



Tuesday, October 21
11:00 am-12:30 pm

504 An Insider's Guide to Office Environmentalism

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Ecolab, Inc.

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Faculty Biographies

Brian H. Davis

Brian H. Davis is the former senior corporate counsel for Ecolab, Inc. He recently founded Environmental Advantage Law LLPC, based in Minnesota with a focus on harmonizing business and environment. Environmental Advantage Law provides compliance and competitive efforts beyond compliance, review of and counsel on sustainability reporting, environmental audit advice and review, and legal counsel on all environmental aspects of business.

Mr. Davis serves as an adjunct professor at the University of Minnesota Law School teaching Business/Environmental Law and a gubernatorial appointee to the Minnesota Clean Water Council. Mr. Davis also serves on the Homeland Security and Emergency Management Metro Regional Response Committee and on the Board of the Minnesota Environmental Initiative.

Mr. Davis has prior experience at 3M and Ecolab, with additional experience at US EPA.

Kevin Lapidus

Kevin Lapidus is the senior vice president and general counsel of SunEdison. SunEdison is North America's largest solar energy services provider, with a growing presence in Southern Europe and the Middle East. SunEdison integrates the design, installation, financing, monitoring, operations, and maintenance of solar energy generating systems. SunEdison then enters into long-term power purchase agreements with commercial, government, and utility customers to provide solar generated electricity over a typical twenty-year time period.

Mr. Lapidus was previously the general counsel of two other technology companies, and was an attorney with Hogan & Hartson and Hale and Dorr.

Kevin Lapidus is also the president of the Washington Metropolitan Area Corporate Counsel Association (WMACCA), representing over 1,600 in-house counsels from Virginia, Maryland, and Washington, DC.

Mr. Lapidus is a graduate of Harvard Law School.

Pam Rothenberg

Pam Rothenberg is a member of the real estate transactions and real estate technology practice groups at Womble Carlyle Sandridge & Rice, PLLC where she also leads the firm's multifamily real estate team. Ms. Rothenberg routinely handles signature transactions involving the acquisition, financing, development, leasing, and sale of commercial office buildings and multifamily properties, as well as large-scale mixed-use

developments. In conjunction with her real estate practice, she serves as a leading partner in the firm's green building (LEED) initiative, which addresses issues such as indoor air quality, mold, energy utilization, and sustainability.

Ms. Rothenberg is the managing member of Womble Carlyle's Washington, DC office and a member of the firm's management committee. She has published articles on "green" topics for the *Journal of Property Management*, where she has been a regular columnist.

Ann-Lewis Shaw

Ann-Lewis Shaw is general counsel for the Northern Virginia Association of REALTORS® (NVAR), where she provides legal counsel and guidance on a variety of legal issues to the board of directors, senior staff, and the membership. She provides oversight for NVAR's arbitration, grievance and mediation functions, and develops and teaches frequent classes and workshops for NVAR's members. In addition, Ms. Shaw writes a monthly column for the association's magazine, *Update*, to inform members about legal issues affecting the real estate industry.

Prior to joining NVAR, Ms. Shaw was an associate at a Northern Virginia law firm, where she focused her practice on residential and commercial real estate transactions, real estate title examination, real estate finance, and drafting and negotiation of contracts.

Ms. Shaw has also written and taught courses on real estate topics for area real estate brokerages, and continuing education courses for real estate agents, attorneys and title insurance agents.

Ms. Shaw earned her JD and BS from the University of Texas at Austin.

ENVIRONMENTAL SUSTAINABILITY REPORTING

ACC-2008

Brian H. Davis
Environmental Advantage Law, LLPC

Beyond Environmental

- What does sustainability reporting mean?
- Includes sustainability reporting trends from an ethical and legal perspective. (i.e., impact of anticipated regulatory initiatives).
- Social and Economic.

Sustainability Reporting: Focus on Environmental Aspects

What You need to Know as
In-House Counsel

Global Reporting Initiative: GRI

- *Definition: a multi-stakeholder governed institution collaborating to provide the global standards in sustainability reporting*
- The Global Reporting Initiative's (GRI) vision is that reporting on **economic, environmental, and social performance** by all organizations is as routine and comparable as financial reporting.
- The Reporting Framework facilitates transparency and accountability by organizations – companies, public agencies, non-profits - of all sizes and sectors, across the world.
- Business, civil society, labor, investors, accountants and others all collaborate through consensus-seeking approaches with a multi-stakeholder network to create and continuously improve the Reporting Framework.

»Sustainability Reporting by S&P 100 Companies Major Advances From 2005-2007«

Report Finds Strong Growth in CSR Web Sites, CSR Reports and Use of Global Reporting Initiative Guidelines WASHINGTON, July 17, 2008, PRNewswire

More than half of the United States' 100 largest publicly traded companies now report on their sustainability efforts, and more than a third now incorporate elements of the Global Reporting Initiative (GRI) sustainability reporting guidelines, according to the Sustainable Investment Research Analyst Network (SIRAN), a working group of the Social Investment Forum (SIF), and conducted by the independent investment research firm KLD Research & Analytics, Inc. The 2008 S&P 100 Sustainability Report Comparison, which evaluates SIRAN data through the end of 2007, shows a marked increase in sustainability reporting and use of the GRI by the top U.S. companies since mid-2005.

Environmental Disclosure Requirements?

Relationship of Sustainability Reporting to existing and potential SEC and/or EPA required disclosures

Climate Risk Disclosure

KEY FINDINGS:

- 86 of the S&P 100 companies now have corporate sustainability websites, compared to 58 in mid-2005, an increase of 48 percent;
- 49 of the leading U.S. companies produced a sustainability report in 2007, an increase of 26 percent from 39 in 2005;
- 41 now include a reference or references to the GRI standards, up 71 percent from just 24 in 2005;
- and -- 34 companies now include a GRI Index in their report, an increase of 70 percent, up from 20 in 2005.
- SIRAN's third annual analysis of sustainability reporting by companies listed on the S&P U.S. 100 Index is available at http://www.siran.org/projects_s_and_p_reporting_comparison.php.

Disclosure PRIMER - ABA

- **American Bar Association Primer on Mandatory Environmental Disclosure: A Presentation Explaining the Longstanding SEC Regulations as Amplified by Sarbanes Oxley.**
- SEC regulations and authoritative accounting guidance dealing specifically with disclosure of environmental liabilities have been in effect since the 1970s, and have been updated on various occasions. Taken all together, they constitute an impressive body of requirements. Unfortunately, they have not been promulgated in a cohesive fashion, making it difficult for environmental practitioners to sort through and comprehend the requirements.
- Sarbanes-Oxley and its blizzard of implementing SEC regulations, added greater urgency for all environmental practitioners to understand what is required to be reported pursuant to SEC and accounting standards.
- View [the "primer" page](#) on both the SEC and accounting requirements, including the very substantial impact of Sarbanes-Oxley.

To Be Considered:

- Generally accepted accounting principles (GAAP) relating to environmental costs, assets, liabilities, and impairments;
- Disclosure of environmental matters under Securities and Exchange Commission (SEC) regulations;
- Requirements of Sarbanes-Oxley pertaining to environmental matters;
- Voluntary sustainability/social responsibility disclosures of environmental matters to stakeholders.
- Per ABA Committee on Environmental Disclosure

Content Evolution?

