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DC Green Bank



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I) Introduction to PACE Financing

A) What is PACE?

Property Assessed Clean Energy (PACE) enables property owners to finance improvements to their property. PACE offers a uniquely scalable solution for providing secure, low-cost capital for energy upgrades in commercial, industrial, and multifamily buildings, and it is now enabled in more than 33 states across the country.

DC PACE was created by an act of the Council of the District of Columbia in 2010 and is administered by Urban Ingenuity, working under contract to the DC Green Bank (DCGB). DC PACE allows property owners to access financing for qualifying energy efficiency and clean energy improvements on their buildings and repay the investment through a special tax assessment. Like other benefit assessments, DC PACE is non-accelerating and the repayment obligation transfers automatically to the next owner if the property is sold. This arrangement spreads the cost of clean energy improvements – such as energy efficient boilers, upgraded insulation, new windows, or solar installations – over the expected life of the measure. DC PACE allows developers and property owners to overcome first cost barriers and install efficient equipment that pays for itself over the term of the special assessment.

PACE financing offers many benefits for both retrofit projects and new construction, including:

- Up to 100% financing for energy- and water-saving upgrades, including soft costs like energy audits and engineering;
- Annual savings that typically exceed annual payments, improving cash flows and net operating income;
- Increased asset value through improved cash flows and more efficient operations;
- Up to 20-year amortization at fixed or adjustable rates to enable deeper retrofits and reduce monthly costs for building owners;
- A form of financing that is potentially off-balance sheet as repayment is through a tax assessment that transfers with the property title, and is not tied to the credit of the property owner or developer; and
- Low-risk due to energy modeling and independent engineering validation.

B) Enabling Legislation

The statutory basis for DC PACE is contained in three pieces of legislation: The Energy Efficiency Financing Act of 2010, Green Finance Authority Establishment Act of 2018, and the Sustainable DC Act of 2012. The history of these laws is as follows:

The Energy Efficiency Financing Act of 2010, [Law 18-183](#), was introduced to the District of Columbia Council and assigned Bill No. 18-580. Signed by the Mayor on April 7, 2010, it was assigned Act No. 18-382 and transmitted to Congress for its review. DC Law 18-183 became effective on May 27, 2010.

The Green Finance Authority Establishment Act of 2018, Law 22-155, was introduced to the District of Columbia Council and assigned Bill No. 22-257. Signed by the Mayor on July 2, 2018, it was assigned Act No. 22-395 and transmitted to Congress for its review. DC Law 22-155 became effective August 22, 2018.

[Law 19-262](#), the "Sustainable DC Amendment Act of 2012," was introduced to the District of Columbia Council and assigned Bill No. 19-756. Signed by the Mayor on Jan. 16, 2013, it was assigned Act No. 19-615 and transmitted to Congress for its review. Law 19-262 became effective on Apr. 20, 2013.

C) About the DC Green Bank (DCGB)

DC Green Bank develops and facilitates innovative financial solutions to support District businesses, organizations, and residents on the path to a cleaner future for all. We invest in solar energy systems, energy efficient buildings and retrofits, green stormwater infrastructure, and transportation electrification in line with our values of Sustainability, Clean Economy, and Inclusive Prosperity. To date, DC Green Bank has invested millions of dollars in a cleaner, greener, and more equitable future. To learn more, please visit us at www.dcgreenbank.com DC Green Bank – We help finance clean energy systems.

D) About Urban Ingenuity

Urban Ingenuity is the private-sector program administrator (Administrator) for DC PACE. With special expertise in Property Assessed Clean Energy (PACE) financing and other public and private financing tools, Urban Ingenuity brings new capital resources to support deep energy efficiency retrofits of commercial and multifamily buildings, and to support the project development of clean-energy micro-grids, co-generation facilities, and solar installations. Urban Ingenuity assists building owners, property managers, investors and project developers, with the goal of cutting costs, enhancing financial performance, and funding capital improvement.

E) About the PACE Program Guidelines

This document may be amended or revised at any time by the District or by the Administrator with the approval of DCGB. At any time, the most current version of the document may be found at dcpace.com. Please ensure that you are viewing the most current edition by checking the date and version number on this document against the version posted at dcpace.com.

II) Eligibility Criteria

A) Property Eligibility Criteria: Is my property eligible for DC PACE?

