Application Form

AFFECT BIL FAC: Topic Area 2 and Topic Area 3

Department of Energy (DOE)

ASSISTING FEDERAL FACILITIES WITH ENERGY CONSERVATION TECHNOLOGIES (AFFECT)

**Modifications**

All modifications to the Federal Agency Call (FAC) Application Form are [HIGHLIGHTED] in the body of the form.

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| **Mod. No.** | **Date** | **Description of Modification** |
| 0001 | 04/19/2023 | Provided a field for reporting non-domestic greenhouse gas (GHG) emission factors in question 4.1.  |
| 0002 | 03/25/2024 | The application form has been fully updated with some new and revised or reorganized questions. Use this version of the application form if applying to Topic Area 2 and Topic Area 3.  |

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| **Applicant Agency:** |  |

**Applicant Points of Contact:**

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| --- | --- | --- | --- | --- | --- |
|  | **First Name** | **Last Name** | **Federal Employee (Y/N)** | **E-mail Address**(\*avoid extra spaces) | **Phone Number**(\*avoid extra spaces) |
| **Primary** |  |  |  |  |  |
| **Backup** |  |  |  |  |  |

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| **Project Title:** |  |

Name of project location(s), complete address(es), and using the [White House Council on Environmental Quality’s Climate and Economic Justice Screening Tool](https://screeningtool.geoplatform.gov/) (CEJST) determine whether the project is in a location that has been categorized as a geographically defined disadvantaged community as defined by the Office of Management and Budget’s [Interim Justice40 Implementation Guidance M-21-28](https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf) and [addendum M-23-09](https://www.whitehouse.gov/wp-content/uploads/2023/01/M-23-09_Signed_CEQ_CPO.pdf). If the project would benefit a Federally Recognized Tribe or Tribal entity, whether or not they have land, all are recognized as disadvantaged communities for the purposes of the Justice40 Initiative.

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| **Name of Location** | **Street** | **City** | **State** | **Zip +4** | **Disadvantaged Community Status (Y/N)** |
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**FAC Topic Areas (Choose one):**

[ ]  Topic Area 2: Modify Existing Projects for Net-Zero Buildings

[ ]  Topic Area 3: New/In Development Net-Zero Buildings Projects

**Confirm the following documents are included for submission with your application as described in FAC Section IV.B:**

[ ]  Application Form

[ ]  SF-424 Application for Federal Assistance

[ ]  Letter of Endorsement

[ ]  Summary Slide

[ ]  2 Completed eProject Builder (ePB) Calculating Templates

Answer the questions below that align with FAC Technical Review Criteria 1-5 in FAC Section V.C. and Program Policy Factor in FAC Section V.E. In accordance with FAC Section IV.A., applicants are instructed to use Calibri typeface, black font color, and a font size of 12 point or larger (except in figures or tables, which may be 10-point font).

1. **Executive Summary for Public Release**
	1. Provide an executive level summary of your project that is suitable for dissemination to the public. It should be a self-contained summary with project objectives, its alignment with agency mission, agency priority efforts toward a net-zero buildings portfolio, and impact on sustainability and climate requirements and goals. The summary should not contain sensitive information. (500 words or less)

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1. **Cost Effectiveness of the Net-Zero Buildings Project (Criterion 1: 20%)**
	1. Describe the extent to which the addition of AFFECT funding would change the scope, contract length, lifecycle cost effectiveness, etc. of the project. (500 words or less)

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* 1. What are the additional net-zero building energy conservation measures (ECMs) and their impacts for which you are seeking AFFECT funding? (Note: this should be consistent with information entered in tab “Sch2a-Imp Price by ECM” of the ePB Calculating Template with AFFECT BIL Grant)

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| **ECMs** | **Estimated Cost** | **Requested Grant** |
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* 1. Using the ePB Calculating Templates, complete the table below based on the calculated Simple Payback period in cell AJ258 of tab “Sch4-Cost Savings by ECM,” for both the project with AFFECT ECMs and the project without AFFECT ECMs. If there are any differences between the ePB files and the table below, please explain.