- *Product Compliance
- *Employee Engagement in Environmental
- *Sustainability Council
- *Outside Verifications

Environmental **CONTENT**

- Typical content in a Sustainability Report:
- Corporate Values
- Sustainability Strategies
- Management Systems
- Environmental Footprint Reduction Goals
- Climate Change
- Engaging Stakeholders

CERES

- Ceres (pronounced "series") is a national network of investors, environmental organizations, other public interest groups, companies and investors addressing sustainability challenges such as global climate change.
- **Mission:** Integrating sustainability into capital markets for the health of the planet and its people.

CERES

- Ceres leads by example producing its own sustainability reports to:
- Hold themselves to the same standards set for Ceres network companies,
- Gain experience to better understand the challenges and complexities involved with reporting,
- Drive improvement of their own performance,
- Support and engage Ceres staff, and
- Demonstrate that reporting can be beneficial to all organizations, no matter their size or type.

Environmentalism Sprouts Up On Corporate Boards

- Wall Street Journal
- August 13, 2008
- THEORY & PRACTICE

More Companies Start Panels on Green Issues Amid Push by Activists
By JOANN S. LUBLIN

- More U.S. corporate boards are going green.
- Amid rising investor worries over global warming and shrinking natural resources, directors are keeping a closer watch on environmental issues. Boards at Integrus Energy Group Inc., Quicksilver Resources Inc., Tesoro Corp. and elsewhere recently have created separate environmental panels -- joining long-established ones at DuPont Co., Occidental Petroleum Corp. and Rohm & Haas Co. Other companies cover environmental issues with an existing board committee.

WSJ (cont.)

- The study was a first for U.S. utilities, says Denise Nappier, treasurer for the state of Connecticut, which sponsored the 2003 resolution.
- In 2006, Ceres gave AEP the highest U.S. ranking for board involvement in climate change, among 100 global businesses studied. That same year, AEP directors gave their governance committee oversight of its sustainability initiatives.
- The panel now receives updates twice a year from Chief Executive Michael G. Morris and critiques drafts of his annual sustainability report. In the 2008 report, Mr. Hudson wrote that the board applauded AEP's progress on offsetting growth in greenhouse-gas emissions, but "expects and requires higher performance in the future."
- AEP directors also tightened environmental-performance targets that employees must meet to receive annual bonuses. In 2006, they docked \$80,045 from Mr. Morris' targeted \$2 million bonus, after AEP received nine notices of possible environmental regulatory violations; the goal had been no more than five. Last year, the target dropped to four, and AEP received only two such notices. Businesses rarely link management rewards to environmental performance, according to Ceres.
- Board committees responsible for environmental affairs elsewhere are turning up the heat, too. Steven Kline, chief environmental officer of PG&E Corp., told the board's public-policy panel in June about plans to lower the company's water consumption over several years -- without promising a timetable.
- They replied, "That's great. But let's see if we can do it faster," Mr. Kline recalls. He hopes to offer a water-reduction schedule for the energy holding company when the panel convenes again in October.

WSJ (cont.)

- About 25% of Fortune 500 companies now have a board committee overseeing the environment, compared with fewer than 10% five years ago, estimates Mindy Lubber, president of Ceres, a national coalition of activists, investors and others concerned with the environment. Such panels typically try to make sure that executives effectively handle conservation efforts, new environmentally friendly ventures like wind power, compliance with environmental regulations and related business risks.
- Shareholders are more active on environmental issues, too. The number of investor proposals related to the environment nearly doubled between 2004 and 2008, RiskMetrics Group Inc. says. Many proposals urge increased board attention to the issue.
- The Earth's sustainability "has become a much more important part of every board's activities," observes Lester A. Hudson, chairman of American Electric Power Co.'s governance committee, which monitors environmental concerns.

WSJ (cont.)

- AEP's experience illustrates the new dynamic. The electric utility, based in Columbus, Ohio, is among the largest U.S. users of coal -- and emitters of greenhouse gases.
- In November 2003, public-employee pension funds offered a shareholder resolution urging independent directors to assess how AEP would deal with potential regulations to reduce carbon dioxide and other power-plant emissions. Mr. Hudson says three fellow directors formed a special panel to do a study, prompting the unions to drop their proposal.
- The board members prepared an analysis following interviews with nearly 30 investors, environmentalists, experts, analysts and regulators. Their August 2004 report concluded that pending legislation likely wouldn't impact AEP's plan to invest \$3.5 billion in cleaner coal-burning technologies by 2010. But the directors noted that AEP might want to consider scaling back plans for another \$1.5 billion beyond that, because laws by that time might limit the use of coal altogether.

WSJ (cont.)

- Ms. Lubber also faults Exxon directors for rejecting investor requests during the past five years to talk face-to-face about environmental problems. W.V. Shipley, head of a board committee that handles corporate governance, wrote Ceres last year that directors prefer senior executives to hold such sessions. Mr. Shipley declined to comment for this article.
- In another sign of investor dissatisfaction, seven environmental resolutions came to a vote at Exxon's annual meeting in May. One proposal asked Exxon to set specific goals for greenhouse-gas emissions; it drew 30.9% of votes cast.

WSJ (cont.)

- But focusing board committees on the environment doesn't ensure eco-friendly behavior, activists say, citing Exxon Mobil Corp. The oil giant formed a public issues and contributions panel to monitor safety, health and the environment immediately after its Valdez oil spill in 1989.
- The committee's efforts have been "more window dressing than anything else," contends Ms. Lubber. She says the company reduced oil spills, but its climate-change performance "is disappointing" -- partly because it lacks a comprehensive strategy for lowering greenhouse-gas emissions.
- Exxon takes climate change seriously and has invested more than \$1.5 billion to reduce greenhouse-gas emissions since 2004, says spokesman Tony Cudmore.

Environmental Reporting BENEFITS to Business

Internal: by preparing and disseminating a sustainability report:

- Data supports assessment of potential liability risks for climate change and wisdom of disclosures
- Internally to demonstrate the value of measuring additional process parameters to allow better controls in manufacturing, transportation, warehousing/logistics and other core efforts
- Money saving benefits
- Enhance employee morale
- Sustainable behaviors often reduce stress, encouraging greater focus on strategic long-term goals.

Environmental Reporting External Beneficiaries

- Customers
- Suppliers
- Regulators – Compliance, Trust Relationships
- Employees - Morale
- Shareholders/Investors – Success Indicator; Risk Management
- Communities
- Corporate Reputation

Inherent RISKS

- US Water – Quality, Availability, Disputes
- Intl. Water – Quality, Availability, Wars
- Natural Resources – Availability (strategic use) and Price
- Increased Global Regulation – Trend (i.e. China)

Some Risk Factors

- Green Commitments – “lacks resources to meet”
- Sustainability Council – “No time to meet”
- Independent Verification – “lacks independence”
- Hazards
- Nanotech v. Unknown Risks
- Choice: “Environment OR Bottom Line.”

S.T.R.I.V.E.

Save our Earth from too much Waste
Teach others about Sustainability
Reuse as Much as possible
Innovate approaches to Environmentalism
Value our Environment by reducing Pollution
Energize our Planet by conserving our Resources

Pamela V. Rothenberg, Esq.

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S.T.R.I.V.E.

“For the first time in history, human activities are altering the climate of our entire planet. In less than two centuries, humans have increased the total amount of carbon dioxide in the atmosphere by 25% from the burning of fossil fuels and the destruction of forests....Unless we reduce emissions of greenhouse gases, the stable, hospitable climate on which civilization is based could become a thing of the past.”

National Resource Defense Council
“50 Simple Things You Can Do To Save The Earth”

S.T.R.I.V.E.