In order to be considered eligible, the property must meet the following criteria. Both existing buildings and new construction projects are eligible. Any exceptions to these criteria must be approved by the District in their sole discretion and at all times subject to the constraints of the applicable law.

- The property must be located within the District.
- The applicant must be the legal owner of the property with clear and uncontested title to the property (and all legal owners of property agree to participate).
- The property must be a commercial, industrial, religious, or multifamily residential property (5 or more units). Single-family residential properties **do not** currently qualify for DC PACE.
- The property cannot be owned by the government (District Government, Federal Government, or foreign government). Publicly owned properties leased to a non-governmental entity via a long-term ground lease may be eligible.
- The property owner must be eligible to pay property taxes. (NOTE: Non-profit owners of commercial, industrial, and multifamily properties are eligible for DC PACE, regardless of whether or not they currently pay real estate taxes.)

- The property taxes and any other assessments or payments owed to the District must be current on the property, if applicable.
- The property owner must be current on all existing mortgages.
- The property must be clear of all notices of default or foreclosure in the past three years, or since acquired by current ownership, and cannot be subject to any involuntary liens or judgments.
- The property must be clear of any notices of foreclosure for the past 3 years, or since acquired by current ownership.

B) Project Eligibility Criteria: What kinds of projects can be financed through DC PACE?

1) Eligible Measures

Any measure that directly reduces utility costs or adds renewable generating capacity is eligible for DC PACE financing. In addition, DC PACE can finance measures that are substantially related to or necessary for the installation of these energy and water conservation measures (e.g. a new roof and/or structural modifications to support a solar installation). DC PACE can finance up to 100% of eligible projects, including both hard and soft costs.

Some of the PACE-eligible measures are provided below. This list is not exclusive or exhaustive, and other measures may be considered and approved by the Administrator:

- Chillers, boilers, furnaces, HVAC systems
- Hot water heating systems
- Lighting upgrades
- Combustion and burner upgrades
- Automated building and HVAC controls
- Variable speed drives (VSDs) on motors fans and pumps
- Fuel switching
- Heat recovery and steam traps
- Window replacements
- Building enclosure/envelope improvements
- Building management systems
- Energy storage
- Water conservation measures
- Green roofs, bioswales, permeable paving, green infrastructure, and other stormwater management measures
- Any measure or system that adds renewable energy capacity, including solar, wind, biomass, geothermal, fuel cells, co-generation, etc.
- Any measure that improves the resilience of the built environment and addresses risks from climate change identified in the Climate Ready DC Plan. These improvements may include flood protection measures, voluntary stormwater management strategies, green and energy infrastructure, energy storage, etc.

- Electrical vehicle charging, including infrastructure and related electrical upgrades
- Measures that enhance climate resilience, energy reliability, and/or grid security
- High efficiency commercial / industrial appliances that are substantially attached to the property (such as commercial kitchen equipment, industrial laundry equipment), including kitchen equipment in rental facilities that would remain with the building and not with the tenant
- Permitting, LEED certification, energy audits, engineering and design, energy modeling, Green Charrettes, staff training, and other soft costs related to the energy and water measures

Measures that are not typically eligible under DC PACE include:

- Cosmetic improvements (such as painting, new carpeting, etc. where measures serve no purpose to support energy and water conservation measures or the reduction of utility bills.)
- Non-commercial / industrial appliances (such as microwaves, non-affixed lighting, and other items not substantially affixed to the property). As noted above, appliances that provide significant energy or other utility savings and are functionally attached to the property on a long-term basis as in multifamily housing, industrial kitchens, or similar projects may be eligible.
- Acquisition, building demolition, or site prep work.

2) Other Project Eligibility Criteria

- The Project must be installed on a property within the District, attached with sufficient permanence to be reasonably considered part of the property from an assessment and lending perspective.
- The Project must meet all applicable codes and licensing requirements.
- The Project must be implemented by contractors licensed and insured appropriately (please see the Section IV: Technical Application Guidance for specific requirements of contractors) and meet Measurement and Verification requirements outlined in Section IV: Technical Application Guidance.

