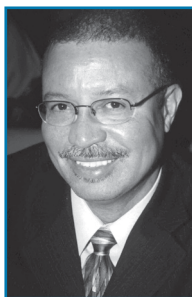


Join the Green Movement

By Judge Herbert B. Dixon Jr.

First disclaimer: This article has nothing to do with whether human activities contribute to global warming or whether global warming is merely a natural phenomenon. Considering some of the emotional discussions that I have seen among friends and colleagues on the subject of global warming, I will join such a discussion only when I am brave enough to discuss religion and politics with the same group.

I am writing about the Green Movement phenomenon because this topic regularly surfaces at legal technology conferences and in periodicals dedicated to legal technology issues. There are two reasons normally given for joining the Green Movement: to save money or save the environment. The proponents of both reasons are unabashed activists. However, regardless of the reason you



Judge Herbert B. Dixon Jr. is the technology columnist for *The Judges' Journal*. He sits on the Superior Court of the District of Columbia and is a former chair of the National Conference of State Trial Judges. He is co-chair of the Judicial Division's Court Technology Committee and a member of the Planning Board for ABA Techshow. He can be reached at Herbert.Dixon@dcsc.gov.

find convincing, I urge you to consider joining the Green Movement.

The "to save money" reason for the Green Movement is obvious. Almost all recommendations under the Green banner result in monetary savings to the consumer. However, the "to save the environment" reason for joining the Green Movement requires a much longer explanation. At the risk of contradicting the disclaimer at the beginning of this article, I will outline the environmental reason for joining the Green Movement. This requires a brief discussion of greenhouse gases and the greenhouse effect.

Simply stated, the greenhouse effect is the process by which heat radiation warms a planet faster than the rate at which the planet radiates heat back into space. The ideal of this process, to accomplish a constant temperature, occurs when there is equilibrium between the heat radiated towards the planet and the heat radiated back into space.

The bulk of gases in the earth's atmosphere are oxygen (O₂), nitrogen (N), and argon (Ar). These are not greenhouse gases. Greenhouse gases in the atmosphere have a significant effect on heat radiation because these gases trap the heat radiation. Without greenhouse gases, the earth would freeze. With an excess of greenhouse gases in the atmosphere, the greenhouse effect results in global warming. At either extreme—no greenhouse gases or an excess of such gases—the conventional wisdom is that the earth would be nearly uninhabitable. Greenhouse gases are essential to maintaining the earth's temperature. There is no dispute that excess greenhouse gases in the atmosphere causes

global warming.

The most abundant greenhouse gases in the earth's atmosphere and significant sources of these gases are as follows.

- Carbon dioxide (CO₂): Organic decay, fires, volcanoes, deforestation, and burning fossil fuels.
- Methane (CH₄): Wetlands, organic decay, natural gas and oil extraction, rice farming, cattle, and landfills.
- Nitrous oxide (N₂O): Forests, oceans, soil, biomass and fossil fuel burning, and fertilizer.
- Chlorofluorocarbons (CFCs): Air conditioners and refrigerators, cleaning solvents, insulation and foam, and aerosol spray propellants.

Another prominent greenhouse gas is tropospheric ozone (O₃), but scientists know very little about whether, if, or how much this gas contributes global warming.

The bottom-line basis of the environmental reason for going Green is that a reduction in the use of electricity, fossil fuels, and trees, and a reduction in landfill waste, will directly reduce the extent to which human activities contribute to the production of greenhouse gases, which will reduce the contribution of human activities to global warming.

And now, back to the Green Movement.

Going Green in the Office and at Home

Green proponents adopt practices designed to reduce paper usage and encourage paperless communications. They encourage the use of electron-

ics for as many paper functions as possible, e.g., electronically maintaining files, filing and receiving documents electronically, eliminating paper checks by paying electronically, and saving on the cost of tapes and other media by storing sound and video on CDs, DVDs, and other modern technology media. Green advocates discourage unnecessary printing and copying and encourage double-sided copies. Green proponents discourage both the use of aerosol products and the purchase of products wrapped in foam packaging material. They promote the use of materials other than rigid foam for building insulation (home or office). They urge sending an e-mail, not a letter; sending an e-mail, not a fax; receiving periodicals online or by e-mail; and getting rid of paper communications. They also urge you not to print e-mail. You may have seen a notice appended to the bottom of an e-mail that states "Please think about the environment before you print this message." Green advocates urge you to store as many documents online as possible to eliminate paper; for example, some court reporting services are promoting online repositories to reduce the need for paper transcripts.

Second disclaimer: I am not being hypocritical by writing a Green article for distribution in a publication printed on paper.

Green advocates recycle as much as possible to avoid the exponential growth of landfills and make every effort to support vendors of a similar mind by buying products made with recycled materials to lessen contributions to landfills. To avoid contributing to problems caused by landfills, Green proponents donate, resell, and recycle as much obsolete equipment as humanly possible. Some proponents not only recycle their toner cartridges, they also purchase only remanufactured toner cartridges. I have seen one estimate that it takes a thousand years for a toner cartridge to decompose in a landfill.

