DRAFT: DO NOT CIRCULATE

Energy Efficiency Financing Foundations

Training for Public Sector Facilities Managers and Finance Officers

This work was funded by the U.S. Department of Energy Office of State and Community Energy Programs, under Contract No. DE-AC02-05CH11231.

Module 6

Engaging with Stakeholders and Partners

Learning Objectives

Learn how to gather information about vendors, compare project costs, and consider vendor vs. customer responsibilities.

Understand who will be responsible for procuring financing and identify potential sources of capital.

Identify and communicate benefits of EE projects within larger capital planning processes.

Consider ways of partnering with internal and interagency stakeholders to move projects forward.

Engaging with Vendors

"**Vendors**" Definition:

Companies that sell, and often install, equipment to help public agencies save energy in their buildings.

Due Diligence: Investigating Vendor Background

<u>Sources of Vendor Background Information</u>:

- Business associations (Chamber of Commerce, trade groups)
- Consumer protection agencies
- Secretaries of State
- Better Business Bureau
- Dun & Bradstreet
- Past client references
- Other facilities managers

Examples: Secretaries of State Reports

VERMONT Secretary of State | CORPORATIONS DIVISION | Vermont Secretary of State, JIM CONDOS

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Filing History

Business Name	Business ID
NEAGLEY & CHASE CONSTRUCTION COMPANY	0097497

Filing Number	Filing Date/Time	Effective Date	Filing Type
0002899343	03/11/2022	03/11/2022	REGISTERED AGENT CHANGE
0002893400	03/02/2022	03/02/2022	ANNUAL REPORT (2021)
0002893396	03/02/2022	03/02/2022	BUSINESS AMENDMENT
0002765336	03/05/2021	03/05/2021	ANNUAL REPORT (2020)
0002644988	03/03/2020	03/03/2020	ANNUAL REPORT (2019)
0002553240	04/09/2019	04/09/2019	ANNUAL REPORT (2018)

Source: Vermont Secretary of State, Corporations Division

Example: Dun & Bradstreet Reports

	Credit Evaluator Plus	Business Information Report™ Snapshot	Business Information Report™ On Demand	D&B Credit Reporter
	$61.99/yr	$139.99/yr *	$189.99/yr *	$799/yr for 5 Reports 10+ Reports Call (855) 819-6440
	Add to Cart	Add to Cart	Add to Cart	Add to Cart
	Learn More	Learn More	Learn More	Learn More
Overall Business Risk Assessment	✓	✓	✓	✓
D&B® Maximum Credit Recommendation	✓	✓	✓	✓
D&B PAYDEX® Score	✓	✓	✓	✓
Risk of Late Payment Indicator	✓	✓	✓	✓
Business and Industry Trends	✓	✓	✓	✓
D&B® Rating		✓	✓	✓
D&B® Delinquency Predictor Score		✓	✓	✓
D&B® Financial Stress Score		✓	✓	✓
D&B Viability Rating				✓

Source: Dun & Bradstreet

Comparing Proposal Costs

Cost categories to consider in comparing proposals include:

- Investment Grade Audit Costs
- Pre-Construction Costs (design and engineering, project development and proposal costs, site visits, legal/accounting review)
- Construction Costs (includes permitting, equipment costs, subcontracting, project management, inspection, commissioning)
- Ongoing operations and maintenance costs
- Ongoing measurement and verification costs

DOE ESCO Cost Comparison Tool

Pre-Construction Fees and Costs	
Design and Other Engineering	$ -
Pre-Construction Services	$ -
Other Pre-Construction Costs	$ -
Construction Fees and Costs	
Trade Subcontractors (Contractor Costs to ESCO)	$ -
Design-Build Subcontractors	$ -
Direct Purchase Equipment	$ -
Construction Management	$ -
Project Engineering	$ -
General Conditions	$ -
Construction Completion	$ -
Subtotals	**$ -**
Other Fees	
Investment Grade Audit and Project Proposal	

Source: U.S. Department of Energy, Cost Pricing Spreadsheet

U.S. DOE: Model Documents for an Energy Savings Performance Contract Project: Cost and Pricing Definitions

Vendor Comparison

In addition to cost comparisons, other factors should be considered when selecting a project vendor, including:

- Firm qualifications
- Project history
- Technical approach (including investment-grade audit, operations and maintenance, and measurement and verification)
- Approach to project development, implementation, and management

For larger projects, it may be worth asking multiple stakeholders to evaluate score vendor proposals

RFQ TO PRE-QUALIFY ESCOS

EVALUATOR SUMMARY (for a single ESCO proposer)

Date	Date
ESCO Evaluated	ESCO Name
Prepared By	Your Name

INSTRUCTIONS:
Enter scores from each Evaluator's scoring sheet for a single ESCO

		Evaluator #1		Evaluator #2		Evaluator #3		Evaluator #4	
EVALUATOR SUMMARY	Weight	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score
1. Program Participation and Compliance	Pass/Fail	Pass/Fail	Pass/Fail	Pass/Fail	Pass/Fail	Pass/Fail	Pass/Fail	Pass/Fail	Pass/Fail
2. Overview of Approach to Performance Contracting	5%	10%	0.5%	10%	0.5%	10%	0.5%	10%	0.5%
3. Project History	20%	10%	2.0%	10%	2.0%	10%	2.0%	10%	2.0%
4. Qualifications	20%	10%	2.0%	10%	2.0%	10%	2.0%	10%	2.0%
5. Financial Soundness and Stability	15%	10%	1.5%	10%	1.5%	20%	3.0%	10%	1.5%
6. Technical Approach	10%	10%	1.0%	10%	1.0%	10%	1.0%	10%	1.0%
7. Management Approach	10%	10%	1.0%	10%	1.0%	10%	1.0%	10%	1.0%
8. Cost and Pricing	20%	10%	2.0%	10%	2.0%	10%	2.0%	10%	2.0%
TOTAL BY EVALUATOR	100%		10%		10%		12%		10%

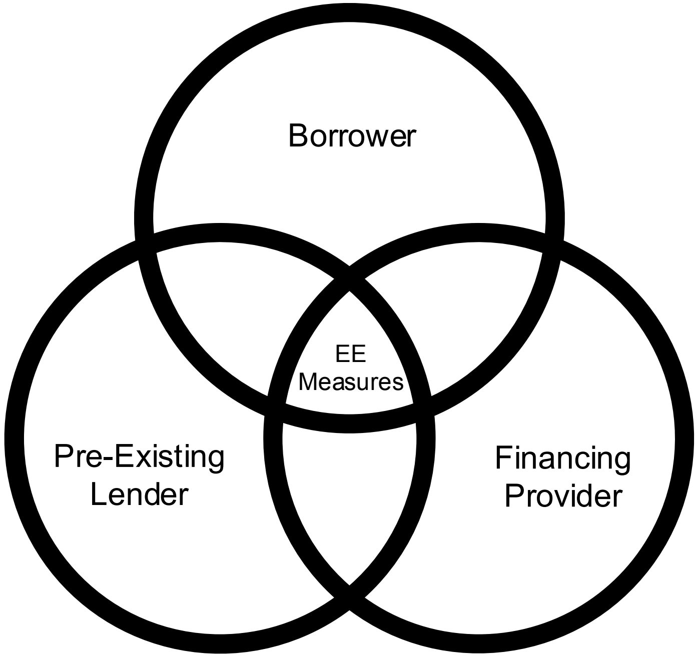
U.S. DOE: Better Buildings ESPC Accelerator, "Best Practices for Selecting an ESCO"

U.S. DOE: Better Buildings ESPC Accelerator, "Evaluation Workbook"

Questions to Ask Vendors: Who will own the ECMs?