3) Savings-to-Investment Ratio Requirement

DC PACE requires that the technical application for all PACE projects specify a calculated Savings-to-Investment Ratio (SIR). The methodology for this calculation, including an explanation of supporting documentation required, is described in Section IV: Technical Application Guidance. SIR refers to the ratio of the value of the project savings over its lifetime to the total amount of PACE financing. In most cases, a project must have an SIR greater than one (i.e., the savings exceed the costs) for program approval. However, in certain cases, a project may be approved if the SIR is less than one.¹

Option 1: SIR > 1

For most projects, the savings from the project must be reasonably expected to equal or exceed the amount of the principal of, and interest on, the PACE financing. Savings may include reduced expenses on utility bills, operations and maintenance, and other monetized benefits, as approved by a DC PACE-approved Independent Engineer. In short, the SIR must be greater than or equal to 1. The applicant may consider either: the undiscounted value of the savings and the undiscounted value of the payments (i.e., both the numerator and

¹ DC Law 22-395, effective as of August 22, 2018, created the opportunity for DC PACE to finance projects with SIR of less than one.

denominator of the ratio are not discounted), OR, the net present value of the savings and net present value of the payments (i.e., both the numerator and denominator are discounted, and by the same discount rate). Please see Section IV: Technical Application Guidance for additional details.

Option 2: SIR < 1

In certain cases, the District may approve of projects that do not meet the SIR greater than one requirement. Specifically, these projects may be approved if:

- A. The property owner has acknowledged that the project does not have a positive SIR and has consented to move forward with an application and the project in full understanding of that fact, as demonstrated by their execution of Appendix D: SIR Waiver Form; and
- B. The project meets the public purpose of the PACE program, and in particular meets high standards of sustainability, energy efficiency, water efficiency, or water conservation. A project shall be approved to meet these standards if one or more of the following are true:
 - It meets or exceeds the requirements for LEED Gold or Platinum certification, Enterprise Green Communities standards, Passive House requirements, Living Building Challenge certification, or a comparable standard of leadership in sustainability and energy efficiency;
 - At least 50% of the PACE-financed measures (by cost) are eligible for incentives or rebates provided by the DC Sustainable Energy Utility, demonstrated by an executed Incentive Agreement;
 - The project is expected to exceed regulatory stormwater retention requirements, whether or not the owner expects to participate in the voluntary stormwater credit market; or
 - At least 50% of the PACE financing is being used to install renewable energy generation technology, energy storage, or other climate resilience measures. This includes, but is not limited to, solar PV, solar thermal, geothermal, co-generation, fuel cells, micro-grids, energy storage (such as batteries), electric car charging stations, flood plain or disaster threat mitigation efforts, and other measures that would promote climate resilience. The project may also include measures that are substantially related to the installation of renewable energy systems or energy storage, such as interconnection infrastructure in front of the electric meter (but physically located on and affixed to the property) if those investments allow for improved energy and environmental performance on the building site.

In the event of DC PACE programmatic approval of project improvements where the savings to investment calculation is less than one, all other criteria for PACE eligibility will still apply, including the underwriting criteria described below. Further, PACE financing can be used only for the PACE-eligible measures described in the “Eligible Measures” subsection above.

4) Underwriting Guidelines:

Prior to approval of the project, the property owner must demonstrate that the proposed project meets the following underwriting guidelines:

- **Loan-to-Value:** The ratio of total debt (PACE plus existing mortgages or other debt on the property) to the value of the property, as demonstrated by a recent appraisal, market study, or the tax assessed

value of the property, shall not exceed 80%. Exceptions to this guideline may be made with the approval of the PACE Capital Provider and the Administrator, subject to review and approval by DCGB.

- **PACE-to-Value:** The ratio of the PACE Assessment to the value of the property, as demonstrated by a recent appraisal, market study, or the tax assessed value of the property, shall not exceed 20%. If there is no existing debt on the property, the value of the PACE Assessment may be up to 35% of the property value. Exceptions to this guideline may be made with the approval of the PACE Capital Provider and the Administrator, subject to review and approval by DCGB.
- **Debt Service Coverage Ratio:** The property financials and post-rehab operation pro forma must demonstrate sufficient cash flows to pay the semi-annual PACE payments as determined by the PACE Capital Provider.
- **Lender Consent:** Any existing mortgage lenders must have provided consent to the property owner's participation in the program, as evidenced by their signature to the DC PACE Lender Consent Form.
- **Term of Financing:** The term of the financing shall not exceed the weighted average useful life of the installed equipment.