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| --- | --- | --- |
|  | **Project w/ AFFECT ECMs** | **Project w/o AFFECT ECMs** |
| Simple Payback |  |  |
| Explain any ePB differences. |  |

* 1. Using the ePB Calculating Templates, complete the table below based on the calculated Total Performance Period (row 34) Annual Dollar Savings Retained by Customer (column will vary by funding/tab) in the appropriate “Sch1***X***-Ann Cost Sav & Pymts” tab based on Project Agreement Type selected in the “Summary Schedule” tab. Then, using the information on “Sch1***X***-Ann Cost Sav & Pymts” tab calculate the Net Present Value (NPV) of the project using a 3% discount rate for the performance period of the project. If there are any differences between the ePB files and the tables below, please explain.

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|  | **Project w/ AFFECT ECMs** | **Project w/o AFFECT ECMs** |
| Total Performance Period Annual Dollar Savings Retained by Customer |  |  |
| Net Present Value (Applicant Calculated) |  |  |
| Explain any ePB differences. |  |

* 1. Using the information provided in ePB Calculating Templates, calculate and provide the Savings to Investment Ratio in the table below. Please include an explanation of the assumptions and methodology used.

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|  | **Project w/ AFFECT ECMs** | **Project w/o AFFECT ECMs** |
| Savings to Investment Ratio(Applicant Calculated) |  |  |
| Explain assumptions and methodology. |  |

# Anticipated Energy and Cost Savings of the Net-Zero Buildings Project (Criterion 2: 15%)

* 1. Using the ePB Calculating Templates, complete the table below based on the Totals in row 258 of tab “Sch4-Cost Savings by ECM”, for both the project with AFFECT ECMs and the project without AFFECT ECMs, what are the anticipated total energy/water reduction (kWh, BTU, etc.) and energy/water cost savings ($)? If there are any differences between the ePB files and the table below, please explain.

|  | **Electric Energy Savings****(kWh/yr)*****Column O*** | **Natural Gas Savings (MMBtu/yr)*****Column S*** | **Total Energy Cost Savings****($/yr)*****Column Z*** | **Water Savings (kGal/yr)*****Column AA*** | **Total Water Cost Savings ($/yr)*****Column AB*** |
| --- | --- | --- | --- | --- | --- |
| Project w/ AFFECT ECMs |  |  |  |  |  |
| Project w/o AFFECT ECMs |  |  |  |  |  |
| Explanation of differences between above data and ePB files. |  |

* 1. For the both the project with AFFECT ECMs and the project without AFFECT ECMs, illustrate the impact of the proposed project by providing the percentage reduction of usage and cost savings relative to your organizational boundary (e.g., campus, site, installation) and provide a description of what constitutes as your organizational boundary?

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|  | **Electric Energy Savings****(%/yr)** | **Natural Gas Savings****(%/yr)** | **Total Energy Cost Savings****(%/yr)** | **Water Savings (%/yr)** | **Total Water Cost Savings (%/yr)** |
| Project w/ AFFECT ECMs |  |  |  |  |  |
| Project w/o AFFECT ECMs |  |  |  |  |  |
| Describe your organizational boundary |  |

* 1. Describe any other energy, water, waste, or cost savings from the net-zero buildings ECMs and explain the degree to which you will increase savings (e.g., through operations and maintenance improvements, bulk purchasing, bundling) for the federal government. (250 words or less)

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1. **Leverage (Criterion 3: 20%)**
	1. What funding source(s) and amount of funding is intended to be committed to the project?

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| **Funding Type** | **Amount $** |
| a. Agency Annual Appropriations (federal) |  |
| b. Agency Bipartisan Infrastructure Law funding, Inflation Reduction Act funding (federal) |  |
| c. Other (federal) | Explain: |  |
| c. Performance Contract Investment (non-federal) |  |
| d. Incentives (utility, rebates, etc.) |  |
| e. Other (non-federal) | Explain: |  |
| f. Past AFFECT Grant(s) (federal) |  |
| g. Requested AFFECT BIL Grant (federal) |  |
| **Total Committed Funds (Sum of rows a thru e)** |  |
| **Total Grant (sum of rows f thru g)**  |  |
| **Cost Leverage Ratio (Total committed Funds/ Total Grant)** |  |

* 1. Identify and explain the potential risk(s) with any of the key funding sources that could negatively impact the proposed project and steps being taken to mitigate impact. (250 words or less)

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# Programmatic Priorities and Policy Considerations (Criterion 4: 20%)

* 1. Using the ePB Calculating Templates, complete the table below based on the Totals in row 258 of tab “Sch4g-GHG,” for both the project with AFFECT ECMs and the project without AFFECT ECMs, what are the estimated Scope 1 and Scope 2 greenhouse gas (GHG) reductions? If the proposed project leads to an increase in emissions, please explain.

