

## The Green Revolution Hits the Office

By Dan Forster, President, inFORM Decisions

*How Global Warming will affect how your office runs in the future.*

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There is a freight train coming. Some have already seen it .... Others aren't sure it exists yet. But by the end of 2008 every citizen in the United States will know about it.

It goes by several names.....global warming ... climate change ... the environment ... our threatened planet. It has to do with one thing ... we have finally reached a tipping point where continued pollution of the environment could lead to enormous consequences within this century. Maybe it won't happen. A diminishing number of scientists continue to dispute the concerns. However, the consequences are so great that just risking it is no longer considered a viable alternative by almost every country including the U.S.

As I wrote this over the past weekend, the two leading news stories included the successful conclusion of the International Climate Conference in Bali, Indonesia. In a historic decision, 130 nations including the United States agreed to work on a Global Warming Treaty that will replace the Kyoto Protocol in two years with a new worldwide climate change treaty. It's aimed at stemming the troubling findings in the most recent assessment of the causes and consequences of global warming by the Intergovernmental Panel on Climate Change.

The second news story over the past weekend was the passing of the new energy bill by the U.S. Senate that mandates a 40% improvement in mileage for cars and light trucks by 2020. Also, 36 billion gallons of renewable fuel would be blended into the nation's fuel supply by 2022. The bill would also increase lighting-efficiency standards and require all new federal buildings to be more energy efficient.

What has this all got to do with us?

Figure 1 shows broad areas where the environment is facing serious threats. The top row includes areas relevant to the office including IT computer centers. The bottom row shows other threats to the environment that are not as closely associated with offices and IT but can be impacted by heavy industries like mining, forestry, farming, power plants and manufacturing.

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### In the Office

<b>Energy</b>	<b>Paper</b>	<b>Recycling</b>
<ul style="list-style-type: none"> <li>➤ Reduce gasoline consumption</li> <li>➤ Reduce power consumption</li> <li>➤ Reduce cooling</li> <li>➤ Reduce heating</li> <li>➤ Trade carbon credits</li> </ul>	<ul style="list-style-type: none"> <li>➤ Reduce paper output</li> <li>➤ Go paperless</li> <li>➤ Recycle own paper</li> <li>➤ Use recycled paper</li> <li>➤ Trade carbon credits</li> </ul>	<ul style="list-style-type: none"> <li>➤ H<sub>2</sub>O cooler vs. plastic bottles</li> <li>➤ Return ink cartridges</li> <li>➤ Recycle everything</li> <li>➤ Use recycled materials</li> <li>➤ Trade carbon credits</li> </ul>

### Outside the Office

<b>Earth</b>	<b>Lakes &amp; Oceans</b>	<b>Atmosphere</b>
<ul style="list-style-type: none"> <li>➤ Stop ground pollution</li> <li>➤ Waste management</li> <li>➤ Forest management</li> <li>➤ Protect wildlife</li> </ul>	<ul style="list-style-type: none"> <li>➤ Stop water pollution</li> <li>➤ Stop urban runoff</li> <li>➤ Water reclamation</li> <li>➤ Desalinization plants</li> </ul>	<ul style="list-style-type: none"> <li>➤ Stop air pollution</li> <li>➤ Reduce CO<sub>2</sub></li> <li>➤ Plant trees</li> <li>➤ Scrubbers, catalytic converters</li> </ul>

**Figure 1: Stabilizing the Environment**  
Preventative measures and corrective actions by threat area

Computers and the offices that house them have become major users of energy in this country ... and of paper, plastics and ink as well. Much of the battleground for conserving scarce energy resources in the future will take place in the office and in computer datacenters across the U.S. The preventative measures and corrective actions shown in Figure 1 are underway, but will gain significantly in intensity in 2008. If you don't have a position on the points shown in this table today, you most likely will by this time next year.

Along with computers, both PCs and large computer centers, Document Automation is going to be smack in the middle of the whole global warming movement. Automating paper-flow to generate less paper leads to fewer trees cut to make that paper. And the protection of our forest resources is critical to our survival in two basic ways.....trees make the oxygen we breathe and they also extract the CO<sub>2</sub> out of the air we breathe, reducing the global warming effect that scientists say is caused by the buildup of greenhouse gasses (GHGs) in the upper atmosphere. These GHGs include carbon dioxide , nitrous oxide, methane and flouorocarbons.

In a recent study by IBM, more than two out of three medium-sized firms will implement new energy efficiency measures in their IT infrastructure. Pete Elliot, Director of Marketing at Key Information Systems, one of the largest IBM hardware/software resellers on the West Coast, reports "Our clients are feeling the pain of power inefficiencies, and next year will see a major effort to upgrade power utilization and management in datacenters everywhere. IBM's Project Big Green is a combination of solutions in this area that will dominate much of IBM's hardware strategy starting in 2Q 2008."