- In most financing arrangements, borrower takes title from the beginning.
- Two exceptions:
  - **TELPs**:
    - Some tax-exempt leases transfer title at the end of the lease period, but customer takes on other rights and responsibilities with respect to the equipment (e.g., maintenance, control, etc.).
    - The level of customer control is generally sufficient to allay any concerns of pre-existing financing providers.
  - **EaaS**:
    - Title remains with the provider during the contract period.
    - Unlike TELPS, many of the rights and responsibilities of ownership also remain with the provider, including maintenance and control (e.g., remote management).
    - These arrangements may not be permitted under covenants of pre-existing financial arrangements secured by real property (typically includes building fixtures), which generally prohibit transfer of ownership of all or part of the property (See module 2).

Possible Ownership Rights



Questions to Ask Vendors: Who will be responsible for O&M?

Questions to Consider

- Will customer be expected to handle O&M, or will vendor perform some O&M functions?
- Which O&M functions can the customer continue to control and perform, if it works best for their facility?
- What O&M practices does the vendor follow, if it is a service they provide?

Considerations in contracting for O&M services

OPERATION AND MAINTENANCE SERVICE CONTRACTS

Source: U.S. Environmental Protection Agency, "Operations and Maintenance Service Contracts: Guidelines for Obtaining Best-Practice Contracts for Commercial Buildings

Questions to Ask Vendors: How will savings be measured?

- Will savings measurement be performed by vendor or customer?
- If vendor performs savings measurement, what methodologies are used?
- Resources below cover best practices for ESPC contracts (left), as well as a framework for self-directed or utility-program-driven EM&V (right). See Module 5 for more details.

M&V framework typically used by ESPC vendors


U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

M&V Guidelines: Measurement and Verification for Performance-Based Contracts Version 4.0

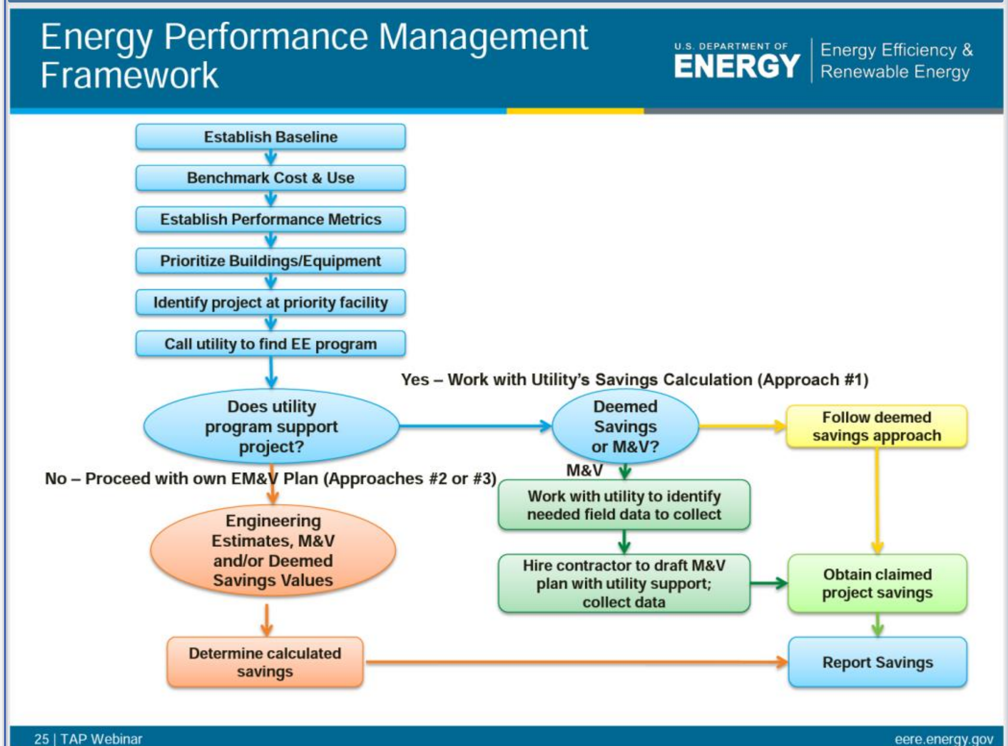
Prepared for the U.S. Department of Energy Federal Energy Management Program

November 2015

FEMP

Source: [U.S. Department of Energy]

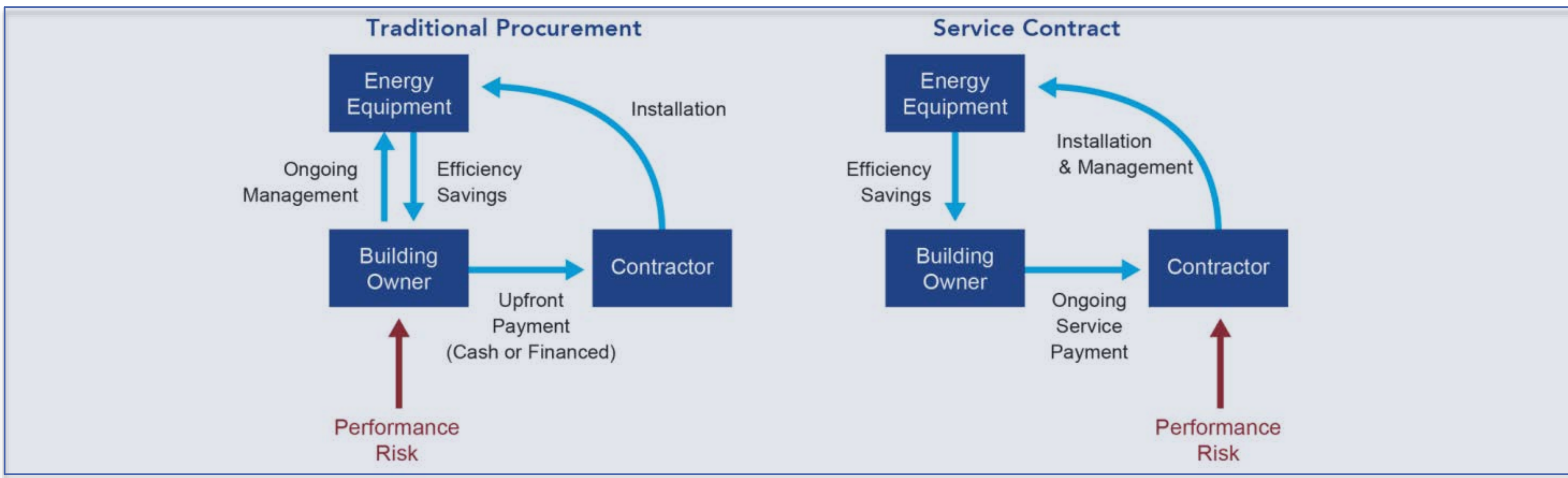
Developing a self-directed or utility-based savings measurement plan



Source: [U.S. Department of Energy, "Developing an Evaluation, Measurement and Verification Plan for Municipal Building Energy Efficiency Projects"]

Questions to Ask Vendors: Who takes on performance risk?

