



ABA-EPA Law Office Climate Challenge ENERGY STAR Program

Take Steps to Reduce Energy Use by 10% through the ENERGY STAR Program

Overview

The ABA Section of Environment, Energy, and Resources (SEER) and U.S. EPA's ENERGY STAR program have developed a law office energy management program that many law offices can use to reduce their energy use by at least ten percent. The ABA Law Practice Management Section (LPM) is co-sponsoring this program.

ENERGY STAR is a joint EPA-DOE (Department of Energy) program that encourages energy conservation by improving the energy efficiency of a wide range of consumer and commercial products, enhancing energy efficiency in buildings, and promoting energy management planning for businesses and other organizations. According to surveys, some 65 percent of the U.S. population recognizes the ENERGY STAR label certifying that lighting, home appliances, building materials, commercial buildings, and a wide range of other products and services have achieved EPA-DOE standards for energy efficiency. ENERGY STAR has established various methods for different industries to promote energy efficiency. More information can be found at <http://www.energystar.gov/>

A law office may enroll in this program and qualify for recognition as an ENERGY STAR Partner by committing to implement an energy management strategy. A law office that participates in ENERGY STAR qualifies as a Law Office Climate Challenge Partner.

The ABA and ENERGY STAR encourage law offices to make good faith efforts to reduce by at least 10% their energy usage, if they own their building, or their electricity usage, if they are tenants. A law office that achieves a 10% reduction will be recognized by ABA as a Law Office Climate Challenge Leader. ENERGY STAR offers a number of energy saving suggestions that law offices can implement regardless of whether they own their building or lease space as a tenant, although for law offices that are tenants, the extent to which they can implement energy saving practices will depend on their lease terms. Even so, a tenant law office with limited control over its electricity payments and facilities can take steps such as such as turning off lights and equipment when not needed and upgrading to more energy-efficient computer equipment. Perhaps most importantly for a tenant law office, an energy management plan creates a basis to work with the building owner to improve energy efficiency and pass the savings to the law office, or to more fully consider energy efficiency goals if circumstances point towards the need for different office space.

A. How can a law office participate in the ENERGY STAR Program, receive recognition from EPA, and participate in the Law Office Climate Challenge?

A law office may join the ENERGY STAR program as a Partner (http://www.energystar.gov/index.cfm?c=business.bus_commit), and in doing so commits to track its energy use, develop an "energy management strategy," and work toward reductions in energy use. To join as a partner, the law office must sign and submit a "partnership letter" that reads, in relevant part, as follows:

With this letter, [Organization Name] joins ENERGY STAR. We are making a fundamental commitment to protect the environment through the continuous improvement of our energy performance. We believe that an organization-wide energy management approach will help us enhance our financial health, increase our value, and aid in preserving the environment for future generations. In partnership with ENERGY STAR, we will specifically:

- Baseline, track, and benchmark our organization's energy performance by using tools such as those offered through ENERGY STAR;
- Develop and implement a plan to reduce energy intensity across our facilities and operations by following the energy management strategy provided through ENERGY STAR; and,
- Educate our staff and the public about our partnership in ENERGY STAR, and

highlight our achievements with recognition offered through ENERGY STAR.

We understand that our commitment to assess and improve the energy performance of our organization is supported by the strategic resources and tools offered through ENERGY STAR. In addition, we are aware that ENERGY STAR presents opportunities to be recognized for success. To be eligible for recognition, we will share with EPA our progress and milestone achievements under ENERGY STAR. As a partner, we agree to follow all applicable terms and conditions governing the use of the ENERGY STAR logos, which are registered trade and service marks.

By submitting this letter, the law office achieves recognition as an “ENERGY STAR Partner,” may make use of the ENERGY STAR logo, consult ENERGY STAR resources for technical expertise, and benefit from the wealth of information that the program has to offer.

After enrolling in ENERGY STAR, the law office may participate in the ABA-EPA Law Office Climate Challenge by completing the Law Office Climate Challenge Application Form. The ABA will grant recognition as a Law Office Climate Challenge Partner.