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|  | **Scope 1 Reductions (kg CO2e/yr)*****Column R*** | **Scope 2 Reductions (kg CO2e/yr)*****Column S*** |
| Project w/ AFFECT ECMs |  |  |
| Project w/o AFFECT ECMs |  |  |
| If the proposed project is located outside of U.S., provide the emission factor(s) used for electricity GHG reduction estimates. |  |
| If the proposed project leads to increased emissions, explain. |  |

* 1. For the both the project with AFFECT ECMs and the project without AFFECT ECMs, illustrate the impact of the proposed project by providing the percentage reduction in Scope 1 and Scope 2 GHG emissions relative to your organizational boundary (note: this should be consistent with question 3.2)? If the proposed project’s focus is on water and/or waste, provide similar information in the text box. Organizational boundary calculation methodology for GHG emissions must be consistent with the [FEMP Annual Energy Management Data Report workbook](https://www.energy.gov/femp/federal-comprehensive-annual-energy-reporting-requirements) methodology.

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|  | **Scope 1 Reduction****(%/Yr)** | **Scope 2 Reduction****(%/yr)** |
| Project w/ AFFECT ECMs |  |  |
| Project w/o AFFECT ECMs |  |  |
| If applicable, water or waste impact of with and without AFFECT ECMS |  |

* 1. Describe how the project with the AFFECT ECMs would accelerate efforts in meeting [EA2020](https://www.congress.gov/bill/116th-congress/house-bill/133), [E.O. 14057](https://www.federalregister.gov/documents/2021/12/13/2021-27114/catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability), and [E.O. 14008](https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad) goals and requirements. (250 words or less)

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1. **Viability, Risks, Replicability, and Scalability of the Net-Zero Buildings Project (Criterion 5: 25%)**
	1. Please describe the project’s viability, execution plan and risks, including: a project implementation timeline; potential risks related to the technology, timeline, funding, personnel capacity, etc. and how you would address them; and other project contingencies. (700 words or less)

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* 1. Describe the extent to which the proposed project’s technologies are early and/or underutilized commercially viable technologies. If an early technology is included, describe the technology validation process to ensure it is commercially viable (e.g., [GSA Green Proving Ground](https://www.gsa.gov/climate-action-and-sustainability/center-for-emerging-building-technologies/about-green-proving-ground), [SERDP and ESTCP](https://serdp-estcp.mil/)). (250 words or less)

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* 1. Describe how strategies and lessons learned from the proposed project would be replicated and/or scaled for a larger deployment across multiple facilities within the proposing agency and/or at other federal facilities. (250 words or less)

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# Other Selection Factors: Infrastructure, Workforce, Equity, Environmental and Energy Justice, and Community and Labor Partnership Considerations

* 1. If applicable, describe the extent to which the proposed project addresses the Indian Energy Purchase Preference (25 U.S.C. 3502(d)), the Buy Indian Act (48 C.F.R 1480), or related policies. (150 words or less)

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* 1. If applicable, describe the extent to which the proposed project results in positive or negative cumulative environmental impacts to disadvantaged communities, how negative impacts will be mitigated, and how community stakeholders will be engaged. (150 words or less)

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* 1. Describe the extent to which the project maximizes the use of domestic goods, products, and materials in constructing the project in support of a diversified workforce within the clean energy economy in construction, skilled trades, and engineering, high-quality jobs, and encourages labor engagement. Additionally, describe the application of the Buy American Act. (150 words or less)

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* 1. Describe how the project will contribute to advancing diversity, equity, inclusion, and accessibility (DEIA). (150 words or less)

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# Eligibility Clarification: Complete, if this project is at a government-owned and contractor-operated (GOCO).

* 1. Describe who ultimately pays for the utility bills, receives the benefits of the reduced utility bills and, in the case of a performance contract, pays the energy service company/utility. (100 words or less)

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