Energy Management Guide

2016 Edition

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If you have questions or would like further clarification on your role as an ELO, please don't hesitate to contact DEM at energy@dcas.nyc.gov.   For more information, visit http://www.nyc.gov/energy-conservation.

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Introduction

DCAS Energy Management (DEM) serves as the hub for energy management for City government operations, from energy procurement and investments in energy-savings programs to reporting and performance tracking, and providing improved operations & maintenance, training, and clean energy and demonstration projects. DEM works collaboratively with energy staff at all levels at City agencies and organizations for which we pay the energy bills. Energy staff will vary from agency to agency, and can include energy managers, energy analysts, Energy Liaison Officers (ELOs), and facility managers, along with fiscal and administrative oversight staff.

Building on the progress of New York City's first sustainability plan, *PlaNYC 2030,* Mayor DeBlasio released *One City, Built to Last* which sets forth a strategy to reduce energy and greenhouse gas emissions from City operations 80% by 2050, with an interim goal of 35% by 2025. This Guide will help us work together toward these goals. It is designed to provide an overview of the tools and resources DEM provides, and the responsibilities of agency energy staff.

Energy Manager Role

Energy Managers have overall responsibility for developing and managing an agency's energy management program that will assist the City to achieve its energy and greenhouse gas emissions reduction goal of 80% by 2050, with an interim goal of 35% by 2025. Energy managers work closely with DEM to reduce energy and greenhouse gas emissions through improved operations and maintenance (O&M) practices at each department facility, and work closely with individual facilities to compile and analyze data for program development and performance measurements. This also means working with their agency's ELO to assure that ELO responsibilities (pages 4-5) are properly assigned and being met.

Energy Liaison Officer Role

Each Mayoral Agency and entity whose energy costs are paid for by the City of New York is required to designate an Energy Liaison Officer (ELO).   ELOs work within their agency and with DEM to develop and manage the annual energy budgeting process and monitor billing. ELOs also have prime responsibility for reviewing monthly energy reports, distributing them as needed within their Agency, and reporting changes to or errors in the Agency's utility accounts to DEM. These duties are essential for understanding energy usage patterns and supporting One City, Built to Last goals. ELOs help serve as a point of contact on energy-related issues.

Energy Management Tools and Resources

This table summarizes the key tools and resources that are available to agency energy staff, including ELOs, and other agency personnel involved in energy management activities. Follow the links listed in the first column below to learn more.

Energy Reporting (EC3)	Energy Cost Control and Conservation (EC3) is DEM's website that provides energy cost and usage reports. Some reports are emailed monthly. Energy Team members can log in, run, and download others from the account up to the agency level, and your agency's homepage has additional metrics. For training and log-in assistance, contact Sergey Shabalin at sshabalin@dcas.nyc.gov.
Demand Response Program	Demand Response (DR) programs reduce electrical load on high consumption days, usually the hottest summer days, while reducing strain on the electric grid without degrading air quality. Enrolled agencies receive revenue based on DR performance.
Benchmarking	Thanks in large part to the efforts of Agency Energy Teams, all of the City's buildings over 10,000 square feet are benchmarked annually using US EPA's Portfolio Manager. Benchmarking scores tell us which buildings are operating efficiently and which ones offer the best opportunity for energy savings. Log on at your agency's Portfolio Manager account to review your buildings' scores and EUI. For login information, contact Val Slobodyan at vslobodyan@dcas.nyc.gov.
Energy Management Institute	In conjunction with the City University of New York and the Association of Energy Engineers, DEM offers energy management training courses for City employees through the Energy Management Institute (EMI). For assistance with registration, contact Jason Bocchinfuso at jbocchinfuso@dcas.nyc.gov .
Outreach Materials	DEM distributes energy updates, seasonal energy use guidelines, fact sheets, energy awareness posters and other materials to support agency efforts to reduce energy use through behavioral change.
Funding Programs	DEM provides two resources to assist agencies with capital or expense funding for shovel-ready projects. For direction on assistance with the application processes, contact: **Accelerated Conservation and Efficiency (ACE):** Brian Cabezas; bcabezas@dcas.nyc.gov **Expenses for Conservation and Efficiency Leadership (ExCEL):** Jason Bocchinfuso; jbocchinfuso@dcas.nyc.gov

Details on Energy Liaison Officers (ELO) Responsibilities

Manage all utility account changes for your agency.