A law office must take the following steps to participate in ENERGY STAR and the Law Office Climate Challenge, and qualify for recognition under these programs:

Step 1: The law office joins ENERGY STAR by submitting the partnership letter described above, and qualifies as a “Partner.” In the partnership letter, the law office generally commits to develop and implement an energy management plan. Upon submission of the partnership letter, the law office becomes entitled to use the ENERGY STAR logo.

Step 2: The law office submits to SEER or LPM the Law Office Climate Challenge Application Form, confirming the organization’s participation in ENERGY STAR. The law office will be recognized as a Law Office Climate Challenge Partner.

Step 3: The law office proceeds to develop and implement an energy management plan.

Step 4: When it has achieved measurable reductions in energy usage, the law office should report those reductions to ENERGY STAR by e-mailing to LawOffice@energystar.gov. There is no standard form or date for reporting improvements in energy efficiency. A law office participating in the Law Office Climate Challenge may defer submitting a report to ENERGY STAR until the earlier of (i) February 1, 2009, (ii) the date the law office has achieved a reduction of at least ten percent of energy (if it owns its building) or electricity (if it is a tenant) usage. The report may be brief and may include the amount of baseline energy or electricity use and the amount of energy or electricity use after implementation of the energy management plan. Note that law offices that own their building and use Portfolio Manager, described below, can generate a “Statement of Energy Performance” from Portfolio Manager that will show the percent reduction in energy use as well as environmental benefits. Law offices that are tenants can use other methods to calculate electricity savings, as described below. To calculate the amount of carbon dioxide (CO₂) emissions avoided, and other environmental benefits, from the energy or electricity savings, see Section F below.

Step 5: At the same time that the law office submits an update to ENERGY STAR, the law office should complete the Law Office Climate Challenge Update form and submit it to SEER or LPM. The reductions in greenhouse gas emissions will be recorded on the Law Office Climate Challenge Web site. The ABA will recognize as a Law Office Climate Challenge Leader a law office that achieves at least a ten percent reduction in energy, in the case of an organization that owns its own building, or electricity, in the case of a tenant organization.

The Climate Challenge was initiated in March 2007 and is currently scheduled to continue through March 2010.

B. What are the costs of reducing energy use and participating in the ENERGY STAR Program?

Participation in the ENERGY STAR program, and the use of ENERGY STAR resources, is free-of-charge. The cost of implementing energy efficiency measures in law offices will vary widely depending on the nature and operations of the office and the measures selected for implementation. Because the range of energy management practices that law offices could undertake is wide, it is difficult to estimate the cost of the ENERGY STAR component of the Challenge. However, because the goal is to reduce energy use and because ENERGY STAR recommends only cost-effective measures, the organization is most likely to save money, at least over the long term. Some of the recommended energy management practices, such as turning off equipment when not in use, are cost-free. Other practices, such as installing occupancy sensors so that lights turn off automatically when the room is empty, are relatively low cost. In addition, local utilities, regional energy efficiency programs, and Federal, State, and local government agencies often offer various tax incentives and rebates, depending on the energy efficiency measure. Some other energy efficiency measures may have higher costs in the near-term, but these costs should be weighed against the energy cost savings that result from their implementation.

C. What are the Benefits to Law Offices of participating in ENERGY STAR?

Law firms that participate in ENERGY STAR can expect to enjoy energy cost savings, as well as an enhanced reputation as good citizens and, in particular, good energy stewards. This may assist in employee hiring and retention, and may be of particular value within the growing field of renewable resources law. Furthermore, participating as an ENERGY STAR Partner will present an opportunity for some law firms to receive recognition from EPA if they demonstrate significant reductions in their energy use.

D. What assistance does EPA offer to Law Offices through ENERGY STAR?

EPA provides many tools and resources to law offices to develop and implement their energy management plans. These resources are described in detail in Section E. By qualifying as an ENERGY STAR Partner, a law office may also use the familiar ENERGY STAR logo to demonstrate to employees, clients, and the public its commitment to energy efficiency and improving the environment. ENERGY STAR Partners are provided regular updates and access to networking opportunities with other leading organizations through meetings, on-line trainings, and networking calls.