In 1989, the Earthworks Group published (on recycled paper using recycled ink) a book entitled:

“50 SIMPLE THINGS YOU CAN DO TO SAVE THE EARTH.”

The book was dedicated to the “not yet born.”

S.T.R.I.V.E.

“...Many Americans have no idea whether saving energy – or water – makes an ecological difference. Will a dab of caulk around your drafting windows really have any effect on our shattered environment? The answer is a resounding yes...Conservation does not mean ‘freezing in the dark’...Conservation can be accomplished by simple, cost-effective measures that require little change in lifestyle. For people concerned about saving the Earth, that is good news indeed.”

Karen Lutz, then Managing Editor of Home Energy magazine
“50 Simple Things You Can Do To Save The Earth”

S.T.R.I.V.E.

2008 Facts:

The built environment, including roads, bridges, other civil structures and buildings, plays a large role in the health, welfare, and economic stability of the United States.

S.T.R.I.V.E.

The Numbers:

In the United States, commercial buildings account for

- ❖ 65% of electricity consumption
- ❖ 36% of energy use
- ❖ 30% of greenhouse gas emissions
- ❖ 30% of raw materials use
- ❖ 30% of waste output (136 million tons annually)
- ❖ 12% of potable water consumption

Source: U.S. Green Building Council

S.T.R.I.V.E.

2008 Facts:

- The built environment comprised 6% of the land of the Continental United States in 2003 and is growing annually.
- A 24% increase in developed land took place between 1992 and 2002.
- The built environment in the U.S., including the office buildings we occupy on a daily basis, have an enormous impact on the natural environment.

S.T.R.I.V.E.

"If we can reduce the need in buildings

- for the generation, transmission and consumption of energy and electricity,
- for the harvesting, transportation and transformation of raw materials into installed finished building products,
- for the transportation and disposal of waste and for the consumption of fresh water,

the built environment will move a long way on the spectrum toward being a part of the solution."

Ellen Sinreich, PLI Green Real Estate Summit 2008

S.T.R.I.V.E.

So, what's a lawyer to do?

S.T.R.I.V.E.

As Kermit says,
it's definitely not
easy being green.

S.T.R.I.V.E.

It seems as though
there is so much to be
done, that to be good
citizens and to try to live
up to an environmental
"social compact," we must
immediately dump our
lifestyles as we know them
today and suddenly become
something else.

S.T.R.I.V.E.

But, it's not "all or nothing"...

"Conservation can be accomplished by simple, cost-effective measures that require little change in lifestyle."

"50 Simple Things You Can Do to Save the Earth." -- Karen Lutz

...The story is still the same today.

S.T.R.I.V.E.

The truth is that there are countless little things that we can do that can make a difference.

S.T.R.I.V.E.

As lawyers and leaders we can take steps individually and within our companies to address these critical issues and that can begin to make a difference.

S.T.R.I.V.E.




And, when taken collectively, when we marshal our efforts together, all of those activities, will significantly contribute to reducing climate change and changing our path so our world does not end up looking like the one WALL-E wakes up to everyday.

S.T.R.I.V.E.

- S**ave our Earth from too much Waste
- T**each others about Sustainability
- R**euse as Much as possible
- I**nnovate approaches to Environmentalism
- V**alue our Environment by reducing Pollution
- E**nergize our Planet by conserving our Resources

S.T.R.I.V.E.

Save our Earth from too much Waste

-  Phase out the use of disposable cups, plates, silverware, plastic water bottles and the like; use ceramic mugs, washable plastics, glass, china and real silverware; **if traveling, use paper and reusable products instead of Styrofoam or plastic.**
-  Use email as often as possible instead of snail mail (cuts down on transportation costs as well as use of paper); discourage printing of emails unless essential, instead, file emails to be saved on servers.
-  Develop technology solutions for business functions that reduce reliance on paper and focus more on web-centric tools, such as an online performance evaluation system vs. a paper driven evaluation process.

S.T.R.I.V.E.

Pass on what you learn to colleagues, family and friends...

“...it has a cumulative effect. As you inspire them, they’ll inspire others...Our ability to have a positive impact will grow proportionately.”

“50 Simple Things you can do to Save the Earth.”




S.T.R.I.V.E.

Teach others about Sustainability

-  Create a **sustainability policy** building upon standards and guidelines that already exist as a starting point (e.g., the International Organization for Standardization’s ISO 14000, which addresses environmental management).
-  Share your ideas liberally; post best practices on your website; nothing about being **green** is proprietary; we all benefit by putting our thoughts together and marshalling our efforts.
-  Raise awareness in the business community about **being green** by requiring your vendors to use **green products** and **green methods**.

S.T.R.I.V.E.

Reuse as Much as possible

-  **Donate** supplies or equipment you no longer need instead of discarding them.
-  If constructing a new building or renovating an older one, require contractors and their subcontractors to **salvage and recycle** the construction materials and to use locally produced materials (to cut down on transportation costs).
-  **“Precycle”** – shop intelligently and try to purchase needed items that are packaged in biodegradable or recyclable materials (such as glass and aluminum instead of plastic).

S.T.R.I.V.E.

Innovate approaches to Environmentalism

- ♻️ Establish a **green task force** and employ a **“green” staffer** — someone whose job it is to ensure your company is thinking green, buying green, selling green, and operating green.
- ♻️ Hold a contest in your office for the best office **sustainability innovations** and award the winner with an **innovative green product**.
- ♻️ Start an office/company philanthropic or pro bono initiative that donates money, expertise or time to organizations **supporting the environment** (plants trees, helps the rainforest, etc.).

S.T.R.I.V.E.

Energize our Planet by conserving our Resources

- ♻️ **Encourage green commuting:** stagger employee hours to permit employees to commute on public transportation during less expensive non-rush hours, encouraging employees to bike to work by installing bike racks and other needed amenities; encourage employees to carpool; connect with other companies in your building and develop a coordinated carpool program.
- ♻️ Shut down computers, turn off lights, and unplug equipment that will continue to use **energy** even when turned off; consider installing master switches in offices to shut off all such extraneous consumption during non-working hours.
- ♻️ Since **energy efficiency** is one key to making a building green, locate operations in a building that uses **renewable energy** or has other sustainable attributes (high performance windows, better insulation, etc.) that make the building more efficient.

S.T.R.I.V.E.

Value our Environment by reducing Pollution

- ♻️ Greenwashing is common, so only purchase products that have a label or certification that is credible, such as **Energy Star, Green Seal, or Greenguard**, or that are backed by reliable independent third parties.
- ♻️ Require office cleaning companies to use equipment, materials, and products that are safe and **sustainable**.
- ♻️ Support **local farmers** by ordering from caterers and restaurants that use them; in addition to reducing transportation costs, they are often less laden with pesticide residues than produce shipped long distances.

S.T.R.I.V.E.

The Legal Landscape:

Currently, there are no federal laws mandating green building standards or recycling efforts.

It is widely expected that in 2009 there will be a number of competing federal green building/LEED incentives and requirements development in Congress and the White House.

S.T.R.I.V.E.

Some state and local jurisdictions are beginning to enact legislation requiring sustainable actions on the part of building developers and tenants.

California Governor Schwarzenegger's 2004 Executive order S-20-04:

LEED is the nation's leading **green building** rating system and that the LEED system promotes: high performance buildings; conserves energy, water and materials; encourages the selection of environmentally preferred products and practices; improves the health and comfort and productivity of employees; reduces operating costs; and reduces the **environmental impacts** of buildings.