III) The PACE Application Process

Step 1: Prequalify

DC PACE is available for property owners and developers of office, multifamily, institutional, and industrial properties. To apply for DC PACE financing, the Property Owner or Capital Provider must submit the Preliminary Application (see Appendix A). In response, the Administrator will provide a Letter of Preliminary Eligibility confirming that the property meets DC PACE eligibility criteria, or a notice of why the property is not eligible.

Step 2: Assess

Work with your selected contractor or energy services provider to conduct an assessment of your building, identify potential energy conservation measures (ECM's), and define a scope of work (please see Section IV: Technical Application Guidance for information on assessment protocols). DC PACE maintains a list of approved Registered Service Providers on the dgreenbank.com website.

Step 3: Apply

Property Owners have two options to complete Step 3 (the PACE application).

1. **Option One:** Property Owner may work directly with one of DC PACE's registered Capital Providers to submit an application as outlined in the Application Checklist (Appendix C).
2. **Option Two:** Property Owner may submit a DC PACE Full Application to the Administrator (Appendix B), who will work with the Property Owner to source a Capital Provider that meets their preferences.

Option One: A registered PACE Capital Provider has been identified:

1. The Property Owner will work directly with the selected Capital Provider to submit a complete application as outlined in the Application Checklist (Appendix C).

Option Two: A PACE Capital Provider has not been identified, and the Property Owner would like to see a range of indicative terms:

1. Complete the DC PACE Full Application (Appendix B).
2. The Administrator will circulate a term sheet solicitation to registered Capital Providers, and all interested Capital Providers will have the opportunity to respond with indicative terms.
3. The Administrator will present the Property Owner with indicative terms for review.
4. The Property Owner will select their preferred Capital Provider, who will then undertake further underwriting and due diligence in order to present a term sheet for acceptance.
5. The Administrator will work with the Property Owner to facilitate the development of a complete application as outline in the Application Checklist (Appendix C).

Step 4: Administrator's Approval

Upon receipt of a complete Application, the Administrator will review all documentation and confirm that the Application meets all applicable criteria, including the Project Eligibility Criteria and Underwriting Guidelines (see Section II: Eligibility Criteria). Upon completion of this review, the Administrator will indicate that the project meets all applicable criteria by submitting an Approval Report to DCGB, which approval shall not be unreasonably withheld, thereby making it an Administrator Approved Project.

Step 5: Closing

1. The Capital Provider, Property Owner, or their contractor submits the required closing documentation, such as contractor certifications, and any contracts, if needed (see Section IV: Technical Application Guidance for further detail).
2. The District receives the Approval Report and reviews the PACE closing documentation. After review, the District indicates their acknowledgement of the Administrator Approved Project by entering into the PACE closing documentation.
3. The Property Owner executes the PACE Funding Agreement, PACE Agreement, and Memorandum of PACE Agreement and Special Assessment.
4. The Administrator records the Memorandum of PACE Agreement and Special Assessment in the land records of the District, thereby making it a Closed Project.

Step 6: Funding

1. Upon closing, the Capital Provider will make the funds available as agreed in the PACE Funding Agreement.
2. The Property Owner or their Contractor may begin construction and draw on the funds per the disbursement schedule agreed to in the closing documents. At the request of the Administrator, the Contractor(s) shall provide any reports (such as disbursement requests and commissioning reports) sent to the Property Owner or Capital Provider to the Administrator.
3. The Property Owner will make semi-annual PACE special assessment payments. The Office of Tax and Revenue (OTR) will send the Property Owner the semi-annual PACE Assessment bill according to the normal property tax schedule. In most circumstances, the first PACE assessment payment will be due at the end of the next full half tax-year following the PACE closing. If the Property Owner does not receive

a PACE Assessment from the Office of Tax and Revenue, please contact the Administrator. For more information on the District's tax billing cycle, please visit <http://otr.cfo.dc.gov/page/real-property-tax-bills-due-dates-and-delayed-bills>.

4. The Property Owner participates in Measurement and Verification or benchmarking as established in section IV: Technical Application Guidance.

IV) Technical Application Guidance

The Administrator is responsible for ensuring that all Applications meet the DC PACE program requirements. The following summary lists the Application components and technical review process and is designed to provide guidance to contractors who are preparing the technical component of the Application.

For more information about project eligibility criteria and what measures can be financed through PACE, please see Section II: Eligibility Criteria.