Lawyers Going Green

Lawyers are among the leaders in the

Green Movement. It is easy to understand why. An estimate provided by the American Bar Association Section of Environment, Energy, and Resources is that a typical lawyer uses up to 100,000 sheets of copy paper per year and that the production of that amount of paper emits up to 4.5 tons of carbon dioxide, in addition to other greenhouse gases, into the environment.¹ In addition, disposal of that amount of paper in a landfill results in another ton of such emissions per year. This estimate suggests that adoption of paper management practices recommended by the U.S. Environmental Protection Agency could result in a substantial reduction of those emissions.

To promote the Green Movement, the Section of Environment, Energy, and Resources has instituted the ABA-EPA Law Office Climate Challenge. This program is designed to encourage law offices to conserve energy and resources and reduce the emission of greenhouse gases. The Law Office Climate Challenge encourages (1) best practices for office paper management by reducing paper, increasing recycling of paper, and increasing recycled content in paper purchased; (2) participation in the EPA's Waste Wise program to save energy by reducing waste and adopting best practices for office paper management; (3) participation in the EPA's Green Power Partnership program by purchasing energy from renewable sources to cover some portion of electricity usage; and (4) participation in the EPA's Energy Star program to reduce energy consumption by using Energy Star-labeled equipment and implementation of energy management practices such as turning off and even unplugging lights and equipment when not in use, replacing incandescent lighting with compact fluorescent lighting and other energy-saving lighting, and relying more on natural lighting.

Green offices provide increased opportunities for telecommuting and encourage workers to bicycle to the office, and some provide free areas for secure storage of the bikes. Some of these offices pay a monthly subsidy to workers who bike to work or use pub-

lic transportation. If a motor vehicle is necessary, Green proponents strongly support hybrid vehicles.

Going Green in the Building Industry

The Green movement has reached into the building industry, including courthouses, by way of a certification system, namely, the Leadership in Energy and Environmental Design (LEED) Green Building Rating System.TM This system promotes the adoption of Green building and development practices through specific measurements. The rating system to achieve LEED certification takes into consideration measurements that include water savings, energy efficiency, materials selection, indoor environmental quality, and other measurable criteria. The certification considers indoor environmental quality because numerous studies have demonstrated the positive effects of improved indoor environment on human function, that is, worker productivity increases from the introduction of natural light into the workplace. In addition to the minimum rating needed for LEED certification for buildings, there are also higher LEED ratings, namely, Silver, Gold, and Platinum for the ambitiously motivated. Green building proponents say that their efforts result in healthier and cleaner work and living environments, improved efficiency, and lower energy costs.

To give some idea of the factors taken into consideration, consider the following examples. In planning new construction, the siting (site location and orientation) of the building to the sun is taken into consideration to take advantage of the sun's potential for light and solar power. Another goal is to avoid heat sinks—areas or surfaces that collect heat from the sun—by use of significant planting around and on the building's balcony, patio, and roof space. As another example, the location of a new courthouse could potentially lessen transportation and security costs if the courthouse is built adjacent or connected to the local detention facility.

Other examples include water savings that are realized through the use of low-flow water fixtures, heating and cooling savings that are realized through the use of double- and triple-pane glass, and other savings that result when materials from demolition of the old structure such as bricks, staircases, marble floors and walls, and chandeliers are salvaged and recycled to the new construction. The LEED criteria also consider the use of low-emitting materials in adhesives and sealants, paints, coatings, and carpeting to avoid the “new furniture” or “new building” smell. A dramatic documentation of savings by going Green is reported by the headquarters property manager for Adobe Systems (yes,

which use sunlight-powered energy) in homes they build for needy families because the solar units can save water-heating bills by eighty percent.

Some of the courthouses that have achieved LEED certification are the Wayne L. Morse U.S. Courthouse in Eugene, Oregon; the Cook County Domestic Violence Courthouse in Chicago, Illinois; and the York County Courthouse in York, Pennsylvania.

Your Personal Small Step for Green

If all of this leaves you wondering what small step you can take to join the Green Movement other than turning off the lights at the end of the day, consider the

use would result in energy savings of \$3 billion; that the carbon dioxide emissions from fifteen computers are equivalent in energy therms to the gas consumption used by one car; and that one person leaving his or her computer on 24/7 is equivalent to using one barrel of oil every ninety days and discharging 3,285 pounds (1.6 tons) of carbon dioxide into the atmosphere every year. Multiply these numbers by the estimated 660 million computers in the world today (and growing rapidly), and you can see where this is going. Even if you have little or no control on courthouse construction, recycling policies, and other Green initiatives, consider installing the free LocalCooling.com utility to help you optimize your computer power consumption. And to give you a warm feeling for the good that you have done, the utility provides you with a continuous real-time report translated into environmental terms of the number of trees, gallons of oil, and kilowatt hours of electricity that you have saved. ■

Endnotes

1. www.abanet.org/envirom/climatechallenge/overview.shtml.
2. EB = Existing Building.
3. www.localcooling.com/.

Lawyers are among the leaders in the Green Movement.

the “PDF” people), which received a Platinum LEED-EB rating.² The property manager reports that Adobe spent \$1.4 million on the LEED certification project and earned the investment back in savings in less than ten months. With respect to residential construction, consider that some Habitat for Humanity affiliates are installing solar water heat-

following power consumption information about office computers. According to Uniblue LocalCooling.com,³ a noncommercial project from Uniblue Research Labs, more than 30 billion kilowatt-hours (kWh) of energy are wasted because of computers that are left running while not being used. Uniblue also reports that improving the efficiency of computer