



ABA-EPA Law Office Climate Challenge WasteWise Program

Law offices use large quantities of paper, and paper use leaves a large ecological footprint. The life-cycle of one ton of office paper, from production to disposal in a landfill, results in the release of about 11 tons of carbon dioxide (CO₂)—equivalent gases, which contribute to global climate change; as well as other air and water pollutants.

Law offices can reduce paper consumption and waste by adopting best practices for recycling, purchase of paper with recycled content, and double-sided copying and printing. Participation in [WasteWise](#), a U.S. Environmental Protection Agency (EPA) voluntary program that encourages organizations to reduce municipal solid waste, can facilitate office paper management and quantification of the benefits.

As part of the ABA-EPA Law Office Climate Challenge, the ABA Section of Environment, Energy, and Resources (SEER) and the ABA Law Practice Management Section (LPM) will recognize as a ABA-EPA Law Office Climate Challenge “Partner” an office that implements at least two of the following three best practices for office paper management:

- Assure that at least 90 percent of all types of copier, printer, letterhead, and bond paper; as well as envelopes (including manila envelopes) purchased have, in total, at least 30% post-consumer recycled content,
- Recycle at least 90 percent of discarded mixed office paper (defined as all types of white paper (copier, printer, letterhead, bond, and note paper), colored paper, file folders, and envelopes (including manila envelopes)),
- Adopt a policy, described in more detail below, of double-sided copying and printing for drafts and internal documents. This policy entails taking reasonable steps to enable copiers and printers to conduct double-sided copying and setting double-sided copying as the default mode on those machines.

Although the ABA will recognize law offices as meeting the Climate Challenge simply by adopting best practices for office paper management, SEER and LPM also encourage law offices to participate in EPA's WasteWise program. To participate, the law office registers with WasteWise and submits a plan for office paper management that focuses on some or all of the best practices described above. The law office that does so will receive recognition from WasteWise as a “Partner” and from the ABA as a “Law Office Climate Challenge Partner.” The law office may then implement its plan and file an annual report with WasteWise that describes its progress and that quantifies – through reasonable approximations – its reductions in paper usage or paper waste. In addition, the law office can translate those reductions into quantifiable reductions in greenhouse gas emissions through simple calculation tools available through WasteWise. After the law office reports that information, SEER or LPM will include the amounts of greenhouse gas emissions avoided on the Law Office Climate Challenge Web site. In addition, if the law office has implemented at least two of the above-described three best practices for office paper management – including, for the double-sided copying practice, achieving the goal of double-sided copying for at least 50% of the pages in internal and draft documents – the ABA will recognize the law office as a “Law Office Climate Challenge Leader.”

1. What is the Problem of Office Paper Waste and How is It Linked to Energy Consumption and Climate Change?

Law offices tend to be paper-intensive. They typically use large quantities of mixed office paper, which includes all types of white paper (copier, printer, letterhead, bond, and note paper), colored paper, file folders, and envelopes (including manila envelopes). One large, Washington, DC. firm with a diversified practice reports that it currently purchases approximately 100,000 sheets of paper — about one-half ton — per attorney on an annual basis. (This figure does not include additional copying/printing performed for clients by vendors at outside locations, such as trial sites and client locations for document

production.) Law offices also use large quantities of folders and binders, and they often subscribe to or purchase numerous journals, books, newspapers, and magazines. Paper and paperboard products waste from all sources is a major environmental issue; it comprises 35% — the largest single component — of the municipal waste stream in the U.S. For more information about paper usage and waste management, see U.S. EPA, [Municipal Solid Waste – Paper and Paperboard Products](#).

The production and waste management of paper products consume energy, thereby generating carbon dioxide (CO₂) and other greenhouse gas emissions. Production of paper products from virgin sources, i.e., sources other than recycled ones, also consumes trees, a process that both releases CO₂ emissions and reduces the amount of CO₂ that can be sequestered. The paper production process also generates wastewater and waste products, as well as conventional and hazardous emissions to the air and water. See [Paper Task Force Recommendations for Purchasing and Using Environmentally Preferable Paper: Final Report](#). (*The Paper Task Force included representatives from Duke University, Environmental Defense Fund, Johnson & Johnson, McDonald's Corp., The Prudential Insurance Co. of American, and Time, Inc.*)

Finally, discarded paper products are either (i) incinerated, a process that releases CO₂ emissions and other pollutants, although it may generate usable energy; or (ii) landfilled, a process that, as the waste decays, releases methane, which is a potent greenhouse gas (although it may be captured and used).

2. What are Best Practices for Paper Management by Law Offices?

Law offices can mitigate these adverse effects by following best practices for office paper usage and waste management. The impacts on greenhouse gas emissions and other environmental impacts attendant to office paper usage and disposal, and the savings that result from best practices, are described below.

