

Sample Building Owners & Property Managers Survey

About the Energy Efficiency Market Transformation Project

From 2012-2013 the Massachusetts Institute of Technology's Community Innovator's Lab Green Economic Development Initiative (MIT GEDI) partnered with local government agencies¹ on an "action research" project to develop energy efficiency market transformation strategies for commercial buildings in each agency's region. The guidebook and accompanying materials (like this one) draw on this work to present how communities can formulate a commercial energy management market transformation strategy and suggests common policies, approaches, and tools to deploy such strategies. It is intended to support your community's ongoing economic development and environmental initiatives.

About this Resource

This sample survey provides a structured format for telephone interviews with building owners and property managers as part of a region's energy efficiency market transformation strategy. The survey will examine owner and operator energy practices including:

- Property Data
- Building Benchmarking Activities
- Energy Management
- Upgrade History
- Financing
- Leasing
- Barriers and Opportunities to Promoting Energy Efficiency

About the MIT CoLab Green Economic Development Initiative

MIT GEDI is a project of the Community Innovators Lab, a center for planning and development within the MIT Department of Urban Studies and Planning (DUSP), which focuses on advancing a socially just and environmentally sustainable economy. MIT GEDI conducts applied research; develops tools and resources for practitioners; disseminates knowledge; and partners with economic development organizations to design strategic planning initiatives intended to transform economic development practice. GEDI is generously supported by a grant from the Rockefeller Brothers Fund.



¹ City of Minneapolis, MN Department of Community Planning and Economic Development
City of Las Vegas, NV Office of Sustainability
City of Bellevue, WA City Manager's Office
County of Passaic, NJ
City of Cambridge, MA Community Development Department

Sample Building Owners & Property Managers Survey

We are interviewing you as part of research being undertaken by [local government] to develop an Energy Efficiency Market Transformation Strategy (EEMTS) for the region. The EEMTS will examine 1) strategies for your city to increase uptake of energy efficiency in private buildings and 2) suggest what the economic development impacts of this work may be.

We will ask a series of questions about your building energy management practices in the property at [address]. We ask that you answer these questions referring to this one specific property. If you are a senior staff person with responsibilities for a portfolio of buildings, we understand you may not understand all the details of a specific property; in this case, please respond to general practices within your company.

We appreciate your taking this survey.

What is your name?

What is your title?

What is your firm's name?

What kind of business is your firm? Check all that apply.

- Property owner
- Real estate investment trust
- Property manager
- Building operations/engineering firm
- Other:

How many buildings are in your company's portfolio in [city]

How many square feet is this portfolio of buildings?

What industry groups do you participate in? Check all that apply.

- Building Owners and Managers Association
- BOMA Engineers
- International Facilities Management Association
- Urban Land Institute
- American Institute of Architects
- Other:

BASIC PROPERTY QUESTIONS

This section asks basic questions about the property this survey pertains to.

What is the address of your property?

You will be asked questions about the specific building at this address. Can you answer questions specific to the history of this building, or will you answer more generally about your firm's practices within your portfolio?

- I will attempt to answer about this specific property to the best of my ability.
- I will answer based on practices across our portfolio
- Other:

What year was your building constructed?

Has this building undergone major renovations since 1980? If so, answer the year in the "Other" section

We define a "major renovation" as the renovation of the majority of HVAC systems, significant envelope modifications, and/or major interior rehabilitation (including lighting and air-handling distribution system changes). Mark only one oval.

- No - this building has not undergone major renovations since 1980
- Not sure
- Other:

We want to develop a better understanding of how you manage your property. Which of these services do you contract out for your property? Check all that apply.

- Property management
- Energy management services
- Building operations
- Preventative maintenance of building systems (HVAC, controls, etc.)
- Other:

Which best describes the company form of the owners of this building? Check all that apply.

- Corporation
- Partnership
- Limited liability company
- Trust
- Real estate investment trust
- Individual owner
- Other:

Is this property leveraged with a mortgage? Mark only one oval.

- Yes
- No
- Other:

If the property is leveraged with a mortgage, are there restrictive covenants that prevent the property owner from assuming debt without lenders' permission (for instance, debt to finance energy improvements)? Check all that apply.

- Yes
- No
- Other:

Does your building have a capital plan that includes funding for major renovations and retrofits? Mark only one oval.

- Yes
- No
- Not sure

Does your building's capital plan includes funding for energy efficiency upgrades? Mark only one oval.

- Yes
- No
- Not sure

Do you have a fixed capital budget, with limited funds for energy efficiency upgrades? Check all that apply.

- Yes. We have a fixed budget, and cannot draw on additional reserves for cost-effective upgrades.
- No. We can draw on reserves for cost-effective upgrades. Our budget is not entirely fixed.
- Other:

If you have a capital budget with funds for energy efficiency improvements, in how many years will capital plan funds be available for energy upgrades?