E. How does ENERGY STAR recommend that I go about improving the energy efficiency of my law office?

Many law offices can make substantial reductions in their energy usage at relatively low cost. Based on the experiences of ENERGY STAR Partners and on industry studies, EPA believes that law offices that own their own building may be able to lower their energy consumption by as much as 30 percent, and that law offices that are tenants in leased space have the potential to lower their electricity usage by at least ten percent. (For those who are tenants, the Law Office Climate Challenge is focused on reducing electricity usage, because tenants often have no significant way to control gas or other fuel use as these fuels are typically used in heating of buildings, which is often beyond the control of tenants. However, if a tenant law office can impact gas or oil usage in its building, it is, of course, encouraged to do so.)

SEER and ENERGY STAR have developed the Law Office Guide to Energy Efficiency (<http://www.abanet.org/environ/ecochallenge/lawofficeguide.pdf>), which includes many suggestions that law offices should find useful in developing energy management plans. In addition, the ENERGY STAR Building Upgrade Manual (http://www.energystar.gov/index.cfm?c=business.bus_upgrade_manual) provides a wealth of information on strategies for upgrading buildings.

Important steps that many law offices can take to improve energy efficiency include, but are not limited to:

- As office equipment of all types wears out, replace it with more energy-efficient ENERGY STAR labeled equipment. This includes computers, monitors, printers, copiers, and facsimile machines.
- Turn off lights, computers, copiers, printers, and other equipment when not in use.
- Replace incandescent or halogen lamps with ENERGY STAR-qualified compact fluorescents (CFL).
- Use daylighting as much as possible instead of lights.
- Enable power-down management software on all computers.
- Upgrade fluorescent lighting systems from traditional T12 lamps to more energy-efficient T8 or T5 systems, and upgrade exit signs to use ENERGY STAR- qualified light-emitting diode (LED) exit signs.
- Use automatic lighting controls such as dimming systems that reduce light when natural daylight is available; and occupancy and motion sensors for, among other things, conference rooms, kitchens, storage rooms, and restrooms. Consider timers that power down computer equipment, task lights, and other plug load equipment.
- Educate cleaning crews to shut off miscellaneous items such as office lights, coffee pots, and other equipment when not used. Consider the feasibility of day cleaning.
- Make sure that kitchen equipment is energy efficient, kept in good repair, and used efficiently.
- Adjust thermostats according to the season (slightly higher in the summer months and slightly lower in the winter months).
- Install automatic thermostat controls, and use them to reduce temperature on the premises during unoccupied times.
- Inform employees about the many opportunities for energy efficiency improvements at home.

The following describes the steps for law offices to take to develop an energy management plan to achieve energy or electricity reduction goals.

a. Steps for a Law Office that Owns Its Own Building

A law office that owns its own building generally has available the full array of methods to improve energy efficiency that are available to any commercial building owner. However, it is important to employ an organized approach to energy management in order to ensure the best results, and law offices are urged to consult and follow the 7-step ENERGY STAR Guidelines for Energy Management (http://www.energystar.gov/index.cfm?c=guidelines.guidelines_index). The following briefly summarizes these 7-step guidelines and their applicability to law offices that own their own buildings.

Step 1. Make a commitment

Submit an ENERGY STAR partnership letter to EPA, described above, committing to make good faith efforts to reduce energy consumption.

Step 2. Assess Performance

Before embarking on any plan to reduce energy use, it is important to know where you are starting from so that you will be able to measure your progress. Law offices should gather 12-months of energy use data and determine the building's baseline energy performance, and all future measurements should be taken

against this baseline. ENERGY STAR's no-cost, online tool, Portfolio Manager (http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager), was designed specifically for this purpose. It is a comprehensive tool that rates a building's energy performance on a scale of 1 to 100 (where 50 represents a building with average performance), as compared to similar buildings, and therefore lets you know how your building's energy performance compares against that of a typical similar building.