A. Purchase Office Paper with Recycled Content

One best office paper usage practice is purchasing paper with recycled content that replaces at least a portion of the virgin source content. Use of recycled content reduces all of the adverse environmental effects noted above associated with paper production.

Currently, U.S. EPA recommends 30% post-consumer recycled content for most types of office paper, including printer and copier paper, bond paper, offset printing paper, note pads, stationery (and other writing papers), forms, ledgers, and envelopes. U.S. EPA, [2004 Comprehensive Procurement Guidelines: Buy Recycled Series — Paper Products](#) and [EPA's Comprehensive Procurement Guidelines \(CPG\)](#). Post-consumer recycled content refers to content from paper products recycled after use by consumers (residential or business), and has been established as the standard for recycled content partly to encourage post-consumer recycling.

A law office can implement this policy by establishing a centralized purchasing policy and conducting informal surveys or inventories to ascertain the extent of compliance. A law office can quantify the extent of the increase in recycled content by comparing the quantities and types of the paper it purchases during representative periods before (i.e., during a baseline period) and after changing its policy.

B. Recycle Mixed Office Paper

In addition, best practices for office paper waste management includes recycling mixed office paper (including shredded paper). Mixed office paper includes nearly all waste paper generated in an office, such as white paper (copier, printer, stationery, and notepaper), colored paper, file folders, and envelopes (including manila envelopes). See [WasteWise Tip Sheet: Recycling Collection](#), Feb. 8, 2007.

In areas where paper recycling is well-established, a law office can implement this policy by providing attorneys and employees convenient access to separate bins for office paper, providing for centralized collection and transfer to a recycling station, and conducting informal surveys of attorneys and employees to ascertain the extent of compliance. A law office can quantify the extent of its increase in recycling by approximating the amount of paper discarded during representative periods before (i.e., during a baseline period) and after changing its policy.

C. Use Double-sided Copying and Printing

Best practices for office paper usage, which reduce the amount of office paper consumed, primarily include using double-sided copying and printing for all drafts and internal documents, and as many other documents as possible. This entails establishing and communicating to attorneys and employees the policy of double-sided copying and printing; purchasing office equipment and software that support this policy, and setting the equipment on double-sided copying or printing as the default option. Law offices can monitor implementation through informal surveys.

The amount of office paper reduction can be quantified in several ways, including:

- Comparing the quantities purchased, on a per-attorney basis, during a baseline period (i.e., before implementation of the double-sided copying/printing policy) and a post-implementation period (although a law office that employs this method should be attentive to any variations in paper usage between the baseline period and the post-implementation period that may result from factors extrinsic to the method of copying and printing, such as the beginning or completion of an unusually paper-intensive client matter);
- Keeping track of amounts copied and printed by a representative sampling of the law office's attorneys for representative periods of time; or
- For those copiers and printers that keep account of the number of pages copied or printed, reviewing that information.

Other best practices for office paper usage include (i) reviewing documents on-line, rather than printing them out; (ii) providing personnel information on-line instead of through paper; and (iii) distributing paper documents through routing rather than through duplication.

3. What About Other Types of Office Waste Products?

Although for reasons of simplicity and practicality, the focus of the Law Office Climate Challenge is on office paper management, law offices can implement practical and effective best practices to reduce other types of waste, as well. The following are a few examples that cover a range of equipment and materials:

First, for computer equipment purchase and waste management, best practices include (i) purchasing equipment based on environmental attributes; and (ii) at the end of the equipment's useful life, selling, donating, or recycling it. For more information, see U.S. EPA's [Resource Conservation Challenge](#) which is designed to encourage institutional purchasers to evaluate and select desktop computers, notebooks and monitors based on their environmental attributes (a computerized procurement tool, [EPEAT](#), is available to facilitate purchasing computer equipment based on environmental attributes) and the [Plug-in to eCycling](#) program, which promotes reuse and recycling of computer equipment.

Second, anecdotal evidence indicates that some law offices can readily reduce their toner use by as much as 50 percent without meaningfully affecting copy quality. Specifically, one law firm reports that 600 dpi (dots per inch) printing, rather than the standard 1200 dpi, is fully adequate.

Third, law offices periodically dispose of used furniture, and best practices for such disposal include selling or donating.

4. How Can a Law Office Adopt Best Practices for Paper Management and Participate in the Law Office Climate Challenge?

This component of the Law Office Climate Challenge includes a simple and practical method for law offices willing to implement best practices in office paper management to participate in, and receive recognition under, the Climate Challenge program, without having to quantify the amount of environmental benefit or to join the associated EPA program. This method, which may be called “Method A,” is described below.