A) DC PACE Technical Application & Validation Process

Once the Administrator has screened a project for initial eligibility, the contractor and the Property Owner will gather the elements of the project, including work scope, costs, savings, energy modeling (if needed), and the various supporting documentation described below.

A complete technical application includes five main components:

- 1) **DC PACE Energy Audit Worksheet.** This worksheet (template available at dcgreenbank.com) summarizes the key project information including energy usage baseline and the costs, savings, and expected useful life associated with the selected measures. The information in this worksheet should be consistent with other documentation. The costs should match the costs presented in the construction contract(s), invoice(s), and the amount of financing requested, and the savings estimates should align with the estimates from the energy audit or model (as discussed in the Energy Audit / Energy Model section below). Explanations must be provided for any discrepancies. This worksheet is used by the DC PACE program to review the project's Savings-to-Investment Ratio.
- 2) **Energy Audit / Energy Model.** Provide the energy audit report or energy model report underlying the savings estimates presented in the DC PACE Energy Audit Worksheet. If the scope of work is known, applicants do not need to conduct a full energy audit of the property. Instead, an energy model demonstrating the savings from the specific measures identified is sufficient. In either case, the report should include information on inputs, assumptions, modeling software or approaches, etc. Alternatively, for boiler or other HVAC-only replacement projects, provide the Boiler Light Worksheet and short narrative project description, and for solar only (or solar and roof-only projects), provide the Solar Feasibility Worksheet and a short narrative project description. A full audit or modelling report is not typically needed for HVAC and solar projects.
- 3) **Supporting Documentation.** Provide supporting documentation sufficient for the Independent Engineer to understand and examine the assumptions behind the savings estimates. Supporting documentation should include, but not limited to, specifications for the selected equipment, feasibility studies, engineering, drawings and plans (if applicable), building permits received to date (if none, permits may be required as a condition of closing or of specific draws), as well as information regarding implementation (such as proposals or construction contracts). For solar projects, provide information regarding the feasibility of the proposed solar project, such as a Helioscope or other layout and

production estimate tool inputs and outputs and documentation of design approval by a licensed structural engineer.

- 4) **Utility Bills.** Include utility bills for at least 12 consecutive months (24 months is preferred), if available.
- 5) **Measurement and Verification Plan (M&V).** If the property does not already provide annual reporting through the District's Energy Benchmarking Program, the Property Owner or their contractor will comply with one of the following:
 - a. Benchmark their property using Energy Star Portfolio Manager, a free online tool, and share read-only access to their Portfolio Manager account with the DC PACE Administrator and DCGB. Property Owners may also use third-party software for benchmarking if it reports to Portfolio Manager. The DC SEU also maintains a list of benchmarking service providers active in the DC area, OR;
 - b. Conduct two years of M&V in accordance with International Performance Measurement and Verification Protocol (IPMVP). The M&V plan should be submitted as part of the technical application for approval to the Independent Engineer, who will confirm that it conforms with IPMVP standards. Annual reports for the two years of M&V should be provided to the DC PACE Administrator and DCGB.

For properties mandated to provide annual reporting under the District's benchmarking law, DC PACE requires no additional M&V, but the Property Owner will share read-only access to their account with the Administrator. In all cases, the Property Owner may choose a more rigorous M&V approach than is required (for example, they may choose to commission two years of M&V in addition to benchmarking). The PACE Capital Provider may impose additional requirements for M&V.

Completion of the technical underwriting portion of the Application is typically the responsibility of the contractor, engineer, energy auditor, or owner's agent.

B) Audit Level Selection

For complex multi-measure projects, the Administrator typically requires an ASHRAE Level II (or, in certain specific cases, an ASHRAE Level III) audit or energy model completed to equivalent standards. For simple single-measure projects a lower level audit may be appropriate.

- **ASHRAE Level I – A walk-through audit.** An analysis made to assess building energy efficiency to identify potential energy conservation measures (ECMs), appropriate for simple one or two-measure projects with readily determined costs and savings, such as lighting improvements or like-for-like equipment replacement.
- **ASHRAE Level II – An energy audit performed by an independent audit contractor.** A comprehensive analysis of the facility energy systems, energy use, and a quantitative evaluation of the ECMs cost and savings potential. This level of analysis can involve advanced on-site measurements and sophisticated simulation tools to evaluate the selected energy retrofits, and is appropriate for multi-measure retrofits whose savings and costs require more complex calculation. An evaluation of operations and maintenance costs savings (or increases) must be included in the analysis.
- **ASHRAE Level III – Investment-grade audit performed by independent auditor.** A detailed analysis requiring rigorous engineering study and appropriate for major capital investments. This

level of audit may be required for specific cases, e.g. multi-measure projects on new construction or for a building that will be substantially changing use.