All new and renovated state-owned facilities paid from state funds should be designed, constructed and operated as **LEED** silver or higher certified building.

State executive orders similar to the one in California have been issued or **green/LEED legislation** has been passed by states such as New Mexico, Michigan, Colorado, Rhode Island, Washington and Maine.

Source: Les Lo Baugh, Esq., PLI Green Real Estate Summit 2008

S.T.R.I.V.E.

Washington is one of the first major U.S. cities to require **LEED** compliance for private projects. The District's new **green building standards** will be mandatory by 2009 for private construction projects in the District with 50,000 square feet or more.

Public projects may have to comply with the **new standards** as early as this year. In addition to its mandates, the act includes an **incentive program** designed to encourage early adoption of the new standards.

S.T.R.I.V.E.

On a local level, various cities such as Pasadena, San Francisco, Burbank, and Los Angeles in California, several cities in Texas, various cities in New York and Washington, D.C. have adopted **green building programs** and have recycling laws.

Washington, D.C.'s **Green Building Act** went into effect in 2007. The act established new standards for "**green building**," applicable to both private and public projects in the nation's capital and requires compliance with LEED.

Source: Les Lo Baugh, Esq., PLI Green Real Estate Summit 2008





S.T.R.I.V.E.

Even if these legal requirements do not currently impact your company or any of its operations, there is little doubt that this legislation is indicative of a **green trend** that will likely be followed by many more jurisdictions.

Many believe that the **climate change debate**, along with the recurring theme of reducing dependence on the import of foreign oil, will drive the process.

S.T.R.I.V.E.

The Message Points:

-  Everyone of you is a leader who can have a significant impact, even by doing the little things, on your company's path to **sustainability**.
-  Engaging in some type of **environmentally conscious** behavior, whatever choice from the checklist you may choose, works towards enhancing the **social compact** that your company has with its employees and your customers at large.
-  **Green**, at what ever level you can participate, is good for your company's business.
-  Even if you can only effectuate one or two changes on the way your company does business, when taken together, those can have a **meaningful impact**.

S.T.R.I.V.E.

In the context of our planet, everyone of us is like *Jo-Jo*, the tiniest of *Whos*, that can truly make a compelling difference by utilizing simple sustainability tactics and every action toward sustainability that each one of us takes contributes, when taken together, to saving our *Whoville*.

S.T.R.I.V.E.

In "*Horton Hears a Who*,"
by *Dr. Seuss*,
the land of *Whoville* is
facing a huge threat,
and everyone of the tiny
Whos has to pull together to be heard.

It's not until *JoJo*, the tiniest of *Whos*,
makes a contribution that *Whoville* is saved.

2008 ACC Panel
"Insider's Guide to Office Environmentalism"

S.T.R.I.V.E.

Save our **E**arth from too much **W**aste

Teach others about **S**ustainability

Reuse as **M**uch as possible

Innovate approaches to **E**nvironmentalism

Value our **E**nvironment by reducing **P**ollution

Energize our planet by conserving our **R**esources

**A Sustainability Checklist for Lawyers who
Strive to Build and Sustain a Green Office**

Compiled by Pamela V. Rothenberg*

Whether you are processing things from the vantage point of the average person or the average legal practitioner, and whether you're practicing at a private law firm, in-house or with some other governmental or non-profit organization, the task of addressing climate change feels overpowering.

It is difficult to identify the things you can do to make a contribution towards reducing climate change. Even worse, it is often overwhelming to consider the amount of change that it appears we are required to make in virtually everything we do in order to make a difference.

It almost seems as though there is so much to be done, that to be good citizens and to try to live up to an environment "social compact," we have to immediately dump our lifestyles as we know them today and suddenly become something else.

It certainly feels like Kermit the Frog is right, it is not easy being green.

However, the "all or nothing" approach is not really the truth. As Karen Lutz said in the 1989 book *50 Simple Things You Can Do to Save the Earth*: "Conservation can be accomplished by simple, cost-effective measures that require little change in lifestyle."

The story is still the same today. The truth is that there are countless little things that we can do that can make a difference. And, when taken collectively, when we marshal our efforts together, all of those activities, will significantly contribute to reducing climate change and changing our path so our world does not end up looking like the one WALL·E wakes up to everyday.

As lawyers and leaders we can take steps individually and within our companies to address these critical issues and that can begin to make a difference.














The following sustainability checklist is an attempt to enumerate from (sometimes) the sublime to the ridiculous some of the steps you can take towards establishing a sustainable office.

Coached by my children, I have organized the checklist components around an acrostic using the word Strive:














Save our Earth from too much Waste
 Teach others about Sustainability
 Reuse as Much as possible
 Innovate approaches to Environmentalism
 Value our Environment by reducing Pollution
 Energize our planet by conserving our Resources

It is my conviction that every lawyer is a leader who can have a significant impact, even by doing the little things, on your organization's path to sustainability. Engaging in some type of environmentally conscious behavior, whatever choice from the checklist you may choose, works towards enhancing the social compact that your company has with its employees and your customers or constituencies at large. Green, at what ever level you can participate, is good for your organization's business. Even if you can only effectuate one or two changes on the way your organization does business, when taken together, those can have a meaningful impact.











Save our Earth from too much Waste

-  Phase out the use of disposable cups, plates, silverware, plastic water bottles and the like; use ceramic mugs, washable plastics, glass, china and real silverware; if traveling, use paper and reusable products instead of Styrofoam or plastic.
-  Substitute pitchers of water and glasses in common areas for plastic water bottles.
-  Refurbish old office furniture instead of purchasing new furniture.
-  Establish a goal and develop a plan to become a paperless office/company.
-  Use email as often as possible instead of snail mail (cuts down on transportation costs as well as use of paper); discourage printing of emails unless essential, instead, file emails to be saved on servers.
-  Save documents on disks; avoid printing multiple hard copies.
-  Plan well in advance for office moves to avoid last-minute dumping of papers and supplies.
-  Use office supplies and equipment that can be reused, such as intra-office envelopes, USB flash drives and disks.
-  Save unneeded and used non-confidential paper for scrap paper and informal notes.
-  Develop technology solutions for business functions that reduce reliance on paper and focus more on web-centric tools, such as an online performance evaluation system vs. a paper driven evaluation process.
-  Use intranets and extranets as frequently as possible for distribution of documentation to your internal staff, as well as to your clients and customers (i.e., move to e-files instead of paper files).
-  Proactively stop junk mail by having your name removed from intrusive mailing lists.
-  Replace paper towels with hot air blowers or other low-energy hand sanitizers.

Teach others about Sustainability



-  Educate colleagues about why sustainable practices are important for the long-term well-being of society and how their individual actions make a difference.
-  Encourage employees to place a new tagline under their email signatures to remind people to "please consider the environment before printing this email."
-  Give gifts of reusable grocery sacks.
-  Create a sustainability policy building upon standards and guidelines that already exist as a starting point (e.g., the International Organization for Standardization's ISO 14000, which addresses environmental management).
-  Develop and impose a sustainability reporting system for your company that encourages accountability for your company's sustainability policy.
-  Develop standard policies and procedures for employees to follow for recycling of all possible materials and hold them accountable for their compliance.
-  Develop a "Reuse Policy" through which you encourage employees to reuse materials; use of ceramic coffee mugs may result in fewer coffee cups in the trash, use of a soda fountain in a break room may mean fewer discarded cans.
-  Give gifts of "Go Green" mugs.
-  Share your ideas liberally; post best practices on your website; nothing about being green is proprietary; we all benefit by putting our thoughts together and marshalling our efforts.
-  Raise awareness in the business community about being green by requiring your vendors to use green products and green methods.
-  Celebrate Environmental Education Week or Earth Day by giving gifts of green plants and other green items, as well as green educational materials (Environmental Education Week 2009 will be held April 12-18, 2009 and Earth Day 2009 is April 22, 2009).
-  Connect individual actions with global results---encourage healthy lifestyles that benefit the individual and incrementally affect the planet---every little bit counts.
-  Reward eco-friendly behaviors with small tokens of appreciation such as gift certificates to eco-friendly restaurants and other stores in the vicinity of your office.