Method A: Law Office Simply Adopts Best Practices and Receives Recognition by the ABA under the Climate Challenge Program

Under Method A, a law office may participate in the Law Office Climate Challenge program simply by implementing at least two of the following three best practices for office paper management, and advising SEER or LPM when it has done so:

- Assure that at least 90 percent of all types of copier, printer, letterhead, and bond paper; as well as envelopes (including manila envelopes) purchased have, in total, at least 30% post-consumer recycled content,
- Recycle at least 90 percent of discarded mixed office paper (defined as all types of white paper (copier, printer, letterhead, bond, and note paper), colored paper, file folders, and envelopes (including manila envelopes)),
- Establish an office-wide policy of double-sided copying and printing for all internal documents (including drafts) of more than several pages in length, implemented as follows:
 - Set double-sided copying or printing as the default mode for all copiers and printers that are typically used for documents of more than several pages in length, and which can accommodate double-sided copying or printing;
 - If the law office uses, for documents of more than several pages in length, copiers and printers that cannot perform double-sided copying or printing, establish a policy of making reasonable purchases of software or attachments as needed to enable double-sided copying as the default mode, or establish a policy of replacing those copiers and printers, at the appropriate time, with ones for which double-sided copying or printing can be enabled as the default mode; and
 - Establish a policy of assuring, to the extent feasible, that any copiers and printers that are typically used for documents of only several pages in length, are equipped for double-sided copying and printing as the default mode.

The law office may implement these practices through informal and flexible methods, described above. It does not need to join WasteWise; quantify the amounts of paper saved or recycled or the amount of recycled content in paper increased; or calculate the amount of attendant greenhouse gas emissions avoided. It should indicate on its Law Office Climate Challenge Application Form that it has implemented these policies (even if it has done so before the establishment of the Climate Challenge), and the ABA will recognize it as a Law Office Climate Challenge Partner.

Method A has the advantages of simplicity and practicality, but because it does not involve calculating the amount of greenhouse gas emissions avoided, the ABA’s overall tally of greenhouse gas emissions avoided due to the Climate Challenge will not include those emissions from law offices employing this method of participation.

5. How Can a Law Office Participate in Waste Wise and the Law Office Climate Challenge?

SEER and LPM encourage law offices to consider joining the EPA WasteWise program and quantifying both the amount of office paper waste avoided and the amount of attendant greenhouse gas emissions avoided. Law offices that choose this track, which may be called “Method B,” described below, will also be recognized by the ABA, and the amount of their avoided greenhouse gas emissions will be included on the Law Office Climate Challenge Web site.

Method B: Law Office Joins WasteWise and Quantifies Office Paper Waste Reduction

A law office that is prepared to take the additional, but still fairly simple and practical, steps needed to quantify the improvements in its office paper management should consider Method B, under which the law office joins EPA’s WasteWise program, implements its choice of at least two of the three best practices for office paper management, quantifies the results, and receives recognition from the ABA under the Climate Challenge. [WasteWise](#) offers a structured methodology and useful tools and resources – including technical assistance from WasteWise program specialists – that can give law offices practical tips to implement best practices and calculate the effects. Note that law offices may participate in WasteWise by targeting any type of waste, but will receive recognition by the ABA for participating in the Law Office Climate Challenge only if they target office paper waste.

For this purpose, the three best practices for office paper management are the following:

- Assure that at least 90 percent of all types of copier, printer, letterhead, and bond paper; as well as envelopes (including manila envelopes) purchased have, in total, at least 30% post-consumer recycled content,
- Recycle at least 90 percent of discarded mixed office paper (defined as all types of white paper (copier, printer, letterhead, bond, and note paper), colored paper, file folders, and envelopes (including manila envelopes)),
- Establish an office-wide policy of double-sided copying and printing for at least 50% of the pages of all internal documents (including drafts). Adherence to this policy may be determined through good faith, practical estimates. As discussed above, such estimates can be based on enabling double-sided copying and printing as the default mode for copiers and printers that are the ones used most often for documents of more than several pages in length, as well as surveys of attorneys and other employees.

To participate in WasteWise and the Law Office Climate Challenge, a law office should take the following steps:

Step 1:

The law office joins the WasteWise program by filing a [Partner Registration Form](#). This form is one page and requires little more than generally identifying the waste reduction activities of greatest interest to the organization.

In the case of law offices participating in the Law Office Climate Challenge, that waste will be the types of office paper associated with the best practices described above. Upon filing this registration ([sample](#)), the organization becomes recognized as a WasteWise Partner and listed as such in the WasteWise Membership Listing.

Step 2:

Within two months after registering, the law office must file its first [WasteWise Assessment Form](#). This two-page form, which may be referred to as the “Baseline Assessment form,” should indicate goals. For law offices participating in the Law Office Climate Challenge, the goals should include meeting at least two of the three best practices described above.