How many tenanted spaces are there on the property? E.g. how many different tenanted spaces with separate leases are there on the property?

BUILDING BENCHMARKING AND RATING

This section asks about building benchmarking practices, and green building ratings pursued/achieved for the property.

Do you benchmark your buildings' energy use? If you do benchmark your buildings energy use, please indicate the platform you use (e.g. ENERGY STAR Portfolio Manager, or name another system)..

Benchmarking is the practice of tracking and assessing energy and water consumption, and comparing this consumption to other similar buildings and/or historic performance. It is an energy management strategy. Mark only one oval.

- No - We do not benchmark our buildings energy use.
- Not sure
- Yes - We benchmark with ENERGY STAR Portfolio Manager
- Other:

If your building is benchmarked using ENERGY STAR Portfolio Manager, what is your building's ENERGY STAR score (a rating from 1 to 100)? Check all that apply.

- Yes - it is ENERGY STAR labeled
- I am not sure
- No - it is not ENERGY STAR labeled
- Other:

Who regularly (e.g. monthly or annually) sees benchmarking information? Click all that apply.

- Building owner
- Building operator
- Property manager
- Tenants
- Building engineer
- Other

Please provide any additional comments on how you use benchmarking practices as part of your energy management.

What LEED certifications has your building (or sections of your building) achieved? These rating systems are described here: <http://new.usgbc.org/leed/rating-systems> Mark only one per row.

	LEED New Construction & Major Renovations	LEED Existing Buildings - Operations & Maintenance	LEED Commercial Interiors	LEED Retail	LEED Core and Shell Development
LEED Platinum					
LEED Gold					
LEED Silver					
LEED Certified					
Not rated					
Not sure					

BUILDING ENERGY MANAGEMENT

These questions ask about your building energy management practices.

Does your firm have a written Energy Management Plan/Policy? Check all that apply.

- Yes No Not sure

If your firm has an Energy Management Plan/Policy, describe how it was developed in relation to the International Standard Organizations' ISO 50001 Standard for Energy Management.

Check all that apply.

- Our energy management plan development did not refer to ISO 50001
 Our energy management plan was informed by ISO 50001, but is not certified to the ISO 50001 standard.
 Our energy management plan is certified to the ISO 50001 standard.
 Other:

Is your building covered by a contract with an Energy Service Company (ESCO)? Check all that apply.

- Yes
 No
 The building was covered in the past, but the contract term has expired
 We have sought ESCO services in the past, but opted not to pursue
 Other:

Does your building have a building automation system with direct digital controls?

DDCs differ from pneumatic or electric controls, which often do not have as precise control potential, nor data logging of building conditions. The BAS refers to the advanced functionality provided by the control system of a building. A BAS can provide detailed zone condition controls, scheduled lighting controls, monitors system performance, and alert property managers/building operators via email/text of problems. Check all that apply.

- Yes don't know
 No Other:

What firm provides your building automation system? Check all that apply.

- Alerton Schneider Electric
 Automated Logic Trane
 Cisco Tridium
 Honeywell ESC Automation
 Johnson Controls We have a BAS with DDCs, but I am unsure of the supplier.
 Siemens Other:
 Square D

Do you use an advanced energy management software and/or energy management services, in addition to / instead of a BAS with DDCs?

Advanced energy management software & services typically include feedback on near-real time energy use, assist with fault detection, and provide suggestions for upgrade opportunities. Mark only one oval.

- Yes No Not sure

What advanced energy management software service do you use? Check all that apply.

- Enernoc EfficiencySmart Insight
- Other Enernoc Service
- Johnson Controls Panoptix
- BuildingIQ
- DGLogik DGLux
- Schneider Electric Structure Ware
- Crestron Fusion EM
- KGS Buildings
- don't know
- none
- Other:

How do you typically procure energy efficiency upgrade services? Check all that apply.

- We have a relationship with an Energy Services Company / Engineering Firm that we typically engage.
- We have relationships with contractors for different building equipment.
- We will launch a competitive bidding process for an Energy Service Company / engineering firm
- We will launch a competitive bidding process for contractors
- I am not sure how we would typically engage in energy upgrades.
- Our property management / building operations firm provides in-house energy management services
- Other:

Do your facility/building engineering, operations and management staff hold any of the following credentials? Check all that apply.