Reuse as Much as possible













-  Place labeled recycle bins (that are clearly marked as to which products may be recycled in a particular bin) in private and public areas of your office to encourage their use.
-  Give gifts to employees of reusable aluminum or stainless steel bottles.
-  Purchase products made with recycled materials, including paper, binders, labels, envelopes, Post-Its, clipboards, pens, pencils and remanufactured ink and toner cartridges.
-  Buy refillable pens and pencils in place of single use pens and pencils.
-  Recycle as much as possible, including paper, newspapers, magazines, junk mail, packaging materials, and ink cartridges; reuse packing material when shipping packages.
-  Donate supplies or equipment you no longer need instead of discarding them; donate leftover food from office functions to local shelters or foodbanks.
-  If constructing a new building or renovating an older one, require contractors and their subcontractors to salvage and recycle the construction materials and to use locally produced materials (to cut down on transportation costs).
-  "Precycle" – shop intelligently and try to purchase needed items that are packaged in biodegradable or recyclable materials (such as glass and aluminum instead of plastic).
-  Store leftover food from office events in reusable containers instead of using aluminum foil and plastic wrap.
-  Install a system for your building to catch rainwater and convert it to graywater, which will reduce run-off and can be used for landscaping or potable uses if purified.

Innovate approaches to Environmentalism














-  Establish a green task force and employ a “green” staffer” — someone whose job it is to ensure your company is thinking, buying, selling and operating green.
-  Perform an ROI (return on investment) analysis on costs to go green vs. reduced operating costs – you will likely find that green is good for business – then demonstrate how going green is an economic imperative for your company.
-  Make good choices —buying a product you think is green may be more harmful to the environment if the process used to manufacture the product is not environmentally sound.
-  Develop a system to stay current on green legal requirements and the changing legislative landscape as well as best practices for environmentalism – so that you have the most current and vital sustainability policies (i.e., regularly review resources dedicated to reducing climate change and furthering sustainability).
-  Think about how to simplify – innovate programs to encourage people to simplify; buying less; using less.
-  Hold a contest in your office for the best office sustainability innovations and award the winner with an innovative green product.
-  Start an office/company philanthropic or pro bono initiative that donates money, expertise or time to organizations supporting the environment (plants trees, helps the rainforest, etc.).
-  Investigate other forms of recycling beyond the obvious paper, glass and aluminum; technology is changing all the time; stay on top of emerging ways to recycle waste.
-  Collaborate with your clients and customers about being green: share your best practices and borrow from theirs.
-  Launch a Plant a Tree Campaign and plant a tree on behalf of a client or customer each time they collaborate with you on any type of green activity, such as using an extranet for document access (instead of requiring paper copies).
-  Develop goals and metrics for your office to become more green and reduce your carbon footprint; hold yourself accountable to those goals metrics (i.e., what gets measured is what gets done).
-  Partner with your clients and customers to develop shared green initiatives or to support a greening project in your local community.









-  If applicable in your jurisdiction, become certified as a green business.
-  Set up a speakers program to educate your organization’s employees about best green practices.

Value our Environment by reducing Pollution

-  Purchase non-toxic, water-based markers and highlighters.
-  Office furniture can harm indoor air quality. Be aware of what is used to make the furniture, and what the furniture may emit while it sits in your office.
-  Avoid products made with formaldehyde (e.g., plywood)—they tend to continue to emit the likely carcinogen throughout their life cycle.
-  Greenwashing is common, so only purchase products that have a label or certification that is credible, such as Energy Star, Green Seal, or Greenguard, or that are backed by reliable independent third parties.
-  If you choose to refurbish furniture, find a company that tries to reduce their environmental impact by recycling or by using recycled materials, certified wood, or products without VOCs (volatile organic compounds) and harmful chemicals.
-  Decrease how often you paint your office, and if you are painting, use water-based paints or paints with low VOC emissions.
-  Require office cleaning companies to use equipment, materials, and products that are safe and sustainable.
-  Improve indoor air quality by prohibiting smoking in your office (if it is not already smoke free) and eliminating products with unhealthy emissions.
-  When running dishwashers, use slightly less detergent – manufacturer's sometimes recommend more than what is necessary and run only when completely full (no half loads).
-  Use unbleached coffee filters.
-  Support local farmers by ordering from caterers and restaurants that use them; in addition to reducing transportation costs, they are often less laden with pesticide residues than produce shipped long distances.
-  Instruct cleaning contractors about using environmentally friendly cleaning products. If specialized sustainable products are installed, such as waterless urinals, ensure that the appropriate types of cleaning products are used.

Energize our planet by conserving our Resources

-  Install motion sensor lights in offices and conference rooms.
-  Require double-sided printing throughout the office and post signs on printers and computer monitors encouraging the same.
-  For company vehicles, replace customary sedan services with hybrid cars.
-  Encourage green commuting: stagger employee hours to permit employees to commute on public transportation during less expensive non-rush hours, encouraging employees to bike to work by installing bike racks and other needed amenities; encourage employees to carpool; connect with other companies in your building and develop a coordinated carpool program.
-  Change your company's workweek to 4 ten-hour days from 5 eight-hour days or permit employees to telecommute 1 day per week.
-  Purchase furniture or other products made with wood certified by the Forest Stewardship Council as coming from a well-managed forest.
-  Purchase Energy Star electronics and appliances and use an energy-efficient HVAC system, such as one with an Energy Star label.
-  Buy compact fluorescent light bulbs (CFLs)—they last much longer than normal light bulbs and are energy efficient.
-  Reduce water use by using low-flow fixtures and water-efficient appliances - Upgrade your toilets to use less water, such as by purchasing dual-flush toilets and install faucet aerators; also consider self-flushing toilets, motion sensor sink faucets/soap dispensers.
-  Shut down computers, turn off lights, and unplug equipment that will continue to use energy even when turned off; consider installing master switches in offices to shut off all such extraneous consumption during non-working hours.
-  Use natural light instead of lamps or light fixtures when practicable.
-  Since energy efficiency is one key to making a building green, where viable, locate operations in a building that uses renewable energy or has other sustainable attributes (high performance windows, better insulation, etc.) that make the building more efficient.
-  Have your building LEED-certified either during construction or as an existing building.

-  When landscaping around your building, plant greenery that needs less water (or uses graywater) and can grow without any fertilizers or other chemicals.
-  Purchase office and other supplies for your company from local suppliers to cut down on transportation and associated energy consumption.
-  Grow a green roof.
-  Where available, have company hotel accounts at hotels that offer energy-sensitive options, such as only changing sheets or towels when requested.
-  For office and company functions, consider reducing the meat and increasing the fruits and vegetables you serve; in addition to increasing wellness, the savings in grains and soybeans could adequately feed millions of additional people and reduce water consumption.
-  In planning for an office or other company move, consider locations in mixed-use transit-oriented developments that facilitate the use of public transportation and reduce transportation costs by offering live/work/shop amenities.
-  Where available use taxicab companies that use hybrid vehicles.
-  Reduce travel by relying more on teleconferences or video conferences in place of in-person meetings.