Step 3. Set goals

Before embarking on an energy improvement program, it is important to establish energy efficiency goals. The goals should reflect a good faith effort to reduce energy usage, and it is recommended that a goal of at least a ten percent reduction be used. In fact, ENERGY STAR Partners and various studies have found that many building owners can profitably reduce their energy consumption by as much as 30% using low risk, high return measures.

Step 4. Create an action plan

Develop an energy management action plan to guide your efforts. The plan should identify and prioritize opportunities for improving energy efficiency in the building, and should be realistic considering available resources. To get started in putting together your plan, consult the ENERGY STAR Building Upgrade Manual, the Law Office Guide to Energy Management, and other resources available on the ENERGY STAR Web site.

Step 5. Implement the action plan

Implement the action plan according to the priorities you have set, and be sure to track your progress by monitoring energy usage using Portfolio Manager.

Step 6. Evaluate progress

Evaluate progress by reviewing both the energy usage data and the energy management activities carried out as part of the action plan. Determine the amount of energy reduced, and compare that amount to the performance goals. It is optimal to gather 12 months of energy data after implementation of the action plan to evaluate performance, due to seasonal variations in energy consumption. However, even with less than 12 months of data, it may well be possible for law offices to come to practical, common-sense conclusions about the success of their plan. In addition, Portfolio Manager will calculate for you your energy savings, financial savings, and emission reductions.

Step 7. Recognize Achievements

Once you've made good progress, don't forget to let everyone know. Providing and seeking recognition for energy management achievements is a proven step for sustaining momentum and support for your program, both within the organization and externally. Providing recognition to those who helped the organization achieve these results motivates staff and employees to continue their efforts, and brings positive exposure to the energy management program. Receiving recognition from outside sources validates the importance of the energy management program to both internal and external stakeholders, and provides positive exposure for the organization as a whole.

b. Steps for a Law Office that Leases Its Space

Law offices that lease their space in a building often pay a fixed amount for their utilities, usually based on the amount of space they occupy. Sometimes, utilities are included in the rent price, but on occasion, a tenant will pay for its actual usage. In any of these cases, the ability of the law office that is a tenant to reduce its energy use is more limited than for offices that own their building because the available options usually relate to the operation of only the tenant's own space. As a result, the Law Office Climate Challenge focuses on only electricity use for law offices that lease their space. However, while a law office may well choose to focus its efforts on actions within its direct control, in many instances, a key component of its ability to reduce electricity usage will entail identifying, and developing information about, energy-saving opportunities that make sense from its building owner's perspective, and bringing that information to its building owner's attention at the appropriate time.

The tenant organization's development of an energy management plan should parallel that of the organization that owns its building, as described above, with refinements as needed to account for the constraints of the lease situation. Key lease provisions will differ from lease to lease, which may lead to differences in the type of electricity management plan that tenant law offices may develop. Nevertheless, law offices are urged to consult and follow the 7-step ENERGY STAR Guidelines for Energy Management (http://www.energystar.gov/index.cfm?c=guidelines.guidelines_index). The following briefly summarizes these 7-step guidelines and their applicability to law offices that lease their office space.

Step 1. Make a commitment

Submit the ENERGY STAR partnership letter to EPA, committing to make good faith efforts to reduce electricity consumption.

Step 2. Assess Performance

Before embarking on any plan to reduce energy use, it is important to know where you are starting from so that you will be able to measure your progress. The tenant firm may have a gross lease, so that it makes a single payment that covers rent and utilities. Or, it may pay a set amount for its energy use based on the amount of space it occupies. In these cases, the best calculation the law office may be able to make of its baseline electricity usage may be an approximation. For example, the organization could approximate its usage by inquiring as to the total electricity usage in the building and by assuming that its share of electricity usage corresponds to its share in square feet of the space in the building. Alternatively, a law office could make use of standardized assumptions for electricity use per square foot. Standardized assumptions for electricity usage by an office may be found in this publication by the Energy Information Agency of the Department of Energy: http://www.eia.doe.gov/emeu/cbecs/cbecs2003/detailed_tables_2003/2003set10/2003pdf/c15.pdf As this document indicates, the average office electricity per square foot (SF) varies from region to region (from 15.0 kWh/sf/year to 18.8 kWh/sf/year). The average office in the country uses approximately 17.3 kWh/sf/year.