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Project Big Green at IBM will include servers and storage units engineered to use less power, take up less space and generate less heat -- three of the most critical resources of any large datacenter – along with sophisticated software and services to better assess a datacenter's energy scenario. These new more efficient users of our nation's electricity should be in datacenters in time to head off anticipated increases in energy costs in the future.

These developments led to a brainstorming session at our company on what we should be doing to help. The end result was the development of our own company guidelines reflecting our philosophy towards global warming. Because we are a small software company of original thinkers, it was pretty easy to get a broad cross-section of opinion from "we have to stop all pollution tomorrow!" to "it's much ado about nothing". We codified our feelings into our Green Policy (see IFD Green Page in References).

It's interesting how one set of policies can kick off a whole set of thoughts that leads to further implementations. Our Green Policy seems to last a few months and then new thinking forces revisions. I'm sure this same phenomenon will occur at your organization too as you start down the road to defining your policies vis-à-vis the issues in Figure 1.

The document industry deals with at least two major resources that are major players on the global warming stage: paper and ink. Each of these will become the target of much improvement in years to come. Paper from non-forest fiber? Bio-degradable and reusable inks? Recyclable ink and ink cartridges are already here. We'll see many more industry developments as our nation's agenda for tackling this global challenge takes shape in 2008.

To determine the stress that a country, state, company or individual is putting on the planet, the concept of a carbon footprint has evolved into the international standard of measurement.. Your carbon footprint reflects your impact on any of the squares in Figure 1 that involve the introduction of GHGs into the atmosphere. If you reduce your GHGs, you can earn carbon credits that can be sold or exchanged on new financial exchanges that permit registration and exchange of carbon credits. This will become a significant part of our economy over the coming years and an issue that smart companies will learn to work to their advantage and to the benefit of our environment.

A Senior News Editor at *MC PressOnline*, Chris Smith, said in his editorial yesterday, "... the need for measuring the carbon footprints of today's businesses is a foregone conclusion. Gathering the data necessary to meet the anticipated reporting requirements will surely involve computer technology and therefore will fall under the purview of IT programmers and administrators."

As an industry, everyone involved with the creation, management, storage and disposal of documents will be on center stage in the global warming challenge now unfolding. The role of document management will only become more crucial in the eyes of the public, as its impact on our climate and forests becomes better known and understood. As professionals in the wide field of documents in the broadest sense, it is incumbent upon us to take the initiative and become a major part of the solutions to come.

## References

### Definition of Global Warming

Wikipedia

[http://en.wikipedia.org/wiki/Global\\_warming](http://en.wikipedia.org/wiki/Global_warming)

### Definition of Climate Change

Wikipedia

[http://en.wikipedia.org/wiki/Climate\\_change](http://en.wikipedia.org/wiki/Climate_change)

### IFD Green Page

Useful links with focus on the office and IT centers.

[www.informdecisions.com/trees](http://www.informdecisions.com/trees)

### Crossing a Threshold on Energy Legislation

*New York Times*; Dec. 5, 2007

<http://www.nytimes.com/2007/12/05/washington/05energy.html?ref=environment>

### California, New York, Michigan as Leaders

*San Francisco Chronicle*; Dec. 15, 2007

<http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/12/15/EDM3TTDGE.DTL>

### BBC Climate Change Site

Scientific articles with blog commentary you can join.

[http://news.bbc.co.uk/2/hi/in\\_depth/sci\\_tech/2004/climate\\_change/default.stm](http://news.bbc.co.uk/2/hi/in_depth/sci_tech/2004/climate_change/default.stm)

### Intergovernmental Panel on Climate Change

Nobel-prize winning definitive 4<sup>th</sup> assessment.

<http://www.ipcc.ch/>

### Carbon Footprint Website

Everything you didn't know you needed to know about CF.

<http://www.carbonfootprint.com>

### The Green Exchange

For registration/exchange of carbon credits.

<http://thegreenex.com>

### Climate Change and IT

Latest commentary on IT and carbon credits.

<http://www.mcpressonline.com/analysis-of-news-events/climate-change-is-upon-usis-your-firm-up-to-the-challenge.html>

### The Author

Dan Forster is president of [inFORM Decisions](#), a company he founded after 20 years working with various electronic document management solutions. Dan was part of a team that introduced the first implementations of AS/400 laser form, check, and printer connectivity solutions to IBM midrange users in the mid 1980s. His company was one of the first to implement a comprehensive iSeries host-based e-document distribution system powered by intelligent routing capabilities for fax, email, archive-retrieve, and laser forms. The company's current ACH applications include iSeries ACH and iSeries Positive Pay. inFORM recently formulated its IFD Green Policy that can be accessed from its Web site. Dan can be reached at [dforster@informdecisions.com](mailto:dforster@informdecisions.com) or 1.949.709.5838 x102.

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