalized SBEA facility by creating and managing a special purpose vehicle (the "SPV") for the new fund structure, committing $3 million in an equity contribution to the fund structure (the "Equity Contribution"), and providing up to $750,000 of capital for short-term liquidity purposes (the "Liquidity Capital"); and

WHEREAS, the Utilities will continue to make funding available from the Connecticut Energy Efficiency Fund ("CEEF") to reimburse interest expenses, loan losses, and administrative costs associated with the recapitalized SBEA program.

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to execute and deliver agreements to establish the Equity Contribution, Liquidity Capital, and SPV with terms and conditions consistent within the memorandum submitted to the Board dated September 21, 2017, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 270 days from the date of authorization by the Board; and

RESOLVED, that the proper Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to effect the above-mentioned legal instruments.

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Mackey Dykes, Vice President, Commercial, Industrial & Institutional Programs; Anthony Clark, Senior Manager, Commercial, Industrial & Institutional Programs; Laura Fidao, Senior Manager, Clean Energy Finance

JP Morgan Term Sheet

Terms and Conditions for Revolving Line of Credit Proposal

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

- [redacted]
- [redacted]
- [redacted]

[redacted]

[redacted]

[redacted]

[redacted]