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SELECTIVE LIST OF GREEN RESOURCES

Compiled by Pamela V. Rothenberg*

Alliance for Climate Protection <http://wecansolveit.org/>

The Alliance for Climate Protection is a nonprofit, nonpartisan effort founded by Nobel laureate former Vice President Al Gore whose ultimate aim is to halt global warming.

Energy Star <http://www.energystar.gov/>


ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping us all save money and protect the environment through energy efficient products and practices.

Environmental Defense Fund <http://www.edf.org/home.cfm>

The Environmental Defense Fund has published a new report on the best environmental sustainability practices for businesses. The report, *Innovations Review 2008: Making Green the New Business as Usual*, covers practices ranging from reducing waste and the use of toxic adhesives to getting breaks on insurance premiums for energy-efficient buildings.

Forest Stewardship Council <http://www.fscus.org/>

The Forest Stewardship Council (FSC) was created to change the dialogue about and the practice of sustainable forestry worldwide. FSC sets forth principles, criteria, and standards spanning economic, social, and environmental concerns and representing the world’s strongest system for guiding forest management toward sustainable outcomes. The FSC standards for forest management have now been applied in over 57 countries around the world. In 1995, FSC-US, located in Washington, D.C., was established as the national “chapter” of FSC. It’s purpose is to coordinate the development of forest management standards throughout the different biogeographic regions of the U.S., to provide public information about certification and FSC, and to work with certification organizations to promote FSC certification in the U.S.

 **Green Building Initiative** <http://www.thegbi.org/home.asp>

The mission of the Green Building Initiative is to accelerate the adoption of building practices that result in energy-efficient, healthier and environmentally sustainable buildings by promoting credible and practical green building approaches for residential and commercial construction.

 **Green Seal** <http://www.greenseal.org/>

Founded in 1989, Green Seal, a nonprofit organization, provides science-based environmental certification standards that are credible, transparent, and essential in an increasingly educated and competitive marketplace. Green Seal's industry knowledge and standards help manufacturers, purchasers, and end users alike make responsible choices that positively impact business behavior and improve quality of life. Green Seal issued its first environmental standards in 1991-2, and the first product certifications were completed in 1992. Hundreds of products and services from major companies such as 3M, Benjamin Moore, and Andersen Windows have now been certified to meet Green Seal standards, and the number of major product categories covered by standards has increased to more than 40.

 **Greenguard Environmental Institute** <http://www.greenguard.org/>

The GREENGUARD Environmental Institute (GEI) is an industry-independent, non-profit organization that oversees the GREENGUARD Certification Program. As an ANSI Authorized Standards Developer, GEI establishes acceptable indoor air standards for indoor products, environments, and buildings. GEI's mission is to improve public health and quality of life through programs that improve indoor air. A GEI Advisory Board consisting of independent volunteers, who are renowned experts in the areas of indoor air quality, public and environmental health, building design and construction, and public policy, provides guidance and leadership to GEI.

 **International Organization for Standardization** <http://www.iso.org/iso/home.htm>

The International Organization for Standardization (ISO) is the world's largest developer and publisher of International Standards. ISO is a network of the national standards institutes of 157 countries, one member per country, with a Central Secretariat in Geneva, Switzerland, that coordinates the system. ISO is a non-governmental organization that forms a bridge between the public and private sectors. On the one hand, many of its member institutes are part of the governmental structure of their countries, or are mandated by their government. On the other hand, other members have their roots uniquely in the private sector, having been set up by national partnerships of industry associations. Therefore, ISO enables a consensus to be reached on solutions that meet both the requirements of business and the broader needs of society. ISO produces a number of standards addressing sustainability in building design and construction, including ISO 14000, which addresses environmental management.

 **National Resource Defense Council** <http://www.nrdc.org/>

The Natural Resources Defense Council has created a new "Greening Advisor" web site to help firms "green" their operations from supply chain to day-to-day operations. The web site includes tips on finding environmentally friendly sources of supplies; promoting a bicycle-friendly workplace; reducing paper waste; using less-toxic cleaning products; and planting drought-tolerant plants and those native to the locale. It also provides examples of how to develop corporate environmental policies and sustainability reports and suggests environmentally friendly language that companies can write into contracts with their suppliers. The site is particularly useful for small- and mid-sized businesses that want to improve their environmental performance without hiring consultants.

 **Sustainable Buildings Industry Council** <http://www.sbicouncil.org/>

The Sustainable Buildings Industry Council (SBIC) is an independent, non-profit trade association that seeks to dramatically improve the long-term performance and value of buildings through outreach, advocacy and education programs.


The Council has five regular programs that center around specific building types and several Beyond Green™ projects including its annual Beyond Green™ Awards Program and its high-performance building advocacy program.

 **Sustainable Design Group** <http://www.sustainabledesign.com/>

The mission of Sustainable Design Group is to build homes and communities, called Earth Homes (tm), that are in complete harmony with man, nature and the spirit of the place. In addition, Sustainable Design Group works to facilitate global sustainable development and energy independence through the design, development and deployment of sustainable communities and technologies.

 **U.S. Department of Energy** <http://www.doe.gov/>

The U.S. Department of Energy maintains an Energy Efficiency and Renewable Energy section on its website (<http://www.eere.energy.gov/>). On August 5, 2008, the U.S. Department of Energy (DOE) launched the Zero-Net Energy Commercial Building Initiative (CBI), with the goals of developing new commercial buildings that produce as much energy as they use and making these buildings marketable by 2025. Such zero-net energy commercial buildings will minimize their energy use through cutting-edge energy efficiency technologies and will meet their remaining energy needs through on-site renewable energy generation. To help with the CBI, DOE has also formed the National Laboratory Collaborative on Building Technologies (NLCBT), which will allow DOE and five of its national laboratories to work closely on the research, validation, and commercialization priorities that are critical to the success of zero-net energy buildings.

 **U.S. Environmental Protection Agency** <http://www.epa.gov/>

The U.S. Environmental Protection Agency (EPA) has launched a new initiative to encourage the building industry to adopt green building practices and to enhance public awareness of the benefits of green buildings. As part of the effort, the EPA has created a new web site with useful links to help property owners and developers deploy more resource-efficient models of construction, renovation, operation, maintenance and demolition.

 **U.S. Green Building Council** <http://www.usgbc.org/>

The U.S. Green Building Council (USGBC) is a non-profit trade organization that promotes sustainability in how buildings are designed, built and operated. The USGBC is best known for the development of the Leadership in Energy and Environmental Design (LEED) rating system and Greenbuild, a green building conference that promotes the green building industry, including environmentally responsible materials, sustainable architecture techniques and public policy. USGBC has more than 15,000 member organizations from every sector of the building industry and works to promote buildings that are environmentally responsible, profitable and healthy places to live and work. To achieve this it has developed a variety of programs and services, and works closely with key industry and research organizations and federal, state and local government agencies. USGBC also offers a host of educational opportunities, including workshops and Web-based seminars to educate the public and industry professionals on different elements of the green building industry, from the basics to more technical information. Through its Green Building Certification Institute, formerly the LEED Accredited Professional program, USGBC offers industry professionals the chance to develop expertise in the field of green building and to receive accreditation as green building professionals.