This includes the need for new services for new facilities, changes due to shifting use of space, and expected facility closures. [See Page 6 "How to Change a Utility Account"]

Gather annual information for the Heat, Light, and Power (HLP) budget for your agency.

With oversight from OMB, DEM develops the Citywide HLP budget based on past actuals and expected energy usage changes reported by agencies. <u>ELOs play a crucial role in gathering and submitting the information for their agency.</u> Every December, DEM provides ELOs with instructions, forms, and due dates. [See Page 8 "Energy Budget Basics and Agency Role"]

Check monthly energy reports.

[See Page 10 "Using EC3 for Energy Management" section]

- Use reports distributed to you by DEM and also run your own reports in EC3.
- Identify accounts and facilities with large changes in usage (Deviations > 25%) and work with your agency to address the causes.
- Provide DEM with facility contact information where utility accounts have been estimated (Estimated Meter Readings report).
- See how your agency's energy use compares with other agencies' (Energy Dashboard Report, and Energy Change Report: All Agencies) and use that information to encourage reductions in energy use.
- See how changes in energy use in each facility in your agency compare with other facilities' (Energy Change Report: All Facilities), and use *that* information to encourage reductions in energy use.
- If your agency has an Energy Manager, coordinate with him or her to encourage reductions in energy use. By using other cost and usage reports, you can do your own analysis to look for other energy-saving opportunities.

Gather facility information for energy use benchmarking.

You may be responsible for providing DEM with all necessary information on your agency's building(s), including characteristics and usages, energy types consumed, and schedules of operations.

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Assure agency facilities with dual fuel natural gas accounts are prepared for winter gas interruptions.

- Make sure all facilities' switching equipment is operational and adequate supply of alternative fuel is present.
- Verify that utility and DCAS DEM has up to date contact information, including emails, fax and phone numbers.
- Pay attention to announced interruption test dates
- Provide prompt necessary support to facilities in events of malfunctions and failure to interrupt. Report corrections to utility and to DEM within the required time period to avoid incremental penalties.

Provide a point of contact on other energy matters for your agency.

Helping to manage energy use is a dynamic process, especially given New York City's important and ambitious energy and greenhouse gas reduction goals. Here are some of the things you may be called on to do as ELO:
- Help others in your agency use DEM's facility and energy reporting systems
- Identify colleagues who may benefit from DEM's Energy Management Institute (EMI) training program and share the course listings and application information
- Review DEM's Energy Update newsletter and forward it on to colleagues
- Distribute DEM's heating and cooling guidelines as needed
- Encourage colleagues to implement basic energy conservation measures in the office

Highlight and share agency energy-related successes.

If there are energy-related successes at your agency that you would like to highlight, contact Gretel Guivelondo at gguivelondo@dcas.nyc.gov to have them featured as Facebook or Twitter posts or project highlights on DEM's website. Follow DEM's Facebook and Twitter pages for up-to-date news, information and project highlights.

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Utility Account Changes

ELOs should notify DEM promptly when it is necessary to turn on, turn off, or transfer an electricity, gas, or steam utility account for their agency.

- Please use the **Utility Request Information Form (URIF)** to notify DEM of these changes. The URIF form in excel format can be found at the [DEM website](#) and in EC3 under "Other Reports and Information Look Up." Be sure that the address, meter numbers, and account numbers are accurately filled out in the form.

- Submit the URIF to DCAS by email and include **agency authorization**; DCAS needs that authorization before going to the utility company. You can provide authorization at a minimum by copying your agency energy manager or team head when you email the URIF to DCAS. (You may also include **a signed letter on agency letterhead.**) Any URIFs that do not include agency authorization will be returned to the ELO for resubmission.

- Email URIFs to Marilyn Steeps at msteeps@dcas.nyc.gov. Faxed submissions [(212) 386--6323], which are acceptable but not preferred, must be written clearly.