- Certified Energy Manager (CEM) - Association of Energy Engineers
- Government Operator of High Performance Buildings - Association of Energy Engineers
- Energy Manager in Training (EMIT) - Association of Energy Engineers
- Building Operator Certification (BOC) Level 1
- Building Operator Certification (BOC) Level 2
- LEED Accredited Professional - Operations and Maintenance - Green Building Certification Institute
- Energy Management Professional (EMP) - AABC Commissioning Group
- Operations and Performance Management Professional Certification (OPMP) - ASHRAE
- Systems Maintenance Technician (SMT®) Designation Program - BOMI International
- Systems Maintenance Administrator (SMA®) Designation Program - BOMI International
- Building Systems Maintenance Certificate (SMC) - BOMI International
- Sustainability Facility Professional (SFP®) - International Facility Management Association
- Facility Management Professional (FMP®) - International Facility Management Association
- Energy Management Certification - Northwest Energy Education Institute (NEEI)
- Other:

How many "full-time equivalent" Property Managers serve your property? (Answer using decimals. e.g. 1.5 FTEs) Definition: A Property Manager is responsible for interacting with tenants and operating a property on behalf of its owner.

How many "full-time equivalent" Building Operators serve your property? (Answer using decimals. e.g. 1.5 FTEs) Definition: A building operator is responsible for the day-to-day operations and maintenance of building systems.

How many "full-time equivalent" Building Engineers serve your property? (Answer using decimals. e.g. 1.5 FTEs) Definition: A building engineer designs, operates, monitors and maintains building mechanical, electrical, and human safety systems.

How many "full-time equivalent" Energy Managers serve your property? (Answer using decimals. e.g. 1.5 FTEs) Definition: An Energy Manager is responsible for identifying energy savings opportunities within a building.

Describe how you invest in building operators' & managers' skills, to increase their proficiency with energy management.

UPGRADE HISTORY

This section asks about your buildings' history of energy upgrades.

What sort of energy audit has your building performed in the last 10 years? Check all that apply.

- Short walk-through (ASHRAE Level 1)
- More detailed, comprehensive audit. Includes end-use energy breakdown, and financial analysis for each measure (ASHRAE Level 2)
- Highly detailed "investment grade" audit including whole-building energy modeling (ASHRAE Level 3).
- Re-commissioning study.
- We have undertaken an audit, but I do not know what kind.
- No, we have not undertaken an audit.
- Other:

How often does your building undergo formal re-commissioning or retro-commissioning?

Definition: Commissioning ensures that the new building operates initially as the owner intended and that building staff are prepared to operate and maintain its systems and equipment. Retro-commissioning is the application of the commissioning process to existing buildings. Re-commissioning is another type of commissioning that occurs when a building that has already been commissioned undergoes another commissioning process. (from the California Commissioning Collaborative) Check all that apply.

- Every 1-3 years.
- Every 4-5 years.
- Every 6-10 years.
- Every 11+ years.
- The building does not undergo re-commissioning.
- don't know
- We continually commission and function test our systems
- Other:

In about what year did your building last undergo a major (>50% floor space) lighting fixture upgrade?

Check all that apply.

- Our building has never undergone such an upgrade.
- Other:

In about what year did your building last undergo a major (>50% floor space) lighting controls upgrade? Check all that apply.

- Our building has never undergone such an upgrade.
- Other:

In about what year did your building last undergo a major (>50% floor space) HVAC systems upgrade to improve energy efficiency? Check all that apply.

- Our building has never undergone such an upgrade.
- Other:

In about what year did your building last complete an upgrade to introduce building system controls (e.g. a building management system with direct digital controls) covering more than 50% of its floor space? Check all that apply.

- Our building has never undergone such an upgrade.
- Other:

In about what year did your building last undergo a major (>50% exterior wall space) envelop improvement?

Check all that apply.

- Our building has never undergone such an upgrade.
- Other:

Has your building introduced strategies to reduce tenant's plug-load energy consumption?

Check all that apply.

- Yes - we have implemented behavioral campaigns.
- Yes - we have replaced plug-load equipment with more efficient models (Computers, equipment, etc.)
- Yes - we have implemented computer power management software.
- No.
- Not sure.
- Other:

FINANCING

This page asks about your financing of energy upgrades, and about what might enable your firm to finance deeper upgrades.

What "rate of return" must an energy upgrade to your property achieve for your firm to consider implementing this upgrade? E.g., what is your firm's "hurdle rate"?

How have you financed energy upgrades in the past, or how are you likely to finance upgrades in the future (after accounting for any utility program incentives)? Check all that apply.

- The building owners' cash reserves.
- Business loan from a bank.

- Energy performance contract (involving an Energy Services Company who may or may not provide financing).
- Energy service agreement.
- Equipment lease.
- Other:

Is it difficult to obtain financing for cost-effective energy upgrades? Check all that apply.

- Yes, very difficult.
- Yes, somewhat difficult.
- No.
- Not sure.
- Other:

How important is it that financing for energy efficiency project be "off-balance sheet"? Check all that apply.