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The Lawyer’s Sustainability Glossary:


**Green Terms Lawyers Need to Know
to Begin to Make a Difference**

Compiled by Pamela V. Rothenberg*

Everyone, every day creates an environmental footprint by simply just existing and, in particular, by simply just sitting in their offices. Legal counsel, whether practicing in-house, at private law firms, with the government or in the public interest sector, can make a significant contribution in helping their organizations understand and help mitigate the adverse impact that each of us has on the environment.

To start to make a difference, you need a basic understanding of the key terms used in connection with sustainability and green activities, a glossary of which are set forth below. By raising awareness about green issues and practices, legal counsel can not only “make a difference” by promoting sustainability, environmentalism and healthier places to work, but can also solidify the “social compact” among their organizations, the employees that they support and the constituencies that they serve, all toward the objective of creating better places to work and to live.

 **Accountability:** Responsibility or answerability to stakeholders, including stockholders, and also including the wider community, the natural environment, and any other entity affected by the actions of a business.

 **Biodiversity:** The variation of life forms within a given ecosystem, biome or for the entire Earth. Biodiversity is often used as a measure of the health of biological systems. Biodiversity found on Earth today consists of many millions of distinct biological species, which is the product of four billion years of evolution.

- ♻️ **Biofuel:** Fuel produced from renewable resources, especially plant biomass, vegetable oils, and treated municipal and industrial wastes. Biofuels are considered neutral with respect to the emission of carbon dioxide because the carbon dioxide given off by burning them is balanced by the carbon dioxide absorbed by the plants that are grown to produce them. The use of biofuels as an additive to petroleum-based fuels can also result in cleaner burning with less emission of carbon monoxide and particulates.
 - ◊ **Ethanol** is produced by fermenting the sugars in biomass materials such as corn and agricultural residues is known as bioethanol. Bioethanol is used in internal-combustion engines either in pure form or more often as a gasoline additive.
 - ◊ **Biodiesel** is made by processing vegetable oils and other fats and is also used either in pure form or as an additive to petroleum-based diesel fuel.
 - ◊ **Biogas** is a mixture of methane and carbon dioxide produced by the anaerobic decomposition of organic matter such as sewage and municipal wastes by bacteria. It is used especially in the generation of hot water and electricity.
- ♻️ **Carbon Footprint:** A measure of the impact that an entity's activities will have on the environment, measures in units of carbon dioxide production. Reduction of one's carbon footprint is considered beneficial for the environment.
- ♻️ **Carbon Neutral:** The concept of offsetting carbon-producing activities with activities that either reduce or capture carbon, thus neutralizing the net amount of carbon released in the atmosphere from a particular activity.
- ♻️ **CERES Principles:** A ten-point code of corporate environmental conduct to be publicly endorsed by companies as an environmental mission statement or ethic. Imbedded in that code of conduct is a mandate to report periodically on environmental management structures and results. For more information, see www.ceres.org.
- ♻️ **Chief Green Officer/Chief Environmental Commitment Officer:** A corporate officer responsible for implementing and managing the corporation's commitment to reducing its carbon footprint and protecting the environment.
- ♻️ **Climate Change:** Any long-term significant change in the weather patterns of an area; also used figuratively; Climate change can be natural or caused by changes people have made to the land or atmosphere.
- ♻️ **Closed-Loop Supply Chain:** A zero-waste supply chain that completely reuses, recycles, or composts all materials. This term can also be used to refer to corporate take-back programs, where companies that produce a good are also responsible for its disposal.
- ♻️ **Corporate Social Responsibility:** The idea that organizations should consider the interests of society by taking responsibility for the impact of their activities on stakeholders such as customers, employees, the community, and others, as well as the environment. The obligation extends past compliance with statutory requirements, and organizations are expected to voluntarily take further steps to improve their environmental and community impact.
- ♻️ **Dematerialization:** The reduction of the total material that goes towards providing benefits to customers. This can be done through increasing efficiency, using better or more appropriate materials, or other strategies.
- ♻️ **Eco-Efficiency:** A term for changing technology and processes so as to generate solutions that offer more value than current offerings while reducing resource use and environmental impact throughout the product or service's life.
- ♻️ **Eco-Friendly:** A term used to refer to goods and services designed to have minimal impact on the environment.
- ♻️ **EPA Climate Partnership Programs:** An Environmental Protection Agency (EPA) program in which the EPA works with businesses, organizations, governments, and consumers to reduce emissions of the greenhouse gases that contribute to global climate change by promoting greater use of energy efficient and other cost-effective technologies. For more information, see <http://www.epa.gov/cppd>.
- ♻️ **Ethical Consumerism:** A movement towards corporate reform, in which consumers use their purchasing power to encourage companies to create products in a manner consistent with environmental and other social goals.

- Fossil Fuel:** Fuel, such as petroleum, coal or natural gas, derived from hydrocarbon deposits or the remains of ancient plants, animals and organisms preserved in rocks in the earth's crust with high carbon and hydro carbon content. Carbon dioxide and other greenhouse gases generated by burning fossil fuels are considered to be one of the principal causes of global warming. Fossil fuels range from volatile materials with low carbon:hydrogen ratios like methane, to liquid petroleum to nonvolatile materials composed of almost pure carbon, like anthracite coal. Fossil fuels are non-renewable resources because they take millions of years to form and reserves are being depleted much faster than new ones are being formed. The burning of fossil fuels produces around 21.3 billion tonnes (= 21.3 gigatons) of carbon dioxide per year, but it is estimated that natural processes can only absorb about half of that amount, so there is a net increase of 10.65 billion tonnes of atmospheric carbon dioxide per year (one tonne of atmospheric carbon is equivalent to 44/12 or 3.7 tonnes of carbon dioxide). Carbon dioxide is one of the greenhouse gases that contributes to global warming, causing the average surface temperature of the Earth to rise in response, which climate scientists agree will cause major adverse effects, including reduced biodiversity and, over time, cause sea level rise. In the United States, more than 90% of greenhouse gas emissions come from the combustion of fossil fuels.
- Global Warming:** The increase in the average measured temperature of the earth's near-surface air and oceans since the mid-20th century, and its projected continuation.
- Graywater:** Wastewater from sinks, baths and washing machines that does not contain body or food wastes that is recycled especially for use in gardening or for flushing toilets
- Green:** Supporting social and political movements and activities that espouse global environmental protection, bioregionalism, social responsibility, and nonviolence.
- Green Building:** A building developed or renovated based upon a comprehensive process of design and construction that employs techniques to minimize adverse environmental impacts and reduce the energy consumption of a building, while contributing to the health and productivity of its occupants. A common metric for green buildings is the *LEED (Leadership in Energy and Environmental Design)* certification.
- Greenhouse Effect:** Greenhouse gases effectively absorb thermal infrared radiation emitted by the earth's surface, by the atmosphere itself due to the same gases and by clouds. Atmospheric radiation is emitted to all sides, including downward to the Earth's surface. Thus greenhouse gases trap heat within the surface-troposphere system. This is called the *greenhouse effect*. In the absence of the greenhouse effect, the Earth's average surface temperature of 14 °C (57 °F) would be about -18 °C (-0.4 °F). Global warming, a recent warming of the Earth's lower atmosphere, is believed to be the result of an enhanced greenhouse effect due to increased concentrations of greenhouse gases in the atmosphere. In addition to the Earth, Mars and Venus have greenhouse effects. The greenhouse effect is only one of many factors which affect the temperature of the Earth.
- Greenhouse Gases:** The gases present in the Earth's atmosphere which warm near-surface global temperatures through the greenhouse effect. Greenhouse gases are essential to maintaining the temperature of the Earth; without them the planet would be so cold as to be uninhabitable. However, an excess of greenhouse gases can raise the temperature of a planet to lethal levels, as on Venus where the 90 bar partial pressure of carbon dioxide (CO₂) contributes to a surface temperature of about 467 °C (872 °F). Greenhouse gases are produced by many natural and industrial processes. Based on ice-core samples and records (see graphs) current levels of CO₂ are approximately 100 ppmv higher than during immediately pre-industrial times, when direct human influence was negligible.
- Greenwashing:** The practice of promoting environmentally friendly programs to deflect attention from an organization's environmentally unfriendly or less savory activities; also called greenwash. The term is generally used when significantly more money or time has been spent advertising being *green* (that is, operating with consideration for the environment), rather than spending resources on environmentally sound practices.