- Most financing arrangements: borrower takes on performance risk.
- Service contracts: provider takes on some or all performance risk
  - **Shared Savings**: Customer and financing provider (often the vendor) split savings above an agreed-upon threshold. If savings are not realized, customer typically does not pay. Specific details can be defined by contract.
  - **Savings Guarantees**: If savings are not realized above an agreed-upon threshold, customer typically still owes financing payment, but vendor will pay customer difference between realized savings and threshold to make up the difference.
- EaaS typically uses a shared savings model.
- ESPC more commonly uses a savings guarantee.



Source: U.S. Department of Energy, Better Buildings Solutions Center

Technical Assistance Programs

Where available, take advantage of programs and resources that offer **technical assistance (TA)**:

- Review and potentially assist in negotiating contract terms, including:
  - Technical project scope
  - Financing arrangements
  - Savings guarantee provisions
- Assist with oversight of project installation
- Review protocols for savings measurement and oversee ongoing performance and savings realization

Example: Guaranteed Energy Savings Program
Minnesota Division of Energy Resources

COMMERCE DEPARTMENT
DIVISION OF ENERGY RESOURCES

What is the Guaranteed Energy Savings Program?

The Guaranteed Energy Savings Program (GESP) provides technical, contractual and financial assistance to state and local government units, school districts, and institutions of higher learning that elect to implement energy efficiency and renewable energy improvements through Guaranteed Energy Savings Contracts. GESP supports you every step of the way. GESP can help you:

- Solicit and award site-specific requests for proposals from pre-qualified Energy Service Companies (ESCOs) to perform Energy Savings Performance Contracting (ESPC) services
- Evaluate the technical and financial feasibility of ESCO proposals
- Negotiate and award work order contracts to pre-qualified ESCOs under the GESP Master Contract to implement energy conservation measures
- Offer project management oversight of ESPC projects
- Provide technical assistance to ensure the ESPC Measurement and Verification Plan is properly performed throughout the performance period of the contract

Source: Minnesota Commerce Department, Division of Energy Resources

TA Resources:
- State energy technical assistance programs
- Utility energy efficiency technical assistance programs
- Owner's representatives
- ESPC toolkit
- US DOE online resources

Engaging with Financing Providers: Typical Options

Traditional Financing Products (Module 3)	Specialized Financing Products (Module 4)
Loans	On-Bill Financing
Tax-Exempt Leases	Efficiency as a Service (EaaS)
Bonds	Energy Savings Performance Contracts (ESPC)

See modules 3 and 4 for pros and cons of each financing option.

Comparing Financing Options

Financing costs can vary based on:

- Interest rates
- Term length
- Financing-related “soft costs” (e.g., bond counsel, underwriting, etc.)
- Upfront fees (e.g., origination/closing)
- Risk mitigation (e.g., sinking funds, borrower-funded loss reserves)

While product structures may vary, certain metrics can help with cost comparisons, e.g.:

- Net present value (NPV) of total project costs under different financing scenarios
- Periodic payment amounts

Analyses should also account for:

- Differences in up-front costs
- Shifting or floating interest rates
- Payments due at termination (e.g., bond par value)
- Lender rights to accelerate payments

EPA Financing Alternatives Comparison Tool

Used in context of wastewater and drinking water projects, but concepts and mechanics also apply to energy efficiency

Choose Summary Report/Graph: Snapshot Report

1. Select Financing Analysis to Work with: Town of Simplicity

2. Select Discount Rate: 8.00 %

Financing Option-> Financing Source->	Option 1 Direct Loan	Option 1 Leveraged Loan	Option 1 Total	Option 2 Rev Bond
Amount Financed - New Costs	3,337,787			3,333,333
Amount Financed - Refinance Costs	0	3,000,000	3,000,000	0
Amount Funded from Grants	0	0	0	0
Total Amount Funded	3,337,787			3,333,333
Total Principal	3,337,787	3,000,000	6,337,787	3,333,333
Total Interest	804,120	669,403	1,473,523	2,849,506
Total Repayment Fees	0	0	0	0
Total Recurring Costs	0	0	0	0
Total Other Costs/(Earnings)	-3,494,284	0	-3,494,284	-827,083
Total Costs	647,622	3,669,403	4,317,025	5,355,756
Years of Repayment	6.0	20.0	25.0	25.0
Average Cost per Year	107,937	183,470	172,681	214,230
Net Present Value of Total Costs	531,865	1,182,558	1,714,423	2,076,392
Comparison to Lowest NPV Cost Option:				
Net Difference			0	361,969
Percent Difference			0.0%	21.1%

Preview Detailed Reports-->>

Summary Level Report

Detail Level Report

Source: U.S. Environmental Protection Agency, Financing Alternatives Comparison Tool

Engaging with Internal and External Public Stakeholders

Engaging with Internal Stakeholders

- Certain aspects of various financing products may be helpful in promoting energy efficiency projects with internal stakeholders.
- Overall, traditional products are generally more familiar and can facilitate inclusion of energy efficiency into larger, non-energy-specific financings.
- By contrast, specialized products tend to offer attractive features such as integrated project management, ongoing maintenance, and savings guarantees.
- Some specialized products are marketed as "non-debt," but this is a complex issue. See Module 4.

Note: Table is specific to financing product features that may facilitate internal buy-in. See Module 4 for more general pros and cons.