- Critical. Our organization can not engage in energy upgrade projects if the financing is not "off balance sheet"
- Important. We would prefer financing be "off balance sheet", and can undertake deeper upgrades if this is so.
- Not important. Our balance sheet can support energy upgrades.
- Other:

LEASING

This page asks about how energy is treated in leasing practices in your building.

Is your building sub-metered for electricity for each tenanted space? Check all that apply.

- Yes - the building is fully submetered for each tenanted space
- No - the building is not submetered
- Some spaces are submetered; however, multiple tenants are not submetered
- Other:

If multiple tenanted spaces are not submetered for electricity, what percentage of the lease-able building floor area is NOT submetered?

If multiple tenanted spaces are not submetered for heating fuel, what percentage of the lease-able building floor area is NOT submetered?

Does your building(s) use an "energy/electric rent inclusion factor", whereby an agreed upon utility cost per square foot is added to the base rent? Mark only one oval.

- Yes
- No
- Not sure
- Other:

If your building is leased, how are utility bill payments treated in the lease? Check all that apply.

- Triple Net Lease - tenant pays for utilities and all capital improvements to a space.
- Multi-tenant office net lease - Tenants pay for all utility costs; building owners pay for capital costs.
- Gross lease - building owner pays for utilities
- Fixed-base year lease (AKA modified gross lease) The building owner pays a portion of operating costs, defined as the costs at some base year. Tenants pay for escalations in costs beyond this base year.

- Other:

If your property(ies) have a fixed base-year lease (AKA modified gross lease), are utility costs and other operating costs separated? Base year and escalation costs for utilities and operating costs may be either combined or separate. Check all that apply.

- Yes, these costs are separated
- No, these costs are combined together
- Not sure
- Other:

Have you considered implementing "green lease" (AKA "energy aligned lease") provisions in your leases with tenants, to align incentives to invest in energy efficiency? Check all that apply.

- Yes, we have implement green lease language in our lease documents
- Yes, we intend to integrate green lease language when our lease is next up for negotiation
- We are aware of green lease language, and are considering implementing it in our leases
- No, we have not considered green lease language
- I am not aware that standard green lease provisions exist
- Other:

Would you be willing to consider re-negotiating leases with tenants in the middle of their current lease term, to insert "green lease" provisions into the lease? Check all that apply.

- Yes, we would be willing to renegotiate leases to insert green lease provisions in the middle of the lease term
- No, but we would be willing to insert green lease language at the end of this lease term.
- No, we would not be willing to change lease language.
- Other:

Have tenants requested energy efficiency improvements to properties? Check all that apply.

- Yes. Tenants are frequent, vocal advocates for energy efficiency improvements.
- Yes. Tenants have made some requests for energy improvements.
- No. Tenants have not requested energy upgrades.
- Other:

If the above questions do not properly reflect how your building(s) is (are) leased, please describe your leasing arrangements here.

BARRIERS & OPPORTUNITIES TO PROMOTE ENERGY EFFICIENCY

This section asks questions about how the City might foster greater investment in energy efficiency.

If your organization were publicly recognized by the City for undertaking energy upgrades, would that increase the likelihood of your organizations undertaking energy upgrade projects? Check all that apply.

- Yes
- No
- Not sure.
- Other:

If your organization had the opportunity to engage local, low-income and/or economically disadvantaged workers as part of your upgrade project, would that increase the likelihood of your organizations undertaking energy upgrade projects? Check all that apply.

- Yes
- No
- Not sure.
- We would not feel comfortable with targeting work towards local/low-income/disadvantaged communities
- Other:

If utility energy programs were simplified, and/or provided greater "turnkey" support over the full lifecycle of an upgrade project, would that increase the likelihood of your organization undertaking energy upgrade projects? Check all that apply.

- Yes
- No
- Not sure.
- Other:

Mark the following questions on a scale of 1-5, 1 being not a barrier to 5 being a significant barrier:

How great a barrier is limited capital to undertaking building energy upgrades and/or re-commissioning? _____

How great a barrier is lack of information about energy efficiency opportunities to undertaking building energy upgrades and/or re-commissioning? _____

How great a barrier is whether you know where to find contractors/professionals to assess and implement energy upgrades and/or re-commissioning? _____

How great a barrier is a lack contractors/professionals you can trust to assess and implement energy upgrades and/or re-commissioning? _____

How great a barrier is a lack of staff time to assess and implement energy upgrades and/or re-commissioning? _____

How great a barrier are breakdowns in communication between building operators, property managers & owners to implementing energy upgrades and/or re-commissioning measures? _____

ADDITIONAL COMMENTS

This page provides an opportunity for you to provide additional comment on your energy management activities.

Please describe what you feel are the most important opportunities for a public/private partnership to advance energy efficiency in your region.

Please provide any other comments.

Thank you for taking our survey!