For a law office with a net lease under which its electricity usage is metered separately (i.e., submetered), it would be able to determine precisely its usage, and assessing its baseline performance would be a straightforward exercise. Because submetering allows tenants the best information about, and control over, electricity usage, tenants should consider taking steps to have submetering installed wherever possible.

Step 3. Set goals.

Before embarking on an energy improvement program, it is important to establish energy efficiency goals. The goals should reflect a good faith effort to reduce energy usage, and it is recommended that a goal of at least a ten percent reduction be used.

Step 4. Create an action plan

Develop an energy management action plan to guide your efforts. The plan should identify and prioritize opportunities for improving energy efficiency in the law office's space, and should be realistic considering available resources and what is within the control of the office given its status as a tenant. However, it should also include a plan to identify options to present to the building manager and owner as well as a strategy for persuading these parties to invest in desired energy efficiency projects. To get started in putting together your plan, consult the ENERGY STAR Building Upgrade Manual, the Law Office Guide to Energy Management, and other resources available on the ENERGY STAR Web site. Also, consult the tenant guide found on the ENERGY STAR Commercial Real Estate Web page (http://www.energystar.gov/index.cfm?c=comm_real_estate.tenant_guide).

One component of the action plan should be installation of sub-metering, if possible. As noted above, sub-metering makes it much easier to calculate electricity usage and to determine the benefit of energy-efficiency measures.

Law offices should calculate the ten percent (or other) reduction targeted in the action plan with reference

to the law office's total electricity usage, even if that amount can be determined only through approximation as described above. The law office then needs to estimate the electricity savings from the different energy-efficiency measures available to it, and compare those amounts to the reduction goal. Practical, common-sense methods are fully acceptable for approximating electricity savings from different measures. In addition, by requesting an energy audit from its utility company, the law office can generally receive estimates of electricity savings from the specific measures recommended by the utility. Similarly, other service and product providers, such as lighting-system providers, can provide estimates of electricity savings from the specific measures they recommend. A searchable list of ENERGY STAR service and product providers can be found at http://www.energystar.gov/index.cfm?c=spp_res.pt_spps

In addition, in devising its action plan, the tenant law office must remain mindful of key provisions of its lease, in the following respects:

(i) Payment of utility costs.

First, the tenant should, of course, be aware of how it pays utility costs under its lease and, in particular, whether the tenant will achieve direct reductions in its utility costs from its energy-saving efforts. Under a gross lease, as described above, the tenant makes a payment of rent and does not pay utilities separately; as a result, none of the tenant firm's energy savings efforts will accrue to the direct benefit of the tenant. Under these circumstances, it may be in the tenant's interests to develop an action plan for energy savings and to present it to the building owner, along with a proposal for how the resulting energy savings should be reflected in the amount of future payments required under the lease.

Under a net lease, the tenant pays utilities separately from the rent. In some cases, the tenant's utilities are metered separately. If so, then all of the tenant's energy-saving efforts will accrue to the tenant's benefit. However, in a typical multi-tenant office building, none of the utilities is metered separately, and instead the tenant pays its pro rata share – generally based on its share of the building's square footage – of the entire building's utilities. In this case, the tenant will directly benefit only in part from its energy-saving efforts. It may be in the interests of such a tenant to propose to the building owner revising the lease to adjust the tenant's obligations for utilities to reflect directly the tenant's energy saving efforts.

(ii) Authority for energy-saving actions.