	Loans	Leases	Bonds	On-Bill	ESPC[1]	EaaS
Familiarity	✓	✓	✓	~ [2]	~	X
Integration with Larger Financings	✓	✓	✓	X	X	X
Ease of Application	~	✓	X	✓	X	X
Project Management	X	X	X	X	✓	✓
Ongoing Maintenance	X	X	X	X	~ [3]	✓
Savings Guarantees	X	X	X	X	✓	✓

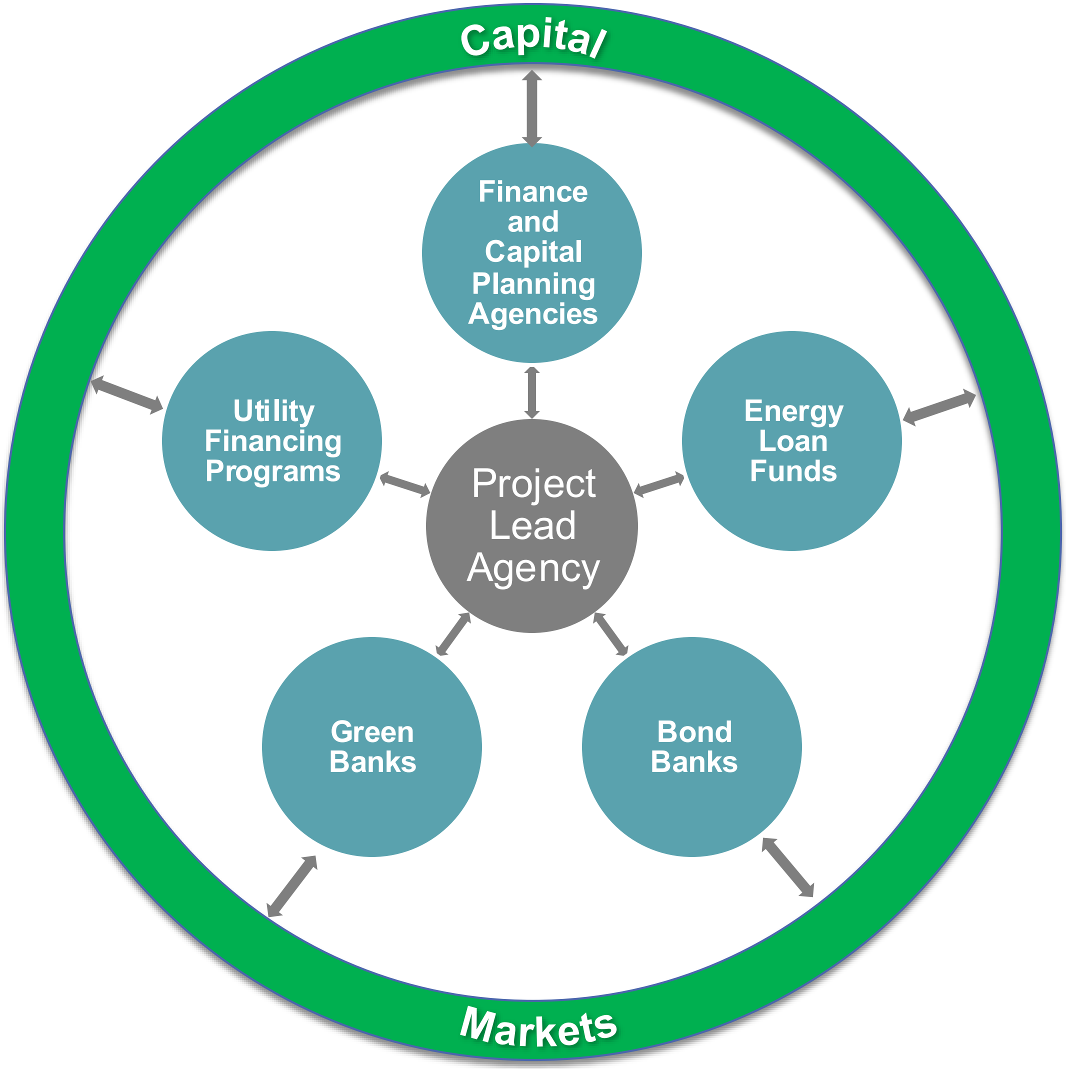
✓ Inherent to product ~ May or may not be present in particular offerings X Not a product feature

1. ESPC may be integrated with financing such as leases or bonds. This column refers to the layering on of ESPC arrangements on top of financing arrangements.
2. On-bill financing as a concept may not be familiar, but uses the utility bill as a familiar, integrated repayment mechanism.
3. Maintenance components are often part of ESPC contracts but may be negotiable.

Engaging with Interagency Stakeholders and Utility Programs

Key Considerations:

- In addition to engaging with internal agency staff, agencies may engage with a range of governmental or quasi-governmental partners to help develop, approve, and finance EE projects (Blue circles).
- Some, such as general services agencies, may oversee facilities needs assessments and capital planning processes (see Module 2).
- Others, such as state treasuries and public/quasi-public financing agencies, may help access capital for EE projects.

