

ATTACHMENT 4

Affordable Homes Electrification Program

Affordable Homes Electrification Program Overview:

The Affordable Homes Electrification (AHEP) Program (the "Program") is designed to allow income eligible homeowners and renters living in single-family homes in the District of Columbia ("District") to electrify their home by switching from fossil fuel to electric for their home and hot water heating systems. As such, this will help to reduce their greenhouse gas emissions, increase the comfort, and air quality in their home, and, when combined with Solar for All benefits, keep energy bills low.

All who qualify must be District homeowners or renters, living in single-family homes with 4 units or less, meet income limits listed below and must have an existing natural gas heating or water heating system.

Service Providers who can provide the following services are strongly recommended to apply.

1. General Contractors
2. Electricians
3. Plumbers
4. HVAC Installers

Qualifications:

Service Providers interested in qualifying for the HVAC Replacement Program will be required to meet the following qualifications:

- A. Identification and installation of high-efficiency heating and cooling equipment (air source heat pump), domestic hot water systems (heat pump water heater and electric water heater):
 - Conversion of traditionally powered fossil fueled (oil, natural gas) space heating and cooling equipment to electric air-source heat pumps with different existing system arrangements:
 - Homes with fuel oil tanks
 - Homes served with natural gas
 - Forced air ducted or hydronic non-ducted distribution systems (radiators)
 - Propose, justify, and explain newly designed electric-based heating, ventilation and air conditioning (HVAC) and domestic hot water (DHW) system.
 - New design and equipment selection will need to be reviewed and approved by the Customer. This work will include:
 - Explaining the project to the customer and the goals of the Program.
 - Discussing with the customer their environmental and suitability goals, climatic and comfort requirements, space and use requirements, and any other restrictions or limitations that may be applicable to the project.

- Reviewing the proposed design and equipment selection with the customer. The proposed design and equipment must meet the customer's requirements and the Program goals.
 - New design and equipment selection will need to be reviewed and approved by the DCSEU.
 - Installation and commissioning of ENERGY STAR® qualified programmable thermostats based on new system installation. Smart thermostats are not eligible for reimbursement under the Program.
 - Secure and provide proof of all permits/licenses (in accordance with Department of Building's (DOB) policies and DC Construction Codes ([DC Construction Codes | dob](#)) **prior to installation** to lawfully complete the installation. Note: DOB final inspection approval will be required prior to payment.
 - Installation of additional high-efficiency electric HVAC and hot water heating measures (Including but not limited to):
 - Water heater to be replaced to with heat pump water heater (where feasible with respect to physical space)
 - Properly removing, disposing, and recycling of fossil fueled HVAC and DHW equipment.
 - Proof of disposal or recycling may be required.
- Ensuring the home can adequately accommodate the new electric measures.
 - If a home's existing electrical system is not adequate to accommodate the proposed electric measures, the selected Service Provider must identify needed upgrades, upgrade costs and be able to provide the services, if approved by the DCSEU.
 - Identification of any potential electrical issues that may arise if a Solar PV system is installed at the home through the DCSEU's Solar for All program (solar installation work is not included in this SOW).
- Develop educational materials and/or a workshop for homeowners both before and after installation (e.g. operations & maintenance, best practices, differences between existing and replaced system(s), etc.)

Authorization of Services:

All services provided under the Program will be authorized by the DCSEU through issuance of a subcontract and one or more Work Orders. Each Work Order will specify the energy efficiency measures to be installed, the pricing provisions, a schedule for performance of the installation services, and any other items deemed necessary by the DCSEU.

Pricing: Representative Pricing for various HVAC Systems

Potential Service Providers shall submit representative pricing for the listed HVAC systems below. The pricing should approximate cost broken out by the material costs per unit and the typical associated labor to install the product.

The list is intended to be an example (but is not limited to) of the types of measures to be installed in this program.

HVAC System (Air source Heat Pumps)

Heat pump and air handler 1.5 Ton 15.2 SEER2+, HSPF2 >= 7.56 (Condensate Pump)

Heat pump and air handler 2 Ton 15.2 SEER2+, HSPF2 >= 7.56 (Condensate Pump)

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Heat pump and air handler 3 Ton 15.2 SEER2+, HSPF2 >= 7.56 (Condensate Pump)

Heat pump and air handler 3.5 Ton 15.2 SEER2+, HSPF2 >= 7.56 (Condensate Pump)

Heat pump and air handler 4 Ton 15.2 SEER2+, HSPF2 >= 7.56 (Condensate Pump)

Heat pump and air handler 5 Ton 15.2 SEER2+, HSPF2 >= 7.56 (Condensate Pump)

Heat pump and air handler 1.5 Ton 17.1 SEER2+, 8.74HSPF2 (Condensate Pump)

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Ductless Mini-Split Heat Pump - 1.5 ton, SEER2 >= 18+, HSPF2 >= 7.65+

Ductless Mini-Split Heat Pump - 2 ton, SEER2 >= 18+, HSPF2 >= 7.65+

Ductless Mini-Split Heat Pump - 2.5 ton, SEER2 >= 18+, HSPF2 >= 7.65+

Ductless Mini-Split Heat Pump - 3 ton, SEER2 >= 18+, HSPF2 >= 7.65+

Ductless Mini-Split Heat Pump - 3.5 ton, SEER2 >= 18+, HSPF2 >= 7.65+

Ductless Mini-Split Heat Pump - 1.5 ton 22 SEER2, 8.55HSPF2

Ductless Mini-Split Heat Pump - 2 ton 22 SEER2, 8.55HSPF2

Ductless Mini-Split Heat Pump - 2.5 ton 22 SEER2, 8.55HSPF2

Ductless Mini-Split Heat Pump - 3 ton 22 SEER2, 8.55HSPF2

Ductless Mini-Split Heat Pump - 3.5 ton 22 SEER2, 8.55HSPF2

DCSEU Verification Requirements: Quality Assurance, Quality Control Inspections:

Upon completion of projects and prior to payment, Service Providers will be required to:

- a. Pass a Quality Assurance, Quality Control inspection performed by the DCSEU to verify completion of the installation services in compliance with the DCSEU Program Protocols and any specifications set forth in the Work Order
- b. Provide the DCSEU with copies of all permits, approvals, and/or consents necessary to lawfully complete the installation (e.g., the District Department of Buildings structural and/or electrical permit(s) and any other permits or approvals required, such as historic, zoning or PEPCO) and pay all related fees, if applicable.
- c. Any other documentation requested by the DCSEU to verify completion of the installation services according to DCSEU Program protocols.

General Provisions

The DCSEU reserves the right to consider eligible providers for other functional categories at its discretion.