Based on the information submitted, DEM will issue a Service and Billing Modification Request (SBMR) to the utility company. **The agency does not need to contact the utility**.

URIF (Utility Request Information Form) Definitions

Turn-On	Move into a new facility or a facility with a separate meter.

By submitting a URIF, the ELO puts its agency on record as requesting that the specified location or meter is included in the City's energy bill and that the expenses be allocated to the energy budget code 423 of the concerned agency.

Moving into a new location under construction:

Installation of the meter is to be done by the utility company, with preparation by the design/construction team that is working for the agency. In the URIF for a new service, include the utility work order number that the contractor receives from the utility company. This is particular important for Con Edison meters. The contractor may use temporary meters during construction. When the contractor completes construction or is able to use permanent meters, the contractor should notify the utility to remove temporary meters. If the contractor is using a permanent meter during construction, the URIF to transfer should identify that permanent meter. File the URIF to have the account placed on the City bill as early as possible, in order to make use of lower NYPA electricity rates.

Moving into an existing location that is new to the agency:

If there is an existing meter serving space that your agency will be newly occupying, file a URIF with the utility meter number(s), and identify the part of the facility supplied by the meter(s). It is your responsibility to confirm that the meter(s) measure only the consumption used by your agency and that all your agency's space in that facility is covered.

Turn-Off	Move out of a facility with a separate meter.

The ELO must notify DEM to remove the specified meter, at the requested time, from the City's billing system and to stop paying for the energy used.

Transfer	Transfer of an account from one agency to another.

The ELOs of both agencies must notify DEM, one relinquishing and the other accepting responsibility for the meter.

Changing a Utility Account - Frequently Asked Questions

Q. I listed a new location for my agency in annual budget forms. Do I also need to fill out a URIF for that location when the site is ready for utility service?

A. Yes! If you are adding or deleting an account, you must submit a completed URIF with agency authorization in addition to the notification in the budget request. Budget requests are often made far in advance of the actual need, which may change. DEM does not notify the utility companies until the URIF is filed and the change in service is actually required.

Q. I identified an account that does not belong to my agency in the annual budget form. Do I also need to request that an SBMR be issued to terminate that service?

A. Yes, you must file a URIF so that the SBMR is submitted to the utility company. Wherever possible, identify the occupant of the space that should take over responsibility.

Q. My agency is taking over the location of another City agency. As the agency ELO, what do I have to do about utility accounts? Do I have to fill out an URIF?

A. Yes, this is a Transfer, defined above. File a URIF and include the agency authorization by including your agency team head in all email correspondence, and where possible a letter on your agency letterhead referring to the URIF Form.
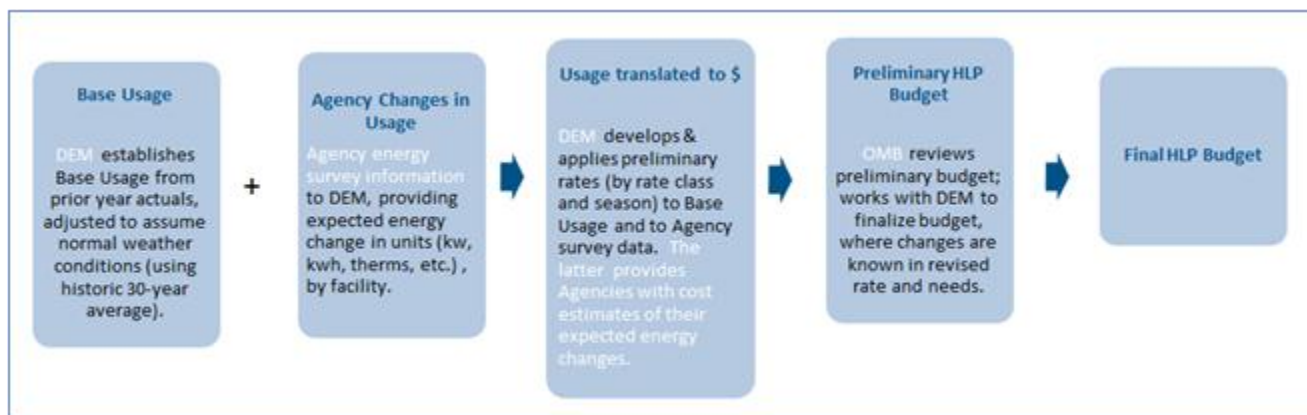
Q. My agency is vacating space. As the agency ELO, what do I have to do about utility accounts?