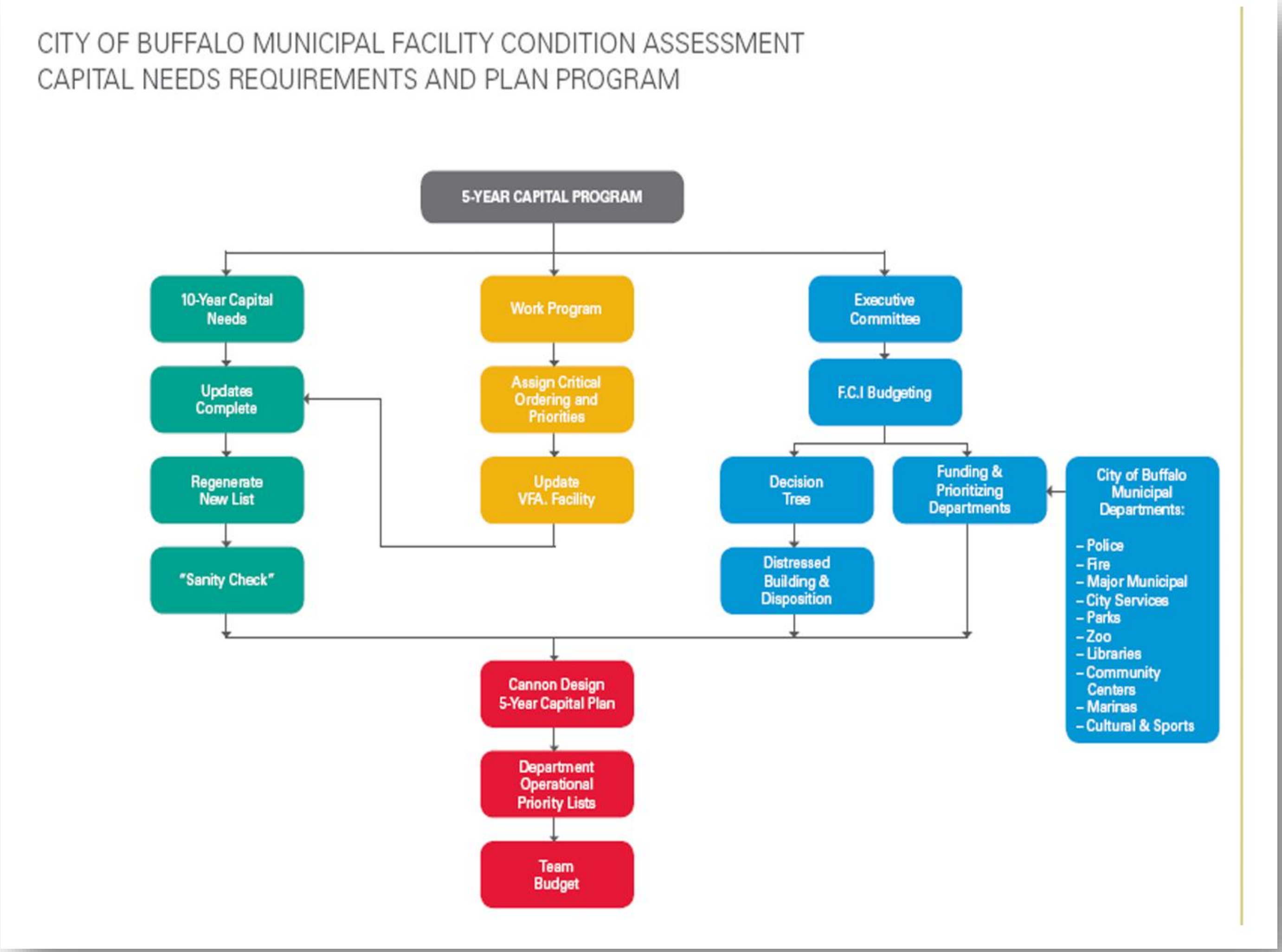


Engaging with Centralized Capital Planning Agencies

- Many state and some local governments have centralized agencies that oversee facilities needs assessments and capital planning across all agencies. Energy efficiency projects may require approval by these agencies.
  - Focusing on the positive net present value and potentially neutral or positive cash flow impacts of EE projects may help with approvals.
  - ESPC savings guarantees can further bolster this case.
- Some states allow agencies to reinvest all or a portion of energy savings back into agency-specific budgets.

See Module 2 for further discussion of budgeting and capital planning.

Example: Interagency Capital Planning Process, Buffalo, NY



Source: [National Association of State Facilities Administrators, "How to Build a 21st Century Facility Management Program"]

Centralized Agencies for Bond Issuance

Centralized Debt Issuance

- 41 states and the District of Columbia have a centralized agency or financing authority primarily responsible for debt issuance
- May include:
  - State treasury departments
  - Economic development authorities
  - Public building/ infrastructure agencies
- State "debt" issuance typically refers to general obligation (GO) bonds, unless otherwise specified.

Source: National Association of State Budget Officers (NASBO), "Capital Budgeting in the States" (see excerpted state-by-state tables in Appendix slides)

Example: Nevada State Treasurer

The State Treasurer is responsible for the issuance of any obligation authorized on the behalf of and in the name of the State, with certain exceptions as stated in Nevada Revised Statute (NRS) 226.110.

State's Capital Improvement Plan

The Department of Administration, Division of Public Works shall recommend the State's biennial Capital Improvement Plan to the Legislature during the regular session. Each biennium, a Capital Improvement Projects bill is thereby submitted to the Legislature, which identifies and authorizes projects to be financed through debt financing, which is subject to the results of the General Obligation Debt Capacity and Affordability Report submitted to the Legislature.

As general obligation bonds, the source of funding for the payment of debt service is included in the amount of the ad valorem tax set in law that is dedicated to the State's general obligation bonds paid from ad valorem tax revenue (currently 17 cents per $100 of assessed valuation). As such, the Capital Improvement Projects bill shall set the amount of funding authorized for eligible projects including the amount authorized to be funded through debt financing paid from ad valorem tax revenue or other identified sources of funding.

Source: [Nevada State Treasurer's Office]

Example: Kansas Development Finance Authority

Kansas Development Finance Authority

A statewide, multipurpose financial resource

ABOUT KDFA | ACTIVITIES | RESOURCES | FINANCE APPLICATIONS | MSRB EMMA | CAREERS | CONTACT US

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State Projects

Kansas Development Finance Authority is periodically authorized to provide for the issuance of revenue bonds for certain activities and capital improvement projects of state agencies which have been approved by specific legislative authorization or occasionally by Resolution of the State Finance Council and all as requested by the Secretary of Administration.

KDFA is also authorized to issue bonds for the purpose of refunding any outstanding bonded indebtedness of any State agency. Bond proceeds are used for such projects as construction and acquisition of office buildings, restoration of the Capitol Building, energy conservation improvements, equipment upgrades, and construction or renovation of State correctional, hospital or other facilities.

Governing Body

The powers of the Kansas Development Finance Authority are vested by statute in a five-member Board of Directors who are appointed by the Governor to staggered four-year terms of office, subject to confirmation by the Kansas Senate. At least three of the appointed members must be representative of the general public, and not more than three of the five Board members can be of the same political party.

Source: Kansas Development Financing Authority

Example: Ohio Public Facilities Commission

Ohio | Office of Budget and Management

Ohio Public Facilities Commission

Bond Programs

About Ohio Public Facilities Commission
The Ohio Public Facilities Commission (OPFC) issues general obligation bonds for common schools, higher education, natural resources, coal research and development, conservation projects, local infrastructure improvements, Third Frontier research and development, job-ready site development, and veterans' compensation. Each of these currently authorized programs is described below.

Common Schools - A 1999 constitutional amendment authorizes general obligation debt to be issued to pay the costs of school buildings and related capital facilities for a system of common schools throughout the state. There is no constitutional limit on the amount of debt that can be outstanding at any time. The full faith and credit, revenue (including net state lottery proceeds, if pledged) and taxing power (excluding highway user receipts) of the state are pledged to retire this debt.

Conservation - Constitutional amendments in 2008 and 2000 authorize $400 million of general obligation debt to be issued to finance preservation of green space and natural areas, development of recreational trails, and protection of farmland through the purchase of agricultural easements, all through partnerships with local governments. Not more than $50 million may be issued in any fiscal year. Additional debt may be issued as outstanding debt is retired, provided that not more than $400 million is outstanding at any time.

Higher Education - A 1999 constitutional amendment authorizes general obligation debt to be issued to pay the cost of school buildings and related capital facilities for state-supported and state-assisted institutions of higher education. There is no constitutional limit on the amount of debt that can be outstanding at any time.

Infrastructure Improvements - A 2014 constitutional amendment authorized $1.875 billion of general obligation debt as a 10-year extension of this program to finance public infrastructure capital improvements of municipal corporations, counties, townships, and other local government entities as designated by law, with an annual issuance limit of $175 million in the first five years increasing to $200 million in the second five-years. This extension followed a prior 10-year extension passed in 2005 which authorized an additional $1.35 billion of general obligation debt. Additionally, there were two prior debt authorizations for this purpose (passed in 1985 and 1995) that each authorized $1.2 billion in debt.