The Baseline Assessment form ([sample](#)) should also include baseline information for paper use and waste management, including, depending on which goals the law office establishes and how it intends to demonstrate that it has met them: (i) for the goal concerning recycled content, the amount of copier, printer, letterhead, and bond paper; and envelopes purchased, and the amount of same purchased with recycled content; (ii) the amount of mixed office paper discarded and the amount of same recycled; or (iii) the amount of copying and printing paper purchased. Practical methods for making these calculations are briefly described above, and WasteWise offers more information and technical assistance to individual organizations.

The law office files the Baseline Assessment form and EPA reviews it for approval. Once EPA approves it, the law office is allowed to use the WasteWise logo.

Step 3:

At the same time that the law office files its Baseline Assessment form, it should submit to SEER or LPM a Law Office Climate Challenge Application form, and attach a copy of its Baseline Assessment form. The ABA will then recognize the law office as Law Office Climate Challenge Partner.

Step 4:

The law office should proceed to implement its waste management plan, and then file an annual [WasteWise Assessment Form](#). WasteWise will advise as to the filing date for this form; according to WasteWise staff, the filing period is generally between the end of January and no later than April 15. This form ([sample](#)) should detail progress in meeting goals over the past year, and establish goals for the next year. The law office may use the same methods for measuring increase in recycled content, increase in recycling, or paper usage reduction due to double-sided copying/printing over the preceding year as the law office used in measuring baseline amounts. The law office should calculate, as described below, the amount of greenhouse gas emissions reductions associated with any increase in recycled content, increase in recycling, or reduction in paper usage due to double-sided copying/printing.

Step 5:

At the same time that the law office submits the WasteWise Annual Assessment form, it should submit to SEER or LPM the Law Office Climate Challenge Annual Update form, and attach a copy of the Annual Assessment form. The ABA will record the amount of greenhouse gas emissions avoided by the law office. In addition, if the law office reports that it has achieved at least two out of the three office paper management best practices described above, the ABA will grant recognition as a Law Office Climate Challenge Leader.

Note that law offices may also apply to WasteWise for [special recognition](#). In 2005, WasteWise special recognition included (i) Partner of the Year and, in some instances, Honorable Mention, in various categories, including Small, Midsize, and Large Business; and (ii) Gold Achievement Award, and, in some cases, Honorable Mention, for achievement in certain focus areas, including paper reduction.

The ABA-EPA Law Office Climate Challenge, initiated in March 2007, is a two-year, pilot program, after which time it will be evaluated. After March 2009, law offices may, of course, continue to participate in WasteWise. If the Law Office ClimateChallenge program is not extended after two years, law offices that are recognized as Law Office Climate Challenge Partners or Leaders as of the conclusion of the program will continue to be recognized as such, and listed on the ABA Web site, for twelve months after the conclusion of the program.

6. How are the Environmental Benefits Calculated?

The WasteWise program provides detailed information about the impacts on energy usage and climate change from waste management, including office paper waste management. See [WasteWise Climate Campaign](#).

In particular, to calculate the greenhouse gas (GHG) emissions reductions (or energy impacts) associated with a law office's improved office paper management, WasteWise provides two different models, described below, for different activities. A law office may use the models to do the calculations

itself at any time. In addition, after the law office submits its Annual Assessment form, WasteWise will provide it with a Climate Profile, which is a report of GHG emissions reductions. (Note that another tool allows calculation of other environmental impacts from a reduction in the amount of office paper used or an increase in the amount of recycled content of the office paper, including amounts of wastewater and solid waste generated. See [Web-based Paper Calculator](#) on the Web site of the Office of the Federal Environmental Executive, using a paper calculator developed by a citizens' group, Environmental Defense.

One model, the [Waste Reduction Model \(WARM\)](#), compares GHG and energy impacts of landfilling or incineration compared to recycling and to source reduction. Thus, the WARM allows calculation of the amount of GHG emissions reduced by reducing office paper usage or by increasing the amount of office paper recycled. For example, assume that a law office uses one ton (i.e., 2,000 pounds) of office paper and disposes of it in a landfill. The life cycle of that one ton of office paper, from production to landfill, results in GHG emissions in the amount of about 11 tons of CO₂ equivalent emissions. If the law office recycles the one ton of used office paper, instead of landfilling, the office will avoid GHG emissions in the amount of about 2.2 tons of CO₂ equivalent emissions. And if the office reduces its office paper usage by one ton, it will avoid GHG emissions in the amount of about another 8.8 tons of CO₂ equivalent emissions.

The second model, the [Recycled Content tool \(ReCon\)](#) calculates the GHG and energy benefits of increasing the recycled content of office paper. For example, replacing one ton of office paper that has zero recycled content with one ton that has 30% recycled content avoids about 2.2 tons of CO₂ equivalent emissions.