- ♻️ **Kyoto Protocol:** A protocol to the international Framework Convention on Climate Change with the objective of reducing greenhouse gases in an effort to prevent anthropogenic climate change. The Kyoto Protocol was adopted on December 11, 1997 by the 3rd Conference of the Parties that was meeting in Kyoto and it became effective on February 16, 2005. As of May 2008, 182 parties have ratified the protocol. Of these, 36 developed countries (plus the European Union as a party in its own right) are required to reduce greenhouse gas emissions to the levels specified for each of them in the treaty (representing over 61.6% of emissions from Annex I countries), with three more countries intending to participate. One hundred thirty-seven (137) developing countries have ratified the protocol, but have no obligation beyond monitoring and reporting emissions. The United States has not ratified the treaty. Among various experts, scientists, and critics, there is debate about the usefulness of the protocol, and there have been cost-benefit studies performed on its usefulness.
- ♻️ **LEED (Leadership in Energy and Environmental Design):** A rating system that encourages and accelerates global adoption of sustainable green building and development practices through the creation and implementation of universally understood and accepted tools and performance criteria. The LEED rating system awards points to both new and existing buildings in six different categories. These categories are Site Selection, Water Efficiency, Energy & Atmosphere, Materials & Resources, Indoor Environmental Quality and Innovation & Design. There are four levels of LEED certification, beginning with the most basic, the certified level, which requires 26 points, then silver, gold and finally, platinum, which requires 52 points. LEED is a third-party certification program and the nationally accepted benchmark for the design, construction and operation of high performance green buildings. For more information, see: www.usgbc.org.
- ♻️ **Recycle:** The process of reclaiming materials from used products or manufacturing byproducts and using them in the manufacturing of new products. This is distinguishable from *Reuse*, in which products are not destroyed and remanufactured but cleaned and repaired to be used again.
- ♻️ **Renewable:** Any material or energy that can be replenished in full without loss or degradation in quality. In contrast with non-renewable resources, in which there is a finite amount of the resource available.
- ♻️ **Reuse:** Reuse of materials which are already manufactured saves more energy than recycling, since they do not need to be recycled into another product.
- ♻️ **Shareholder Activism:** In the environmental context, shareholders use their equity stake in a corporation to put public pressure on the company's management to adopt environmentally friendly policies.
- ♻️ **Socially Responsible Investing:** The process of aligning investment policies with social, environmental, and ethical criteria.
- ♻️ **Stewardship:** The careful and responsible management of our natural resources and the environment.
- ♻️ **Sustainability:** A discussion and approach focusing on how to make human economic systems last longer and have less impact on ecological system; sustainability particularly relates to concern over major global problems relating to climate change and oil depletion. Sustainability can also concern finding ways to make some unit of economic production — a business firm, a family household, a farm — more sustainable and one that focuses on meeting the needs of the current generation without compromising the ability of future generations to meet their own needs.
- ♻️ **Take-Back:** An approach to facilitating reuse or recycling whereby consumers return used products back to the company that produced them, advocating producer responsibility.
- ♻️ **USGBC:** The United States Green Building Council, a nonprofit membership organization whose vision is a sustainable built environment within a generation. Its members include corporations, builders, universities, government agencies, and other nonprofit organizations. Since USGBC's founding in 1993, the Council has grown to more than 14,000 member companies and organizations, a comprehensive family of LEED green building rating systems, an expansive educational offering, the industry's popular Greenbuild International Conference and Expo and a network of 77 local chapters, affiliates and organizing groups. (www.usgbc.org)
- ♻️ **VOCs or Volatile Organic Compounds:** Chemicals emitted as gases from certain solids or liquids. VOCs include a variety of chemicals, some of which may have short- and long-term adverse health effects. Concentrations of many VOCs are consistently higher indoors (up to ten times higher) than outdoors. VOCs are emitted by a wide array of products numbering in the thousands. Examples include: paints and lacquers, paint strippers, cleaning supplies, pesticides, building materials and furnishings, office equipment such as copiers and printers, correction fluids and carbonless copy paper, graphics and craft materials including glues and adhesives, permanent markers, and photographic solutions.
- ♻️ **Zero Waste:** The goal of developing products and services, managing their use and deployment, and creating recycling markets and systems so as to eliminate the amount and toxicity of waste and materials and conserve and recover resources.

It's Not Easy Being Green

Living with, and in, our Buildings

“GREEN” BUILDINGS
Buildings are a Central Component of Environmental Compliance

- What is a “green building?”
- What do you need to know?
 - What standards are already in place?
 - How are state and local building codes impacted?

The “GREEN BUILDING” IS ALREADY HERE

Is your organization in compliance?

CARBON FOOTPRINT

Your buildings have a carbon footprint:

Direct GHG emissions
Indirect GHG emissions
=
Primary footprint
Secondary footprint

The U.S. Conference of Mayors "Climate Protection Agreement"

As of August 2008, over
850
Mayors of U.S. cities have signed
(Is your city on this list?)

STATE ENVIRONMENTAL INITIATIVES

- Most states have undertaken aggressive GHG reduction programs
- Leading states have instituted "green" across the breadth of their programs, from law enforcement to tourism

(Is your state on this list?)

"Cool Counties" Program

- Involves counties across the U.S., including some of the most populous
- Has been adopted and incorporated into state environmental plans

(Is your county on this list?)

NOT JUST NEW CONSTRUCTION

Aggressive State and Local Goals Can't Be Achieved if Only New Construction Meets the Standards....

Major renovations and reconstructions will have to be included

TERMS TO KNOW

- USGBC
- LEED
- NEPA

LEED

Leadership in Energy & Environmental Design

- Provides a benchmark for design and construction goals
- Has become the definition of green building
- Multiple categories

USGBC

United States Green Building Council

- completely voluntary
- fosters cooperation among various construction disciplines
- far-reaching influence accomplished in a short time period

LEED Standards

Application of LEED guidelines

gives architects and engineers

objective standards

LEED Focus

- Measures for “whole building” approach to sustainability in 5 major areas:
 - Sustainable site development
 - Water savings
 - Energy efficiency
 - Materials selection
 - Indoor environmental quality

NEPA

- National Environmental Review Act:
- The first national environmental legislation
 - Requires federal agencies to evaluate and mitigate the environmental impacts of major federal projects

LEED Ratings

- Points assessed for each category determine the rating:
 - LEED Certified (26-32 points)
 - LEED Silver (33-38 points)
 - LEED Gold (39-51 points)
 - LEED Platinum (52-69 points)

WHAT LIES AHEAD?

General Counsel must stay current as changes occur...

change is the only constant

Prepare for challenges

- Construction contracts
- Costs of complying with new GHG reduction standards & other environmental requirements
- Failure to timely meet these emerging standards
- Industry-specific issues