A. This is either a Transfer or a Turn-Off, depending on what is happening to the space your agency is vacating. See the definitions above, and fill out forms accordingly.
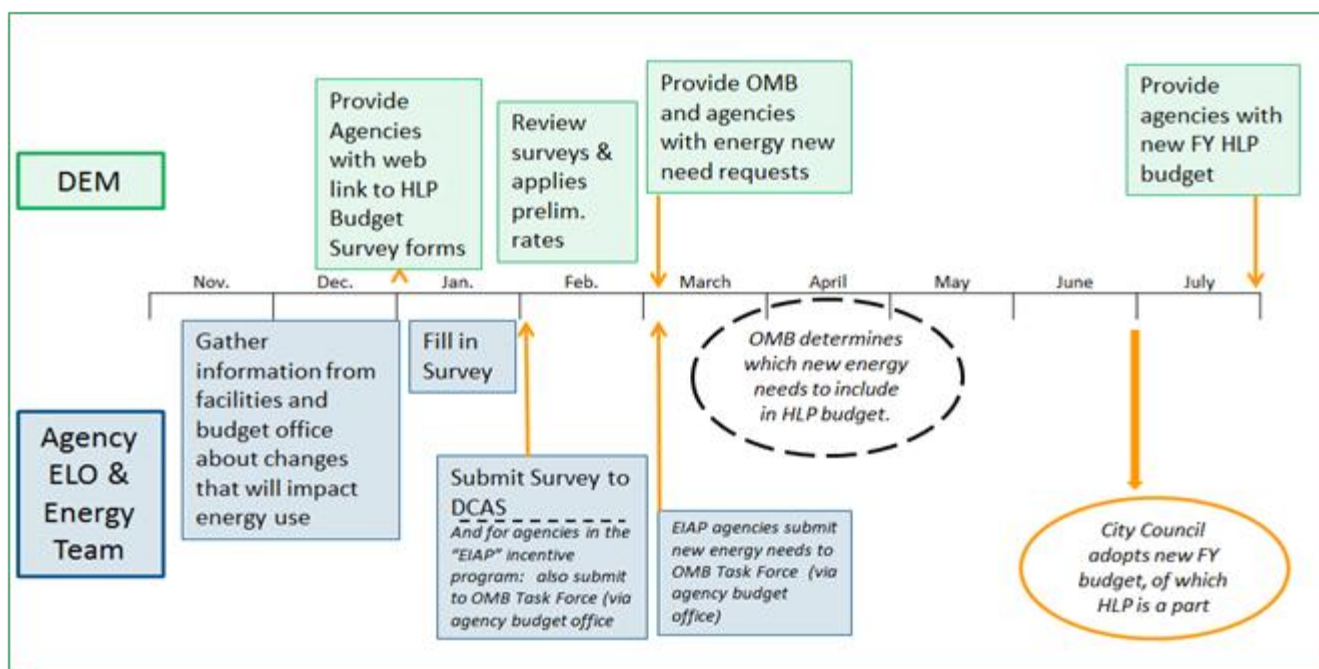
Energy Budget Basics and Agency Role

The energy budget is formally called the Heat, Light, and Power **(HLP)** budget

- The HLP budget is developed by applying rates to "base usage" (prior-year actual usage adjusted for normal weather) and expected "changes in usage":

Base Usage	Agency Changes in Usage	Usage translated to $	Preliminary HLP Budget	Final HLP Budget
DEM establishes Base Usage from prior year actuals, adjusted to assume normal weather conditions (using historic 30-year average).	Agency energy survey information to DEM, providing expected energy change in units (kw, kwh, therms, etc.), by facility.	DEM develops & applies preliminary rates (by rate class and season) to Base Usage and to Agency survey data. The latter provides Agencies with cost estimates of their expected energy changes.	OMB reviews preliminary budget; works with DEM to finalize budget, where changes are known in revised rate and needs.	