Source: [Ohio Public Facilities Commission, State Debt Overview]

Bond Banks

- Consolidate state and/or local government bonds into a single issuance to obtain lower financing costs through diversified risk and superior credit ratings
- Generally make a limited number of issuances at predetermined times throughout the year
- Handle the upfront logistics of bond issuance and ongoing logistics of payments and disclosures
- May require conformity to certain bond parameters (depending on issuance and agency requirements)
- Not available in all states. Estimates of number of bond banks ranges from a handful to a dozen or more, depending on how they are classified.

Examples:

Example: Vermont Bond Bank

Vermont Bond Bank

SOUTHWEST VERMONT SUPERVISORY UNION

Issuer: Vermont Municipal Bond Bank, an authority of the State of Vermont.

Purpose of Bond Issuance Proceeds: Used to complete efficiency upgrades on K-12 school district facilities and develop a new net zero emission police and fire facility for a town.

Background: The Vermont Municipal Bond Bank (the Bank) is an authority of the State of Vermont that issues bonds and uses the proceeds to purchase bonds issued by local governments within the state. Local governments first submit an approved application to the Bank and enter into a loan agreement with the Bank prior to the Bank's purchase of local government bonds.

In March 2017, the Bank issued $6.1 million in labeled green general obligation bonds as part of a larger, pooled $38 million general obligation bond issuance, enabling green-focused investors to target their investment dollars to projects aligned with their investment objectives. The bond issuance supported the following two projects:

1. The Bennington School District, as part of an ESPC project, invested $4.5 million in higher efficiency boilers, heating control systems, water heating, energy recovery ventilators, windows, insulation, and LED lighting29; and
2. The Town of Norwich invested $1.4 million to develop a net zero emissions fire and police facility that did not rely on natural gas, fuel oil, or propane and incorporated solar electricity.

Source: U.S. Department of Energy, "Leveraging Bond Financing to Support Energy Efficiency and Renewable Energy Goals"

Sources of alternative (non-bond) public sector building improvement financing

Example: Mississippi Department of Finance and Administration State Agency Master Lease Program

What are the Benefits of Participating in the Program?

DFA established and designed the Program to provide each State Agency with competitive interest rates and low financing costs for lease-purchase transactions. The interest rates paid under the Program are typically below those that historically have been achieved by lease-purchase agreements entered into by State Agencies acting individually. DFA achieves this result by aggregating the lease-purchase needs of all State Agencies into a single transaction that utilizes standardized documentation and procedures. Due to its aggregated dollar volume, the transaction can be insured or rated, which further reduces the interest rate to the State Agencies. DFA can then access the public markets through the competitive or negotiated sale of insured and/or rated Lease Revenue Certificates of Participation (“COPs”).

The COPs are tax-exempt municipal securities, and they represent the investor’s interest in the lease payments. Alternatively, DFA can give local, Mississippi banks the opportunity to bid on the Program for financing through a negotiated, competitively-bid process reducing the cost of issuance and timing of the financing. Participation in the Program creates an economy of scale such that each participating State Agency can take advantage of factors such as increased dollar volume, standardized documentation and procedures, insurance, rating and the ability to access the public markets.

Ease of Access and Administration

The centralized procurement, documentation and financing process offered by the Program simplifies and minimizes the costs of administration relating to equipment financing for both DFA and the State Agencies while providing the State Agencies with quick and easy access to the financial benefits of the Program. Access to the Program is simplified by establishing DFA as a central source for contact with respect to the lease-purchase financing needs of State Agencies. The Financial Advisor and Lessor work closely with DFA and the participating State Agencies to ensure that benefits are enjoyed by all State Agencies. DFA, the Financial Advisor and the Lessor are available to answer any Program questions or to discuss any upcoming equipment needs. All required documentation is drafted by the Financial Advisor and approved by DFA and its counsel prior to being forwarded to the State Agencies.

MISSISSIPPI DEPARTMENT OF DFA FINANCE AND ADMINISTRATION

Financial Certainty and Flexibility

The structure of the Program provides flexibility to State Agencies by making funds available to pay for the purchase, delivery and installation of equipment acquired from each vendor when needed or desired. This allows State Agencies to take advantage of prompt payment discounts or to make necessary progress payments to vendors if those payments result in overall savings to State Agencies. The financing structure of the Program also provides a degree of flexibility that allows each State Agency to make lease payments over a lease-purchase term appropriate to the useful life for each particular item of equipment acquired under the Program and each State Agency’s budgetary needs or constraints. The Financial Advisor will work with each State Agency to develop a customized amortization schedule of lease payments that will fit each State Agency’s needs under the Program. The Program also provides each State Agency with potential opportunities to refinance existing lease-purchase obligations at current market rates.

Source: MS Department of Finance and Administration

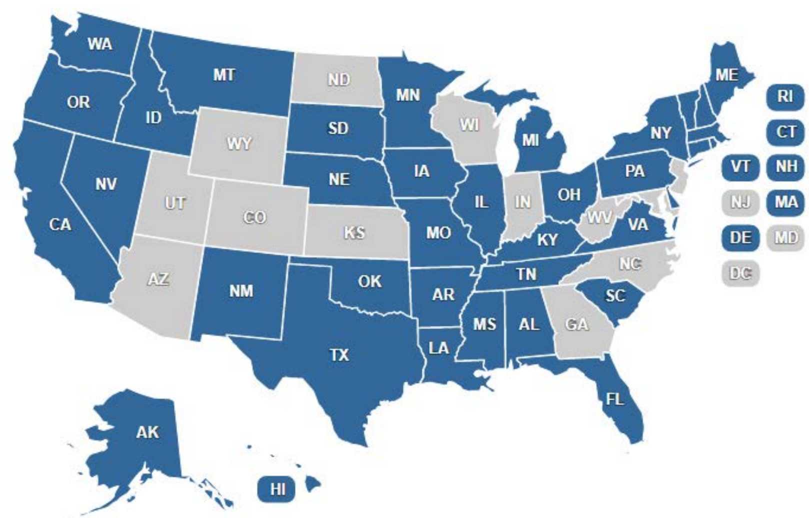
State Energy Loan Funds and Program Administrators

- Enable state and local agencies to support clean energy projects.
- May be administered by state or local energy offices, as well as other agencies such as state treasuries, financing authorities, or capital planning agencies.
- Funding availability limited to fund size, but frequently structured as a revolving loan funds (RLFs). Allows funds to be recycled into new clean energy loans as outstanding loans are repaid. See Module 2 for more details.
- Administrators typically set eligibility requirements for energy-specific funds, include sector eligibility and project eligibility parameters.

National Association of State Energy Officials (NASEO) map provides descriptions and links to many of these programs.*

Program descriptions list program administrators and specify whether public-sector buildings are eligible.

*Note: Not all energy loan funds are captured on this map, but provides a helpful resource for many states.



Source: National Association of State Energy Officials (NASEO)

State and Local Energy Loan Funds and Program Administrators

DSIRE database can be filtered for loan programs and other financing options, as well as public-sector eligibility.

Program descriptions specify program administrator. Can be filtered for state or local.

