

## **Audit and Design: Building Assessment Questionnaire Template**

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**About:** This template is intended to guide the initial audit and design phase of a Clean Energy Community Resilience Hub by capturing critical information about the existing facility's physical structure, utilities, systems, and operational context. This template helps planners, architects, and engineers.

**Usage Description:** This template can be followed to create a Building Assessment Questionnaire to guide the design and audit stage of a CCRH (Clean Energy Community Resilience Hub) project.



# Building Assessment Questionnaire Template

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## Objective:

This questionnaire is intended to guide the initial audit and design phase of a Clean Energy Community Resilience Hub by capturing critical information about the existing facility's physical structure, utilities, systems, and operational context. It helps planners, architects, and engineers:

- Understand current conditions and limitations
- Identify retrofit opportunities and constraints
- Evaluate infrastructure compatibility with clean energy technologies
- Flag accessibility, safety, and resilience needs

## Step 1:

For each field or line in the template, users should aim to fill in the most accurate information readily available, keeping the following guidance in mind:

- *Essential Fields (marked with \*)*
  - Must be filled in. These are crucial for evaluating building suitability for resilience upgrades.
  - If unknown, note as UNK and flag for follow-up.
- *Google Maps-Friendly Fields (marked with ¥)*
  - Can often be estimated using online tools like Google Maps or GIS systems.
  - Example: Roof tilt, building footprint, open/forested areas.
- *General Fields (unmarked)*
  - Fill in if information is known or easily accessible.
  - Rough estimates are acceptable as long as they are noted as such (e.g., “approx. 1,000 SF”).
- *Optional Values*
  - Use standard terms or basic units when possible:
    - Square footage (SF), building age (years), capacity (# of people), etc.
    - System specs (BTUs, kWh, gallons, etc.)
- *Unknown or Inapplicable?*
  - Use the following standardized codes:
    - N/A: Not applicable
    - UNK: Unknown
    - TBD: Will be determined later



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## 1. Location & Contact Info