Timing of agency information-gathering, within the annual cycle for developing the HLP budget:

Information that agency provides to DEM:
1. Energy to be added for new agency facilities or locations, and energy to be removed for closed or vacated facilities.
2. Energy to be added or removed for changes in usage at existing facilities.
3. Review of all utility accounts assigned to agency, to identify accounts that do not belong to the agency.

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Logging On to EC3

First time log-in: Go to https://dcasec3webprod.dcas.nycnet/ec3/.
- Click on the "Request Access" tab as seen below:

Next:
- Fill in your full regular city email, including the @XXX.nyc.gov part
- Select your agency from the dropdown
- Submit request

- You'll get an email back when your request has been approved. Then you should be able to go back to the URL above, and use the left tab to log in. The system is set to conform to your regular City log in, so use your full email address and your regular City password. (When you change your City password, the new password will get you into EC3.)

- Non-mayoral agencies should contact DEM (rrisicke@dcas.nyc.gov) for further instructions on establishing log-in credentials.
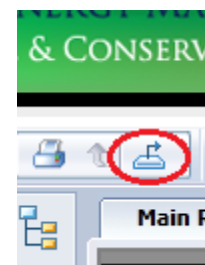
Short Guide

General Introduction to EC3

Agency energy managers, energy team members, and ELOs: The EC3 website is your portal to information about monthly energy cost and usage for your agency's accounts and facilities. The data come from utility billings, which DCAS handles centrally on behalf of all City agencies.

Use this site to oversee accounts and to monitor energy cost and usage at the meter, account, facility, or agency level. Share reports within your agency to check progress in contributing energy reductions to the City's 80 x 50 greenhouse gas reduction goals. Where necessary, contact DCAS DEM (Division of Energy Management) at energy@dcas.nyc.gov.

Navigating EC3

- **Home Page** has key agency charts and metrics and links to relevant reports, and a navigation bar on the left.

- The **Main Navigation** bar on the left has 4 sections (see below); each opens to further choices.

- Within each section, hold the cursor over each report choice for a thumbnail description; selecting a report will run it in the main part of the window.

- Minimize the **Main Navigation** bar to give you more space by clicking the blue rectangle; the rectangle itself will remain on the screen, and when you click it again the bar will return.

- Clicking on the red-roofed house on the **Main Navigation** bar returns you to the home view after you have run a report.

- Once you have a report open, clicking on the 2nd icon in the upper left of the Main Report window gives you the option to export the report as a PDF file or an excel table (to export to excel, select the "data only" option).

- Clicking on the 1st icon in the Main Report window creates a PDF directly (even though it is a printer icon), which you can then open, save, or print.

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Main Navigation bar by Section [Reports and how to use them]

Anomaly Reports	This section has basic reports showing key changes on the energy account level. Reports highlight large deviations in usage, demand; estimated readings. **This is where you'll find the Anomaly and Estimated reports ELOs are required to review on a monthly basis.**
Energy Reports	This section has a range of reports to give Energy Team members the ability to monitor and analyze monthly energy cost and usage at the agency and facility levels. **Energy Team Leads are encouraged to use these reports, and to compare their agency's performance to the rest of the City.** Reports can be downloaded in PDF or excel format for analysis.
Account Lists and Maintenance	This section has the form (Utility Request Information Form - URIF) that allows to address account changes. It also has reports that allow to generate lists of accounts and meters, and accounts by tariff class.
Fact Sheets and References	This section has fact sheets, reference material and links to other websites and databases you may find useful, including the Division of Energy Management website and ENERTRAC (NuEnergen's real-time metering portal)

Quick Lookups within the Navigation Bar

- Find facility monthly cost and usage using an account or facility identifier, by clicking on *Monthly Account Cost and Usage* in the **Energy Reports** Section, Quick Look-Up Window, on the Main Navigation bar. Fill in any one (or more) of the fields listed there, and you will get one or more locations to select from.