C) Key Elements of the Energy Audit / Model

Regardless of the level of energy audit or energy model required, there are a few required data points that must be summarized in the energy audit worksheet and more fully explained and justified in the audit/model report and other supporting documentation:

- **Scope of Energy Conservation Measures** – List of the proposed ECMs, including description of the previously installed equipment (if applicable), schedule of equipment to be installed, and cost estimates for the proposed scope of work.
- **Expected Useful Life of ECMs** – Predicted lifetime of the proposed equipment and savings that they will generate – typically between 10 to 30 years for most pieces of equipment. Predicted Equipment Useful Life (EUL) should be based on ASHRAE (or other comparable industry standards) or manufacturer data, and the Administrator may request the source of the data. For further guidance on typical EULs, please see our external technical application resources.
- **Energy Baseline** –The energy savings will be calculated against a baseline, which will be documented as follows:
 - If baseline energy use data is available for the property, the contractor should provide:
 - Identification of the baseline period;
 - Baseline energy consumption and demand data, including recent copies of all major use account billings;
 - All independent variable data coinciding with the energy data, if applicable (e.g. changes in occupancy, weather data, ambient temperature, etc.);
 - All static factors coinciding with the energy data (e.g. occupancy, utility rates, etc.); and
 - Details of baseline data analysis performed (if applicable), e.g. analysis, weather normalization, any other adjustments (such as adjustments needed to reflect expected changes in occupancy, or to create a code-compliant baseline if the building currently does not meet applicable DC building codes).
 - If historical utility data is not available, the technical application should establish a baseline as described below:
 - For *existing buildings* where there is historical energy use but data are not available (for example, because of a change in ownership, or because the building is individually metered), the baseline should correspond to the modeled energy use of the building with the current equipment and appropriate assumptions about occupancy and usage based on the specific property. For multifamily buildings that are individually metered, it is preferable that historical data are acquired from a sampling of units to confirm the modelling.

- For *existing buildings* where there are no historical data available (for example, if the building has been vacant for several years), the baseline building performance should be calculated based on existing equipment, and where needed, assumptions about the efficiency of equipment that would have been installed given the date of construction or last renovation. Assumptions about occupancy may be based on previous or planned future use.
 - For *new construction* projects, the technical application should include a baseline consistent with the baseline established for LEED accreditation (for example, LEED v4 requires that baseline building performance is calculated according to ANSI/ASHRAE/IESNA Standard 90.1–2010) or in accordance with current or expected DC building code.
- **Estimated Savings** – The energy audit should project estimated savings to the property over the expected useful life of the equipment. DC PACE may consider savings from the following categories:
 - **Utility Savings:** Estimate of annual savings on electricity, gas, or water bills that will result from the proposed scope of work.
 - **Operations & Maintenance Savings:** Net avoided spending on operations and maintenance attributable to the new equipment, including costs of labor, spare parts, service contracts, etc. This may include annual savings or may only apply in some years during the life of the equipment.
 - **Avoided Capital Costs:** DC PACE will allow a portion of the capital cost of new equipment to be considered savings, if the equipment to be replaced is nearing (or past) the end of its useful life. A property owner typically sets aside money each year in order to pay for the eventual costs of system replacement. By paying upfront to replace systems before they fail, the owner is 'saving' in future years what they would otherwise need to be setting aside. The amount that can be included in the avoided capital costs category must be multiplied by the ratio of remaining useful life to total useful life of the equipment being replaced.
 - **Avoided Fees or Penalties:** Some projects may include future requirements such as waste disposal, wastewater treatment, pollution abatement, stormwater retention, etc. If these requirements are associated with environmental or energy regulations, the avoided future costs or penalties may be counted as a savings.
 - **New Revenues:** Revenues earned from solar plants, cogeneration, geothermal, wind, waste-to-energy, and certain other projects that generate renewable energy revenues, including ancillary services (such as PJM Reg D market revenues) may be counted as savings.
 - **Project Financial Savings:** Where the installation of energy or water conservation measures makes a project eligible for DC PACE, and where the PACE funds can be demonstrated to displace higher cost capital resources, the resulting differential cost of capital for financing those improvements can be considered as a direct economic benefit resulting from the PACE project. These “Project Financial Savings” can be used when calculating the total stream of savings and other project benefits resulting from the PACE improvements for the purpose of sizing the PACE note and other