Note: See Module 2 for more on using DSIRE to search general energy efficiency funding resources by state.

DSIRE® | NC CLEAN ENERGY TECHNOLOGY CENTER

Home Programs Resources Services Help/Support

Programs

Name	State/ Territory	Category	Policy/Incentive Type
Energy Efficiency Revolving Loan Fund Program	AK	Financial Incentive	Loan Program
Sustainable Building Design Revolving Loan Fund	AR	Financial Incentive	Loan Program
SoCalGas - Non-Residential On-Bill Financing Program	CA	Financial Incentive	Loan Program
SCE - Non-Residential On-Bill Financing Program	CA	Financial Incentive	Loan Program
PG&E - Non-Residential Energy Efficiency Financing Program	CA	Financial Incentive	Loan Program
Xcel Energy - Commercial Energy Efficiency Financing	CO	Financial Incentive	Loan Program
Low-Interest Loans for Customer-Side Distributed Resources	CT	Financial Incentive	Loan Program
Norwich Public Utilities - Zero Percent Financing Program	CT	Financial Incentive	Loan Program
Small Business Energy Advantage Loan Program	CT	Financial Incentive	Loan Program

Source: [NC Clean Energy Technology Center, DSIRE Database]

Example: Kentucky Finance and Administration Cabinet State Agency Revolving Loan Programs

eSELF Revolving Loan Program allows state agencies to self-perform energy efficiency projects costing between $50,000 and $225,000. The goal for the eSELF program is a 20 percent reduction in energy consumption. State buildings with high energy costs, stable programming and for which no major capital improvement or renovations are planned for at least seven years generally make good candidates for the eSELF program.

Hybrid Revolving Loan Program allows funding for energy projects in state facilities that cost between $50,000 and $600,000. An energy audit or engineering analysis is required along with a completed design and development package. State agencies will procure labor and materials. For more information, please see the Energy Audits page.

ESPC Revolving Loan Program funds energy efficiency projects typically costing more than $600,000. These projects use investment-grade energy audits to provide a detailed cost benefit analysis of energy efficiency investments. These projects also use a life cycle energy cost analysis. For more information, see the Energy Audits page. These loans also require an energy savings performance company or (ESCO). For more information, see our What is an ESCO page.

Source: Kentucky Finance and Administration Cabinet

Green Banks

Capital Markets ⟷ Green Bank ⟷ Project Demand

- Green Bank mission is to use finance tools to mitigate climate change.
- Finance institution dedicated to increasing and accelerating investment in clean power goods and services.
- Can be funded by government, charitable contributions or both.
- May deploy capital from public or private sources, invest on its own or in conjunction with private sector investors. Does not typically take deposits.
- Uses methods that catalyze greater overall investment.

Green Bank Goal is Volume & Scale

coalition for green capital

Source: U.S. Environmental Protection Agency, "Clean Energy Finance: Green Banking Strategies for Local Governments"

Example: Rhode Island Infrastructure Bank Efficient Buildings Fund

RHODE ISLAND INFRASTRUCTURE BANK

Efficient Buildings Fund

WHAT IT IS

The **Efficient Buildings Fund (EBF)** makes attractive, long-term financing available to municipalities and quasi-public agencies for the completion of energy efficiency and renewable energy projects.

HOW IT WORKS

- Projects eligible for EBF financing include any measures that will conserve energy or produce clean energy
- Loans made through the EBF may be repaid over a period of up to 15 years and can be structured to meet the repayment abilities unique to each borrower
- Borrowers receive a reduced interest rate
- Projects are awarded financing based on their ranking on the Office of Energy Resources' Project Priority List, readiness to proceed and subject to credit approval and the availability of funds

Source: [Rhode Island Infrastructure Bank, Efficient Buildings Fund]

Utility Financing

- Many utilities offer financing programs to their customers.
- Commercial financing programs are often available to public-sector utility customers. Some utilities also offer specific public-sector financing programs.
- Some programs allow repayment through the utility bill ("on-bill"), while others rely on traditional payment mechanisms. See Modules 3 and 4 for more details on financing structures.

Implementing Sector: Utility | **Eligible Sector:** Public Sector | **Program Type:** Loan Program

Name	State/ Territory
SoCalGas - Non-Residential On-Bill Financing Program	CA
SCE - Non-Residential On-Bill Financing Program	CA
PG&E - Non-Residential Energy Efficiency Financing Program	CA
Xcel Energy - Commercial Energy Efficiency Financing	CO
Norwich Public Utilities - Zero Percent Financing Program	CT
Small Business Energy Advantage Loan Program	CT
Small Business & Municipal Loan Program	CT

Source: NC Clean Energy Technology Center, DSIRE Database

Example: Energize Connecticut Small Business and Municipal Loan Program (Eversource and United Illuminating)

energize CONNECTICUT CT

Small Business & Municipal Loan Program

What is the Small Business and Municipal Loan Program?	These loans are funded through the Connecticut Energy Efficiency Fund to help upgrade or replace existing electric and gas equipment with qualifying high-efficiency equipment.
Loan Terms →	•Commercial or industrial businesses participating in the **Small Business Energy Advantage (SBEA)** program can apply for loans ranging from $500-$100,000. •Municipalities participating in a retrofit program can apply for loans up to $1 million. •Repayment terms up to 48 months. •Convenient on-bill payment option.
Eligibility →	•Commercial and industrial businesses of Eversource or UI that are participating in the **Small Business Energy Advantage (SBEA)** program are eligible. •Municipalities served by Eversource or UI with projects qualifying for the Energy Opportunities program may also participate. •All participating customers must be in good credit standing, be a Utility customer for one year , and have less than four utility late payments. •The loan must be used to upgrade or replace existing electric and natural gas equipment with high-efficiency equipment.

Source: Energize Connecticut

Additional References

- Benefits of Using Owner's Representatives
- ESPC Champions Toolkit
- Best Practices for Selecting an ESCO
- ESPC Networking Toolkit
- Driving uptake report (when released)

ELECTRICITY MARKETS & POLICY

Contacts

Greg Leventis: gleventis@lbl.gov, 510.486.5965

For more information

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Appendix:
State-by-State Information*

*Check with your state to verify information contained in these tables. Some have changed their processes since the source report was published in 2014.