- Find account and meter numbers using a facility identifier, or find facility identifiers using an account number or even just an agency acronym, from the Quick Link on the Home Page, or by clicking on *Accounts/Meters by Facility [window]* in the **Energy Reports** Section on the Main Navigation bar. Fill in any one (or more) of the fields listed there, and you will get one or more locations to select from. (Note: mapping is dependent on Google's best match for the address; it is usually but not always correct.)

Additional Tips

A note on identifiers:
DCAS DEM's own facility identifier is "OEC ID". Where the information is available, the window also includes the City's BIN (Building Identification Number) maintained by the Dept. of City Planning, and the Borough-Block-Lot. [Utility companies may have an account or meter service address that is not the same as the apparent building address. Contact DEM at energy@dcas.nyc.gov to report items that need correction or to complete missing information.]

Running reports for multiple agencies (divisions) and facilities

Some users have access to more than one agency or division, and most users have access to more than one facility. For those with such access, single reports can be run for multiple agencies or facilities; simply select and add from the drop-down menus. (Reports can also be run for just one agency or facility.)
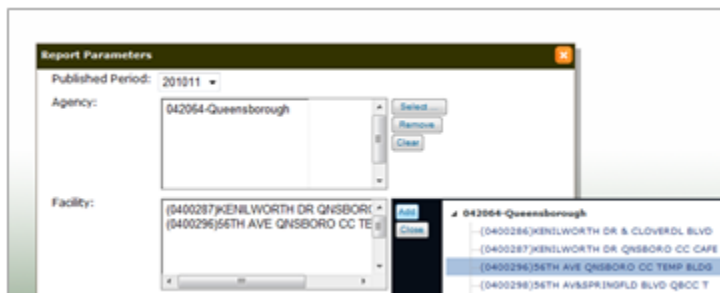
Exporting/Saving Reports

Most reports are generated as Crystal reports in the viewing window. Once you generate a report, you can export, view, and save in PDF or excel format (as explained above). Use the small disc icon at the upper left of the report window. For best formats when exporting to excel, select the "Microsoft Excel (97-2003) Data-Only" option.
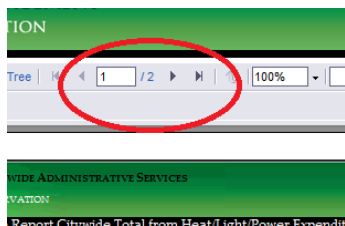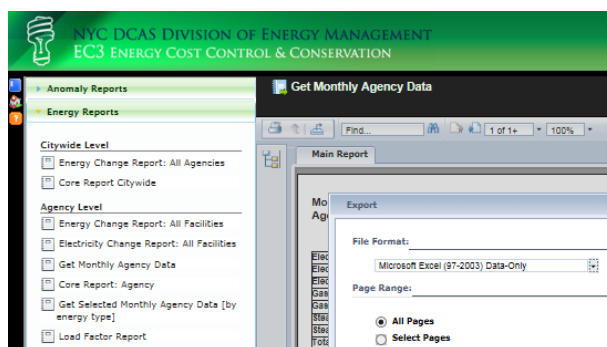

Moving through pages

You can page through the Crystal report, but for longer PDF reports you will find it is faster to export and then page through the PDF version.

Reloading reports/Finding report explanations

These two options are at the upper right of the report area.
Clicking Reload Report allows you to choose other parameters and then re-run the report already selected.
Clicking Explanation provides a pop-up window describing the selected report.
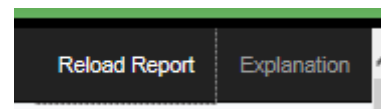
Energy Parameters

Some reports are run for a group of "energy parameters" while others let you select one of the parameters. The parameters are:

- ° Total Energy (in BTUs or millions of BTUs)
- ° Electric Demand (kw)
- ° Electric Consumption (kwh)
- ° Natural Gas (therms)
- ° Steam (mlbs)
- ° Total Cost
- ° Electricity Cost
- ° Natural Gas Cost
- ° Steam Cost

More on report explanations

A list of all the reports currently available, with explanations, is posted in **Fact Sheets and References.**

For additional tips, see the Tips for Reviewing Monthly Energy Usage at the DEM website.