**Site Selection Considerations for Technology Demonstrations**

***The following are important considerations for technology demonstration sites selection. Please anticipate and fill out as much information as possible.***

SITE OVERVIEW

Site location (address):

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Climate zone and other location-specific factors:

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Commercial building type[[1]](#footnote-1):

|  |  |  |
| --- | --- | --- |
| * Education | * Lodging/Hospitality | * Fire Order/Safety |
| * Food Service | * Supermarket/Grocery | * Worship |
| * Hospital | * Office | * Warehouse/Distribution Center |
| * Restaurant | * Public Assembly | * Bank |
| * School | * Laboratory | * Multi-Family or Dorm |
| * Courthouse | * Retail | * Data Center |

Occupancy/Schedule:

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Building Size and Number of Floors:

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Technology(ies) under consideration for this site (check any that apply):

* Submetering of building components or panels;
* Lead/Lag plug load strategies;
* Open Refrigerated Display Case Retrofits;
* Daylighting Systems and Controls;
* External Shading Attachments;
* Advanced Compressor Rack and Refrigerant Systems;
* Advanced Retro-commissioning (RCx) Strategies and Technologies;
* Dehumidification
* Heating
* Cooling
* Ventillation
* Package/Unitary System
* Heat Pump
* Renewables and Distributed Generation

1. Is there a commitment by a decision-making authority in the organization to facilitate the project through its conclusion by ensuring the availability of requisite staff and resources?
   1. \_\_\_ Yes. If yes, identify this authority (name, title, organization, phone, email)
   2. \_\_\_\_ No, but we are working to identify someone
   3. \_\_\_\_ No
2. Is there a strong advocate on or near the site who can serve as the primary point of contact, with access to the space, equipment and operations? Having a local advocate will greatly facilitate addressing potential issues with both the space and its operation and occupants.
   1. \_\_\_ Yes. If yes, provide the following:

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Organization: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. \_\_\_\_ No, but we are working to identify someone
  2. \_\_\_\_ No

1. Will the demonstration require access to areas or space during non-normal hours?
   1. \_\_\_ Yes, If yes, identify areas or spaces and verify accessibility\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. \_\_\_ No

1. Identify any factors below that could obstruct/create difficulty with using the site for a demonstration(check all that apply):
   1. \_\_\_ Site operates under energy savings performance contract
   2. \_\_\_ Pending changes to physical space or usage that could disrupt the demonstration. Typically, the demonstration project needs a consistent test environment for useful pre- and post-retrofit data collection.
   3. \_\_\_ Security constraints. These may come in the form of building access or restrictions associated with the nature of the work in the space.
   4. \_\_\_ Atypical/non-standard electrical layout or configuration (such as modifications that may make clean measurements difficult).
   5. \_\_\_ Limited access for installation of technology and metering
   6. \_\_\_ Other (explain): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Explain the conditions for any of the boxes checked above: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. Does the site have an Energy Information System or Building Automation System?
   1. \_\_\_Yes. If yes, can the EIS or BAS be accessed remotely?
   2. \_\_\_No.
2. Will existing controls operate the system properly?
   1. \_\_\_Yes
   2. \_\_\_No. If not, can they be removed or re-configured?
      1. \_\_\_Yes. If yes, explain how modification or replacement of the controls might affect the results of the implementation. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
      2. \_\_\_No. If no, explain why the site should still be considered.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. Is the site leased or owned?
   1. \_\_\_ Yes. If yes, would we need to access tenant-occupied space and energy data:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. \_\_\_ No.

1. Is the site independently metered?
   1. \_\_\_ Yes.
   2. \_\_\_ No. If no, Explain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Does the site have available historic energy use data?
   1. \_\_\_ Yes, If yes, Explain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. \_\_\_ No.
3. Are you able to access energy cost data?
   1. \_\_\_ Yes.
   2. \_\_\_ No, I don’t have that information.
4. Are the areas or spaces being considered for a demonstration representative of the conditions and functions that are typical for the expected application of the technolog? What is the replication opportunity across other building types and markets?
   1. \_\_\_Yes
   2. \_\_\_No. If no, explain why the space should still be considered.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. Is extensive electrical measurement needed for the demonstration?
   1. \_\_\_No.
   2. \_\_\_Yes.
      1. If yes, can electrical panels or junction boxes be made available for metering access along with space for metering equipment
         1. \_\_\_Yes
         2. \_\_\_No
      2. If yes, can you ensure that equipment will not conflict with operations of the space or area?
         1. \_\_\_Yes
         2. \_\_\_No
2. Is extensive mechanical measurement needed for the demonstration, i.e. flow meters, temperature sensors sensors,?
   1. \_\_\_No.
   2. \_\_\_Yes.
      1. If yes, can we access the duct, piping, mechanical rooms or roof be made available for instrumentation access along with space for measurement equipment? Explain the access needed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
      2. If yes, can you ensure that equipment will not conflict with operations of the space or area?

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9) Is occupant survey data an important part of the project?

a)\_\_\_No

b)\_\_\_Yes

1. If Yes, Are there stable **occupants**? For retrofit demonstrations in worker environments, interior spaces where occupants are transient or relocate often should be avoided as this will severely affect the quality of occupant input
   * 1. \_\_\_ Yes there are stable occupants
     2. \_\_\_ No. Occupation may change during the course of the demonstration.
2. If Yes, Is there stable **space operation and function?** Spaces where operations may be changing during the demonstration period should be avoided as this may introduce additional variable to the responses to surveys.
   * 1. \_\_\_ Yes, operations are stable
     2. \_\_\_ No. Operation and function of the space could change.

TECHNOLOGY-SPECIFIC QUESITONS

Questions to be added for each of the technology/applications listed above. Examples:

* Count of open refrigerated cases – vertical? Horizontal?
* Do windows have existing shading – internal? External?
* Are refrigeration compressor systems individual to equipment or centralized?

1. <http://www.eia.gov/consumption/commercial/building-type-definitions.cfm> and <http://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager/identify-your-property-type-0> [↑](#footnote-ref-1)