\* Address \_\_\_\_\_

\* City \_\_\_\_\_

\* Owner Name \_\_\_\_\_

Tenant Name \_\_\_\_\_

\* Facility Manager Name \_\_\_\_\_

\* Best Contact \_\_\_\_\_

## 2. Building Function

\* Usage(s) \_\_\_\_\_

\* Max Capacity (est.) \_\_\_\_\_

Number of Constituents (est.) \_\_\_\_\_

## 3. Building Description

\* Usable Square Footage \_\_\_\_\_

¥ Footprint (est.) \_\_\_\_\_

\* Stories \_\_\_\_\_

\* Building Age \_\_\_\_\_

Framing \_\_\_\_\_

Outer Walls \_\_\_\_\_

Foundation Type \_\_\_\_\_

Major Renovations \_\_\_\_\_

\* Est. Number of Rooms \_\_\_\_\_

\* Largest Spaces (approx. SF) \_\_\_\_\_

List major weatherization measures + approx dates \_\_\_\_\_

Date of Last Energy Audit \_\_\_\_\_

Other \_\_\_\_\_



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## 4. Roof

\* Construction \_\_\_\_\_

\* Age \_\_\_\_\_

\* Tilt (est.) \_\_\_\_\_

¥ Orientation (Azimuth) \_\_\_\_\_

¥ Rooftop Obstructions (est. SF & height) \_\_\_\_\_

Other \_\_\_\_\_

## 5. HVAC Systems

\* Heating System (e.g., Forced Hot Water) \_\_\_\_\_

\* Fuel Type \_\_\_\_\_

Furnace Type/Size \_\_\_\_\_

\* Age \_\_\_\_\_

\* Cooling System Type \_\_\_\_\_

\* Type/Size (BTU or Tons) \_\_\_\_\_

\* Age \_\_\_\_\_

Quantity of Window ACs \_\_\_\_\_

Other \_\_\_\_\_

## 6. Electrical System

\* Incoming Voltage (e.g., 220 Single Phase) \_\_\_\_\_

\* Number of Meters \_\_\_\_\_

\* Outlet Types (e.g., 110, 240 1P) \_\_\_\_\_

Service 1 (amps) \_\_\_\_\_

Service 2 (amps) \_\_\_\_\_

Service 3 (amps) \_\_\_\_\_

Other \_\_\_\_\_



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## 7. Plumbing & Sewage

\* Water Source (e.g., city, well) \_\_\_\_\_

\* Sewer (e.g., septic, city) \_\_\_\_\_

Piping \_\_\_\_\_

Age \_\_\_\_\_

\* Hot Water Heating Type \_\_\_\_\_

\* Fuel \_\_\_\_\_

Tank Size \_\_\_\_\_

Other \_\_\_\_\_

## 8. Major Appliances

List: (e.g., refrigerators, ovens, washers, elevators). Include type, usage frequency if possible.

\_\_\_\_\_

## 9. Kitchens

\* Kitchen 1 Square Footage \_\_\_\_\_

\* Frequency of Usage \_\_\_\_\_

Number of Sinks \_\_\_\_\_

Cabinet Space \_\_\_\_\_

Counter Space \_\_\_\_\_

\* Professional or Self-Serve \_\_\_\_\_

Dining Space \_\_\_\_\_

Kitchen 2 Square Footage \_\_\_\_\_

Frequency of Usage \_\_\_\_\_

Other Kitchen Notes \_\_\_\_\_

## 10. Bathrooms

\* Number of Bathrooms \_\_\_\_\_

\* Number of HC Accessible Bathrooms \_\_\_\_\_



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\* Number of Toilets \_\_\_\_\_

Number of Urinals \_\_\_\_\_

\* Number of Showers \_\_\_\_\_

Other \_\_\_\_\_

## 11. Accessibility Features

\* Ramps (qty) \_\_\_\_\_

\* Elevators (qty) \_\_\_\_\_

\* HC Parking (qty) \_\_\_\_\_

Other \_\_\_\_\_

## 12. Communications Infrastructure

\* Wifi Coverage (e.g., weak, strong) \_\_\_\_\_

Cellular Signal \_\_\_\_\_

Land Lines \_\_\_\_\_

Broadband Speed \_\_\_\_\_

Cable \_\_\_\_\_

Other \_\_\_\_\_

## 13. Storage

~ SF + Height of indoor conditioned \_\_\_\_\_

~ SF + Height of indoor non-conditioned \_\_\_\_\_

~ SF of outdoor storage \_\_\_\_\_

Other \_\_\_\_\_

## 14. Emergency Systems

\* Fire Sprinkler Type \_\_\_\_\_

\* Emergency Lighting (qty) \_\_\_\_\_

\* Backup Generator Size \_\_\_\_\_

Other \_\_\_\_\_



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## 15. Sustainability Features

- \* Photovoltaic (Size in kW, Age) \_\_\_\_\_
- \* EV Chargers (Qty & Level) \_\_\_\_\_
- \* Battery (Size - kWh, Age) \_\_\_\_\_
- \* Compost (Approx. Volume) \_\_\_\_\_
- \* Rainwater Collection (Approx. Volume) \_\_\_\_\_
- \* Recycling (Materials) \_\_\_\_\_
- Other \_\_\_\_\_

## 16. Utilities & Land

- Electric Provider \_\_\_\_\_
- Gas Provider \_\_\_\_\_
- Oil Provider \_\_\_\_\_
- Water Provider \_\_\_\_\_
- \* Gross Area (SF) \_\_\_\_\_
- Parking (SF) \_\_\_\_\_
- Paved (SF) \_\_\_\_\_
- ¥ Open Area (SF) \_\_\_\_\_
- ¥ Forested (SF) \_\_\_\_\_
- ¥ Wetland (SF) \_\_\_\_\_
- ¥ Garden Space (SF) \_\_\_\_\_
- Other Land Features \_\_\_\_\_

## 17. Neighborhood Context

- \* Use (e.g., residential, commercial, mixed) \_\_\_\_\_
- Demographics \_\_\_\_\_
- Income Levels \_\_\_\_\_



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¥ Local Services \_\_\_\_\_

## 18. Additional Notes

\* Distinguishing Features or Comments \_\_\_\_\_