States Using a Centralized Agency for Debt Issuance

State	Centralized Agency or Financing Authority is Primarily Responsible for Debt Issuance	Additional Explanation
Alabama*		
Alaska	X	G.O./revenue/lease/debt sold through centralized agency. Housing, economic development, student loan, bond bank, energy project debt all sold through public corporations.
Arizona		
Arkansas		Financing Structure and mechanisms in law.
California	X	
Colorado		Issued by individual Agencies as the State is not allowed to issue debt.
Connecticut	X	Office of the State Treasurer.
Delaware	X	
Florida	X	The State Board of Administration is the agency in Florida that issues debt.
Georgia	X	Georgia State Financing and Investment Commission
Hawaii	X	
Idaho	X	
Illinois	X	GOMB is the primary agency responsible to issue state debt although there is also a state finance authority for conduit debt.
Indiana	X	Indiana Finance Authority.
Iowa		Legislatively authorized debt can be issued by the Treasurer of State, Iowa Finance Authority and the Board of Regents.
Kansas	X	Kansas Development Finance Authority (this is not a state agency but an independent instrumentality).
Kentucky	X	The State Property & Buildings Commission and the Turnpike Authority of KY are the primary debt issuing authorities staffed by the Finance & Administration Cabinet's Office of Financial Management.
Louisiana	X	The Louisiana State Bond Commission centrally issues and administers all debt of the State and its agencies, as required by the Louisiana Constitution.
Maine	X	Office of the Maine State Treasurer.

Source: National Association of State Budget Officers (NASBO): "Capital Budgeting in the States"

States Using a Centralized Agency for Debt Issuance

State	Centralized Agency or Financing Authority is Primarily Responsible for Debt Issuance	Additional Explanation
Maryland	X	
Massachusetts	X	Debt of the Commonwealth is issued by the State Treasurer.
Michigan	X	State Building Authority.
Minnesota	X	Minnesota Management and Budget issues most state GO debt. There are some independent authorities in Minnesota that also have authority to issue state debt.
Mississippi	X	
Missouri	X	Debt issued through Board of Fund Commissioners.
Montana	X	
Nebraska	X	State Accounting for Master Lease arrangements; Board of Regents for Higher Education
Nevada	X	State Treasurer's Office.
New Hampshire	X	All State debt issued through the State Treasurer's Office.
New Jersey	X	
New Mexico	X	New Mexico issues debt through the State Board of Finance (centralized agency). In addition the Department of Transportation and the New Mexico Finance Authority have the authority to issue bonds.
New York	X	The Division of the Budget ("DOB") coordinates the State's debt issuance process for all State-supported bond sales, except for those issued by the Office the State Comptroller ("OSC"). Each fiscal year, the DOB prepares a proposed bond sale calendar that outlines the year's debt issuances to finance the capital projects authorized in the five-year Capital Program and Financing Plan. The calendar is developed based on the State's capital commitments and liquidity needs. For each bond sale, DOB establishes a timetable for deliverables, works collaboratively to structure the sales, and evaluates actual outcomes. New York State-supported bonds are issued primarily through three authorized issuers: The Dormitory Authority of the State of New York, the Empire State Development Corporation and the Thruway Authority. Also, the Comptroller of the State of New York issued debt for general obligation and LGAC purposes.
North Carolina	X	

Source: National Association of State Budget Officers (NASBO): "Capital Budgeting in the States"

States Using a Centralized Agency for Debt Issuance

State	Centralized Agency or Financing Authority is Primarily Responsible for Debt Issuance	Additional Explanation
North Dakota	X	
Ohio	X	Ohio Public Facilities Commission.
Oklahoma	X	The Oklahoma State Bond Advisor's Office and the Oklahoma Capitol Improvements Authority issue debt for capital projects.
Oregon	X	The State Treasurer has over-all responsibility for issuance of state debt. The Department of Administrative Services (DAS) issues debt for most state equipment and facilities, The university system and community colleges issue state debt independent of DAS. Other agencies (Transportation, Housing, Environmental Quality, Economic Development, Energy, etc.) issue program specific debt.
Pennsylvania	X	
Rhode Island	X	The State Budget Office, in cooperation with the General Treasurer's Office, oversees the issuance of state debt and is responsible for ongoing tracking of debt issuances.
South Carolina	X	The Office of State Treasurer is the centralized agency for issuing all debt for state agencies and higher education institutions. That debt includes all general obligation debt as well as debt backed by revenue sources of the individual higher education institutions.
South Dakota	X	South Dakota Building Authority.
Tennessee	X	
Texas	X	Debt is primarily issued through the Texas Public Finance Authority. The Texas Department of Transportation and some higher education institutions also issue debt.
Utah	X	State Treasurer.
Vermont	X	State Treasurers Office.
Virginia	X	Debt is primarily issued by financing authorities such as the Virginia College Building Authority, the Virginia Public Building Authority, and the Virginia Public School Authority.
Washington	X	Once the legislature appropriates general obligation bond capacity, the State Finance Committee (Governor, Lieutenant Governor, and Treasurer) authorize the sale of bonds. The State Treasurer conducts bond sales and is the centralized agency responsible for management of all bonds.
West Virginia		
Wisconsin	X	
Wyoming		
District of Columbia	X	

Source: [National Association of State Budget Officers (NASBO): "Capital Budgeting in the States"]

States Using Alternatives to Bonds To Finance Capital Projects

Table 38: Alternative Capital Financing Methods

State	Certificates of Participation (COP)	Lease-Purchase Agreements	Public-Private Partnerships	Tax Increment Financing (TIF)	Revolving Loan Funds	Private Sector Development Bonds	Other
Alabama*		X		X			
Alaska	X	X			X		
Arizona	X	X	X				
Arkansas					X		
California*		X					X
Colorado*	X	X					X
Connecticut		X	X	X	X		
Delaware*		X					X
Florida	X	X	X		X		
Georgia			X				
Hawaii	X	X	X				
Idaho							
Illinois			X	X	X		
Indiana		X	X		X		
Iowa							
Kansas	X	X	X	X	X		
Kentucky		X	X		X		
Louisiana							
Maine	X	X					
Maryland		X	X		X		
Massachusetts		X		X	X		
Michigan	X	X	X				
Minnesota*	X	X					X
Mississippi	X	X	X				
Missouri				X	X		

Source: National Association of State Budget Officers (NASBO): "Capital Budgeting in the States"

States Using Alternatives to Bonds To Finance Capital Projects

Table 38: Alternative Capital Financing Methods

State	Certificates of Participation (COP)	Lease-Purchase Agreements	Public-Private Partnerships	Tax Increment Financing (TIF)	Revolving Loan Funds	Private Sector Development Bonds	Other
Montana					X		
Nebraska		X	X				
Nevada*	X	X			X		
New Hampshire		X					
New Jersey	X	X	X				
New Mexico*		X		X	X	X	
New York		X					
North Carolina	X	X			X		
North Dakota		X					
Ohio	X				X		
Oklahoma		X	X				
Oregon		X					
Pennsylvania							
Rhode Island*	X	X			X		
South Carolina	X		X	X	X		
South Dakota	X				X		
Tennessee*							X
Texas		X	X		X	X	
Utah							
Vermont	X	X	X	X	X		
Virginia		X	X		X		
Washington	X	X					
West Virginia		X	X	X	X		
Wisconsin	X	X				X	
Wyoming							
District of Columbia	X	X		X			
Total	**20**	**35**	**20**	**10**	**23**	**3**	**5**

Source: National Association of State Budget Officers (NASBO): "Capital Budgeting in the States"