underwriting and analysis of total project benefits. Financial savings are subject to the review and approval of the Administrator, the District, and the selected Capital Provider. The project must meet all other underwriting constraints (including Loan-to-Value (LTV) and Debt Service Coverage Ratio (DSCR) criteria).

- **Other Monetized Benefits:** Tax credits (Investment Tax Credit, accelerated depreciation), Solar Renewable Energy Credits, utility incentives and rebates, or other monetized benefits that are demonstrated to be reasonably expected to accrue to the Property Owner may be counted as savings.
- **Methodology** – Summary of the assumptions underlying the model, calculations, and the methodology used. DC PACE will accept both industry standard and proprietary energy audit analysis models.

D) Validation Process

The technical application must be reviewed by an approved Independent Engineer. The Independent Engineer shall be a licensed Professional Engineer (or equivalent if approved by the Administrator) with energy and water efficiency experience and with no other involvement in the project. The Independent Engineer should have at least one of the following certifications:

- American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE)
 - Building Energy Assessment Professional (BEAP)
 - Building Energy Modeling Professional
- Association of Energy Engineers (AEE)
 - Certified Energy Manager (CEM)
 - Certified Measurement and Verification Professional (CMVP)
 - Certified Energy Auditor (CEA)
- Building Commissioning Association
 - Certified Commissioning Professional
- Building Performance Institute
 - Energy Auditor
- Investor Confidence Project
 - Credentialed Quality Assurance Provider

Either the Administrator or the Capital Provider will make arrangements for the validation process. The technical review will result in a validation report that confirms that the engineering and energy savings analysis, Effective Useful Life (EUL) estimates, construction cost estimations, ECM, and capital improvement recommendations (if applicable) are appropriate and reasonable and meet the current requirements of DC PACE. The technical review will confirm the appropriate lifetime savings resulting from the project that may be used to determine the project's conformity with DC PACE Savings-to-Investment Ratio requirements, as well as the total eligible project costs. In considering the non-technical savings such as tax benefits or new revenue stream), the independent reviewer may rely on assumptions provided by the Property Owner or Capital Provider. The technical review will also include an assessment as to whether the methodology (including appropriateness of modeling software and other tools) and assumptions used in estimates are reasonable.

E) Additional Closing & Post-Closing Requirements

Once the Administrator and the District have approved a project, the following items will be required prior to the closing:

- **Signed Construction Contract(s)** – If an executed construction contract was not provided as part of the documentation submitted for third-party technical review, it must be provided prior to the Administrator’s approval. Contracts must cover all work necessary to complete the installation of funded improvements.
- **Contractor Qualifications** – All subcontractors must submit the following items prior to project closing. The PACE Capital Provider may have additional requirements for contractor due diligence.
 - Licensing and certification information (if not covered in the construction contract)
 - Proof of insurance, with property owner listed as additional insured (if not covered in the construction contract)
 - Evidence of bonding capacity, if required by the Capital Provider and Property Owner
 - Three references for comparable work or case studies (if the Contractor is not already a DC PACE Registered Service Provider)

After disbursement and construction completion, the following are required pursuant to the PACE Closing Documents:

- **Completion/Commissioning Documentation:** The contractor should provide a commissioning or equipment start-up report. Please also provide any permit inspection reports, final invoices, lien waivers, or other documentation demonstrating the successful completion of the project to the Program Administrator.
- **M&V:** Provide M&V reporting as established in the M&V plan.

V) Program Fees

One-Time Fees			
Fee	Amount	Recipient	Details
Application Fee	\$250	Administrator	All projects – with Complete Application
Program Administration	1.25% (minimum \$2,500)	Administrator	All projects – at closing
Capital Sourcing and Project Development Fee	0.75%	Administrator	Waived if the Property Owner does not need assistance sourcing capital, obtaining lender consent, project development support
Recording Fee	\$36.50	Recorder of Deeds	All projects – At closing

Transaction Fees: In addition to the program fees outlined above, the property owner may also be required to pay lender’s origination, transaction, and legal fees, along with costs for the technical validation by an Independent Engineer.