Second, the tenant should be aware of the types of energy saving actions that (i) the tenant may take on its own; (ii) the tenant may take, but only after receiving written authorization from the landlord; and (iii) the landlord alone is authorized to take. In the typical office building, examples of actions within the tenant's control primarily include work practices, such as relying more on daylighting or manually turning off lights and equipment when not in use; as well as purchasing and maintaining office equipment. Examples of actions for which the tenant typically needs written permission may include replacing lighting fixtures. Examples of actions that typically fall within the sole province of the landlord typically include purchasing and maintaining the HVAC equipment. Of course, as a practical matter, a tenant may find it expedient to attempt to reach its energy-saving goals through actions that are within its control.

(iii) Responsibility for costs of energy saving actions; characterization of energy saving actions

Third, the tenant should be aware of which party must bear the costs of the energy-saving actions; and, as a related matter, how the energy-saving actions would be characterized under the lease, e.g., in a typical lease, as either maintenance expenses or capital expenditures. For example, downtown office leases (i) often provide that the landlord generally agrees to perform all maintenance, (ii) often provide that such maintenance costs are included in the tenant's base rent, and (iii) may specify which items are considered maintenance. Further, such leases often provide that if the landlord's maintenance costs exceed a base amount, then the tenant must pay an additional amount as its pro rata share.

For some leases, some energy-saving actions, such as replacing less efficient light bulbs with more efficient light bulbs, may fall in the category of maintenance that is covered by the tenant's base rent. Other energy savings actions, such as replacing light fixtures to accommodate more energy efficient light bulbs, may trigger additional costs to the tenant, but the tenant may be willing to incur them if it will directly

realize the benefits of lower utility costs.

As a related matter, the tenant should be aware of the length of its remaining lease term and how that period might affect the landlord's willingness to pay for energy saving measures that are capital-intensive.

For example, under some leases, capital expenditures are the sole responsibility of the landlord, some energy savings actions may be capital-intensive, and the benefit of these energy saving measures may extend well beyond the tenant's lease term. In these cases, it may be reasonable for the tenant to share in the costs of those energy-efficient measures. In addition, the tenant should also consider if it can use the implementation of energy efficiency measures as a bargaining tool when renegotiating a lease, as many landlords may be willing to make upgrades requested by a law office in order to maintain the firm as a tenant.

Step 5. Implement the action plan

Implement the action plan according to the priorities you have set, and be sure to track progress by monitoring electricity usage to the extent possible in light of the information available to the tenant.

Step 6. Evaluate progress

Evaluate progress by reviewing both the electricity usage data and the energy management activities carried out as part of the action plan. Determine the amount of electricity reduced, and compare that amount to the performance goals. It is optimal to gather 12 months of energy data after implementation of the action plan to evaluate performance, due to seasonal variations in electricity consumption, but in many cases, less than 12 months of data will suffice. Tenant law offices should be able to make practical, common-sense estimates about the amount of their energy savings from the various measures in their action plans, and come to a reasonable conclusion about the success of their plans.

Step 7. Recognize Achievements

Once you've made good progress, don't forget to let everyone know. Providing and seeking recognition for energy management achievements is a proven step for sustaining momentum and support for your program, both within the organization and externally. Providing recognition to those who helped the organization achieve these results motivates staff and employees to continue their efforts, and brings positive exposure to the energy management program. Receiving recognition from outside sources validates the importance of the energy management program to both internal and external stakeholders, and provides positive exposure for the organization as a whole.

F. How can I calculate the environmental benefits of my efforts to save energy?

Environmental benefits may be calculated by multiplying the electricity savings, which are calculated in kilowatt hours, or energy savings, which are generally calculated in Btus (British thermal units), by standardized amounts of pounds of pollutants emitted per kilowatt hour or Btu. If using Portfolio Manager, carbon dioxide emission reductions are calculated automatically. Additionally, the following calculators may be useful to determine both the greenhouse gas emissions avoided and environmental benefits achieved by using less energy: <http://www.epa.gov/cleanenergy/powerprofiler.htm> and <http://www.usctcgateway.net/tool/>