Capitalization of Fees: All program fees may be capitalized into the PACE financing and paid at closing.

Permanent Servicing Fees			
Fee	Annual Amount	Recipient	Details
PACE Servicing (Administrator)	0.15% of original principal	Administrator	All projects
PACE Servicing (District)	0.05% of original principal	District	All projects
Payment Processing Fee	\$250.00 per year	Paying Agent	All projects

VI) Participating in the DC PACE Program

A) Contractors and Service Providers

If you are a contractor, energy service company, engineering or consulting firm, or expert in mechanical systems, solar installation, architecture or design, DC PACE can help you meet your client’s needs.

Contractors can register with DC PACE to help manage energy retrofit projects according to PACE underwriting standards, and support DC PACE financing applications. Registered contractors are listed on our website, where we direct property owners and developers looking for contractors. In addition, registered contractors may request co-branded DC PACE marketing materials to share with clients, listing them as a registered contractor of DC PACE.

To become a DC PACE Registered Contractor, applicants must:

- Be in good standing with regard to licensing applicable to the trades proposed; qualified to do business in DC; hold any other necessary permits, certificates, registrations, and approvals.
- Fill out the [DC PACE Contractor Registration](#) form and submit supporting documentation, including three references or case studies.
- Attend a contractor training within six months of registration. Regular DC PACE contractor trainings are held quarterly. Contractors may also contact the Administrator to schedule individual trainings for their company.

B) Capital Providers

Banks and other investors can originate private financing into clean energy projects secured by a DC PACE assessment and collection on property tax bills by the District’s Office of Tax and Revenue. PACE assessments offer a highly secure asset backed instrument for guaranteeing stable yields to investors in clean energy projects. PACE assessments are used to fund projects that produce annual energy and other savings for the building owner in excess of the annual cost of the special assessment; in most cases providing excess cash flow to the investor.

Because PACE financing is attached to the building (not the building owner), and can be amortized for up to 20 years, PACE greatly improves project-level economics for the property owner, reduces risk for investors, and increases demand for financing of clean energy projects within regional markets. Primary mortgage lenders and other investors can also utilize PACE to leverage additional capital investment into properties that need energy upgrades.

DC PACE is continually expanding the roster of Registered Capital Providers. Any lender must be registered with DC PACE in order to fund projects in the District. In addition, Capital Providers are eligible to receive indicative terms from the Administrator on particular projects, and will be listed on the DC PACE website. To become a qualified Capital Provider, applicants must:

- Review the DC PACE Program Guidelines, Standard Offer, closing documentation, and other relevant information

Penalties:	A lien for unpaid installments of the Special Assessment, including penalties and interest, shall attach to the Property in the same manner and with the same priority and collection procedures as a lien for delinquent property taxes under Title 47 of the District of Columbia Official Code. Special Assessment liens shall be in priority immediately junior to delinquent property tax liens, but senior to all other liens and subject to assignment under District delinquent tax lien policy for Special Assessments.
Property Owner Covenants:	<ul style="list-style-type: none"> • Pay all liabilities when due • Notify the PACE Administrator of any litigation that will have a material adverse effect to the Project or the financial condition of the Property or Property Owner • Pay all Special Assessments and property taxes when due • Maintain its existence at all times • Comply with all applicable laws at all times • Any other covenants as specified by the PACE Capital Provider
Conditions Precedent	<ul style="list-style-type: none"> • Receipt of Complete Application as established in the Program Guidelines, including satisfactory documentation demonstrating that the property meets programmatic loan-to-value, PACE-to-value, and Debt Service Coverage Ratio (DSCR) requirements • Receipt of additional Closing Requirements as outlined in the Program Guidelines • Approval of the imposition of the Special Assessment by the Board of Directors of the Property Owner, if applicable • Approval and execution of the PACE Closing Documents as outlined in the Program Guidelines • Other conditions as specified by the PACE Administrator or the PACE Capital Provider
Lender Consent:	All mortgage lenders must consent to the Special Assessment.

If the terms and conditions described above are acceptable, please so indicate by signing this agreement.

Sincerely,

 Ronald Hobson
 PACE Program Manager

ACCEPTED.

Property Owner:

 By:
 On behalf of: