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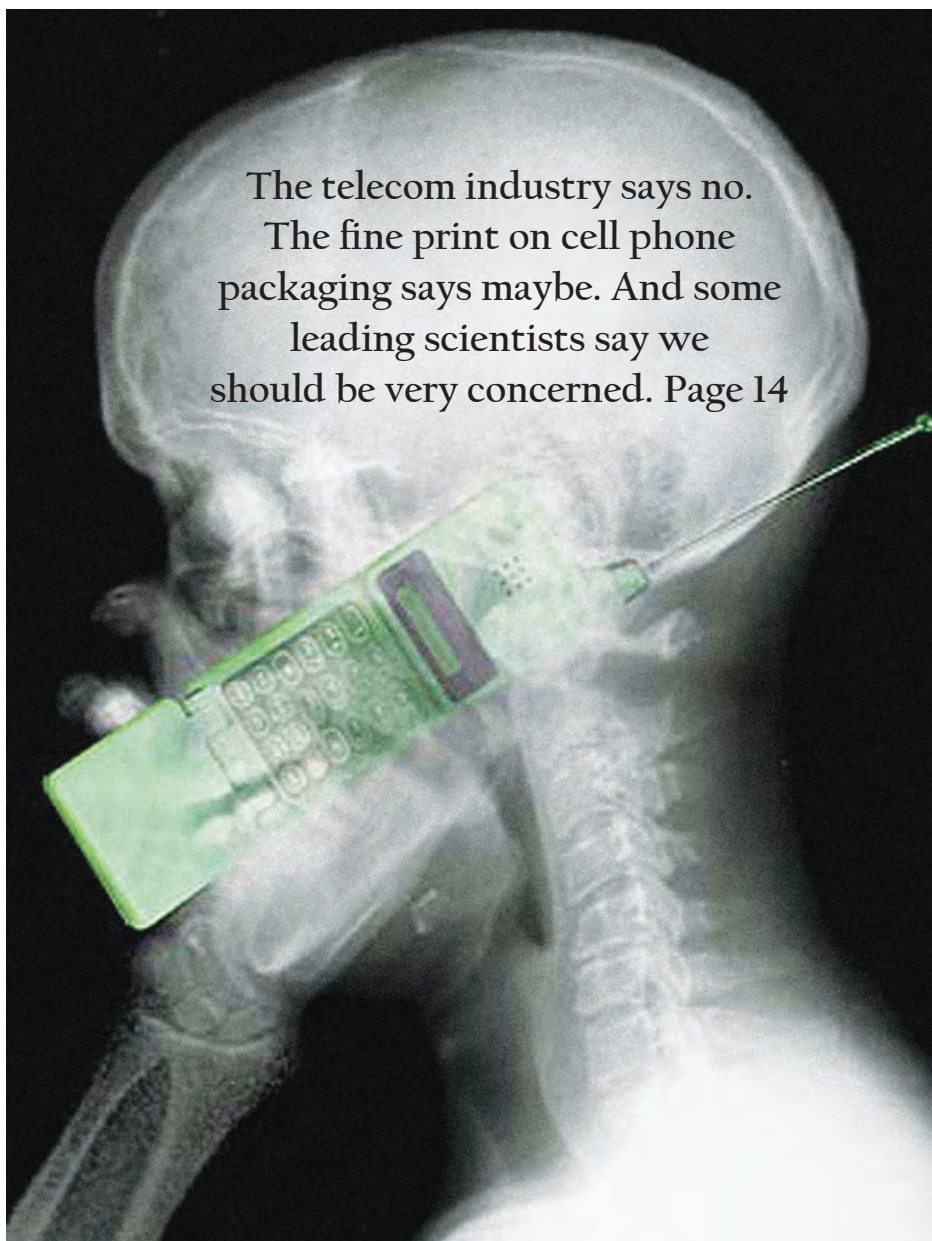
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The telecom industry says no.  
The fine print on cell phone  
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**A publication of Green America (formerly Co-op America)**

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Green American magazine (ISSN: 0885-9930) is free with Green America Individual Membership (starting at \$20/year) or Green Business Network Membership (starting at \$85/year).

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# Cell Phone Safety: An Urgent Call for Corporate Responsibility

Dear Green Americans:

Our profound commitment to you is to champion the actions that will bring about a green economy and a just, sustainable society—for you, your children, and all the generations to come.

The strategies for change that we use combine the power of the “no”—demanding corporate responsibility to stop the damage and suffering caused by business-as-usual—with the power of the “yes”—advancing the healthy, green solutions that provide a better way forward.

While the “yes” strategies are always more joyful, it is imperative to take tough stands against dangerous and irresponsible practices that undermine the health of people and our planet.

Taking these stands is never easy, as we’ve learned over the years. There is almost always push-back at first, but then, as more and more people learn about the issue and join in, there’s the satisfaction of being able to bring about great change.

So today we take on another urgent matter of corporate responsibility: cell phone safety. The emerging scientific data on cell phone dangers are frightening—from the serious risk to your health (p. 12) to the human rights and environmental issues in mining the rare metals required in the phones (and the imperative of recycling them, p. 21).

Many members have contacted us to ask about the health and environmental safety of cell phones (Thank you!), so our editorial team dug in to find the answers. What we learned is alarming. Our editor-in-chief, Tracy Fernandez Rysavy, lays out the science in clear, objective terms, along with how you can protect yourself (p. 17) and demand corporate responsibility on the part of the cell phone industry (p. 20).

We had several experts review the data and our conclusions. Every one of them not only agreed with what we write here, but told us that they are completely changing the way they use cell phones after reading this feature. After reading it, I also switched to safer cell phone use—and hope you do, too.

What is most alarming of all is the cell phone industry’s behavior. Its actions to deny the data and abrogate their responsibility are all too reminiscent of the corporate response to emerging data on deadly issues such as tobacco, asbestos, DDT, and climate change in the past.

With a different corporate response—one that puts energy into health and safety instead of misdirecting and misleading—we could have cell phones that are much safer for people and the environment.

As you use your cell phone, please protect yourself. Share this article with everyone you love, and join with us in demanding that the cell phone industry clean up its act. They can start immediately by putting the warning labels they already include in cell phone manuals directly on the phones.



ALISA  
GRAVITZ

For people and the planet,

*Alisa*

Alisa Gravitz, Executive Director

*BetterPaper.org + ClimateAction.org  
CommunityInvest.org + FairTradeAction.org  
ResponsibleShopper.org + Sweatshops.org*



*Ainhua Gomal/Oxfam*

*Climate activists erected a giant message in a bottle to UN Climate Change Conference attendees in Cancun, Mexico, on behalf of millions of the world's poorest people, who continue to suffer disproportionately from the effects of climate change.*

## Cancun Climate Agreements: Some Progress, But More Needed

While world leaders boast about the success of the December 2010 UN Climate Change Conference in Cancun, Mexico, many climate activists—including Green America's Climate Action team—feel that the international community once again failed to step up to the plate to adequately address the urgent nature of the climate crisis.

The two-week-long Cancun summit brought together 194 nations from around the world to forge a path to limit global warming to an increase of two degrees Celsius over pre-industrial levels. Attendees lauded the talks as a success for international relations following the collapse of talks in Copenhagen in 2009, but while diplomatic fences may have been mended in Cancun, negotiators took few steps forward in setting meaningful emissions reductions.

The Cancun Agreements carry through

many of the inadequate commitments set in the Copenhagen Accord of 2009, including country-specific greenhouse gas reduction goals that are too low, and a framework for transparency in keeping track of each nation's progress, which lacks teeth.

The Agreements also established a \$100 billion fund, the Green Climate Fund, to help developing countries adopt clean technologies and to provide aid to countries already feeling effects of a changing climate. The participating nations also committed to curbing deforestation, particularly in developing countries.

While these steps equal progress, the Agreements still push most of the difficult decisions into the future, such as whether the Kyoto Protocols, a binding international agreement to reduce emissions reductions (which the US notoriously refused to sign), will be extended

beyond 2012. And scientists agree that the emissions targets set in Copenhagen, and reaffirmed in Cancun, are simply not enough. Even in the best-case scenario—in which every nation follows through on its loftiest goals to reduce emissions—there is still a gap of five gigatons of excess CO<sub>2</sub>-equivalents to achieve the level of emissions reductions experts agree the world needs to avoid the most catastrophic effects of climate change. Five gigatons is equal to the emissions of all the world's cars, buses, and trucks in 2005.

These goals are far better than a "business as usual" scenario, in which increased emissions worldwide would lead to a temperature change of more than four degrees Celsius, but still not enough to ensure a safe future for countries around the world. For example, the United Nations Environment Programme recently took a close look at how climate change is impacting Latin America and the Caribbean, where the number of people affected by extreme weather events exacerbated by climate change (including forest fires, droughts, floods, and more) grew from 5 million in the 1970s to more than 40 million in the last decade. And with NASA reporting 2010 was the hottest year yet on record, more reports detailing suffering sparked or worsened by the climate crisis are sure to come.

"We're glad to see nations working with one another in Cancun, and while the Agreements reached there are a step in the right direction, there is still a long way to go," says Green America's strategic outreach director, Fran Teplitz. "As world leaders fail to act at the level required by this crisis, Green America is working with our allies to put forth solutions that will move us towards a green-energy future. For example, Clean Energy Victory Bonds (CEVBs)—a new mechanism to fund clean, renewable energy—could create



\$150 billion in overall investment in clean energy and thousands of green jobs. The time has never been more urgent.”

*Take Action: Sign up for Green America's e-mail newsletter at [GreenAmerica.org](http://GreenAmerica.org) to participate in our up-to-the-minute climate and green energy campaigns. Show your Congressional representatives that you support Clean Energy Victory Bonds by taking our short survey at [GreenAmerica.org/takeaction/CEVB](http://GreenAmerica.org/takeaction/CEVB).*

## Fair Trade Keeps on Growing

October was National Fair Trade Awareness Month, and it brought great news to supporters of Fair Trade. Sales of Fair Trade Certified™ products at grocery stores grew by 30 percent this year, to \$140 million, according to data analyzed by SPINS, a for-profit company that compiles data about the natural products industry. The Fair Trade spike was led by growth in sales of packaged coffee (44 percent) and ready-to-drink tea and coffees (51 percent). Consumers also bought more Fair Trade chocolate candy, frozen desserts, and more.

Green America celebrated Fair Trade Awareness Month with a slew of events and activities centered on Fair Trade, particularly in the cocoa industry. We released our corporate responsibility report on the Hershey Company, sent out the film *The Dark Side of Chocolate* to our members for screenings nationwide, held our annual Reverse Trick-or-Treating action to get children involved in educating people about Fair Trade on Halloween, and released our Chocolate Scorecard, which rates chocolate companies on their use of fair labor. (See p. 7 for the scorecard and more on our Hershey campaign.)

“Even as we celebrate the rise in Fair Trade sales, we'll continue our work to bring more workers into the Fair Trade system,” says Elizabeth O'Connell, Green America's Fair Trade coordinator. “We're going to continue to put pressure on corporate giants like Hershey's to eliminate child and slave labor from their supply chains while also working with consumers in the US to increase the demand for Fair Trade on store shelves.”

*Take Action: See p. 7 for information on joining our Hershey campaign. For resources, ideas, and assistance with growing Fair Trade in your community, join Green America's Fair Trade Alliance, [FairTradeAction.org](http://FairTradeAction.org), and our Fair Trade Your Supermarket campaign, [FairTradeYourSupermarket.org](http://FairTradeYourSupermarket.org).*

## Toys 'R' Us Continues to Sell “Poison Plastic” Toys

For years, Green America and our allies have urged manufacturers to stop using polyvinyl chloride plastic (PVC) in everyday products, especially toys and other items marketed to young children. Two years ago, toy retailer Toys 'R' Us promised to voluntarily reduce its use of PVC in children's toys, but according to a recent report commissioned by the Center for Health, Environment, and Justice (CHEJ), which has led the Toys 'R' Us campaign, the company has not kept its promise.

PVC releases dioxin, a human carcinogen, during manufacture and incineration. Also, PVC often contains phthalates, a hormone disruptor, to make it pliable, and other additives such as lead and cadmium, which are neurotoxins, to keep it from breaking down. These additives can leach from PVC and are particularly dangerous to children's growing bodies.

According to the CHEJ report, testing conducted on toys purchased at Toys 'R' Us shows that 72.5 percent of all children's products tested contained high levels of chlorine, an indication they were likely made of PVC. Of the 60 products tested, only one was labeled as containing PVC.

The report includes recommendations for Toys 'R' Us to phase the “poison plastic” out of its products, and it calls for Congressional action on comprehensive toxic chemicals reform. CHEJ is also calling on consumers to boycott Toys 'R' Us until it removes PVC toys from its shelves.

*Take Action: Download the report and send a letter of concern to your Congressional representatives at [ToxicToysRUs.org](http://ToxicToysRUs.org). Read about Toys 'R' Us' social and environmental performance at Green America's [ResponsibleShopper.org](http://ResponsibleShopper.org).*

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# Valentine Chocolates Tainted by Child Labor



Daniel Rosenthal

*A child worker from the Côte d'Ivoire working in the cocoa fields. The Côte d'Ivoire is the largest supplier of cocoa for major US chocolate companies.*

**T**his Valentine's Day, many of the heart-shaped chocolates Americans will give their sweethearts will be tainted by the labor of enslaved children.

Hershey's, Nestlé, and the other big chocolate companies know this. They promised nearly a decade ago to set up a system to certify that no producers in their supply chains use child labor. They gave themselves a July 2005 deadline for that, which came and went without meaningful action. A second voluntary deadline sailed by as well in 2008. Then, these companies let a third deadline pass them by at the end of 2010.

Take action to keep child slavery out of your Valentine's Day celebrations. Here's what you need to know.

## Children Exploited for Chocolate

Few Americans had heard of the problem of child labor on cocoa farms before 2001, when reporters Sudarsan Raghavan and Sumana Chatterjee exposed the scandalous conditions under which most US chocolate is made.

In one of their articles, a child slave described his 13-hour work-days on the 494-acre plantation as brutal, filled with harsh physical labor, punctuated by

beatings, and ending with a night of fitful sleep on a wooden plank in a locked room with other slaves.

"The beatings were a part of my life," said the boy, who was sold into slavery at not yet 12 years old. "Any time they loaded you with bags and you fell while you were carrying them, nobody helped you. Instead, they beat you and beat you until you picked it up again."

## More Evidence of Child Labor

The reports shocked some members of Congress into action. That fall,

**WHAT?** When you buy chocolate, buy Fair Trade.

**WHY?** Fair Trade chocolate helps ensure that no slave or child labor was used to grow the cocoa, and workers earn a fair wage.

**WOW!** Fair Trade products are grown using sustainable methods, and many are also organic.

Rep. Eliot Engel (D-NY) and Senator Tom Harkin (D-IA) prepared bills to require US chocolate companies—by force of law—to certify their products as slave-free. Engel's bill passed the House, but before Harkin's bill could pass the Senate, the chocolate industry had announced a voluntary four-year plan to clean up its own supply chains, without legislation.

Meanwhile, evidence that child slavery still bedevils the chocolate industry isn't hard to find. For example, in late September, a research team from Tulane University (specifically charged by Congress with oversight of the voluntary supply-chain efforts) reported that "the industry is still far from achieving its target by the end of 2010 ... and the majority of children exposed to the worst forms of child labor remain unreached."

The recently released documentary *The Dark Side of Chocolate* by filmmakers Miki Mistrati and U. Roberto Romano takes a less-detached tone, going undercover and exposing child slavery in the cocoa supply chain from the inside.

And if that's not enough, the State Department's own 2010 *Trafficking in Persons* report lists several West African countries where children are traded and taken to work on cocoa plantations.

All the while, the biggest chocolate companies cavil that because they don't own the cocoa plantations outright, cleaning up their supply chains is too hard. But some of them aren't even trying. The biggest cocoa company in the country, Hershey's—even after nine years—has no certification system in place whatsoever to ensure that its cocoa isn't tainted by labor rights abuses.

## Take Action

Here are some steps you can take on Valentine's Day to ensure that your chocolate isn't exploiting children overseas:

- Look for chocolate from companies that certify their supply chains via the Fair Trade Certified™ and the IMO Fair For Life label. See Green America's scorecard at right, which explains these labels in detail and ranks the companies.

- Contact conventional chocolate companies like Hershey's—call them, write to them, protest on their Facebook pages—and tell them you expect them to prove their supply chains aren't tainted.

- Contact your representatives in



## Labor Certifications

**Fair Trade Certified:** This label, from Fair Trade USA<sup>m</sup>, prohibits child labor, forced labor, and discrimination, and protects the freedom to organize. Farmers are guaranteed a Fair Trade floor price for cocoa beans, as well as a social premium. For a product to bear this label, 100 percent of the primary ingredient must be certified Fair Trade.

**IMO Fair for Life:** This Swiss label mandates the protection of human rights at all stages of production, preventing child and forced labor and ensuring safe working conditions for laborers. It ensures that suppliers earn an appropriate fair wage and a social premium. To bear the seal, all ingredients that can possibly be sourced from Fair Trade suppliers must be Fair Trade—amounting to at least 50 percent.

**Rainforest Alliance Certified:** Prohibits child and forced labor and discrimination. However, it does not protect the right to organize and does not require buyers to pay a minimum floor price to provide workers with a living wage. Only 30 percent of the primary ingredient needs to be certified to bear this label—the remaining 70 percent could come from farms that use child and forced labor.

**UTZ Certified:** Prohibits child and forced labor and discrimination, and protects the right to organize. However, the premium paid to farmers is negotiated between buyers and farmers, which is not so different from what goes on with conventional farms. Buyers do not have to pay the legal minimum wage in the first year of certification.

Congress. If after a decade the chocolate companies can't monitor their own supply chains, America needs to go back to the drawing board and demand, by law, that slave-produced chocolate must have no place on the shelves of US stores.

The people who produce the raw materials for our chocolate treats deserve fair wages and safe working conditions. Children shouldn't have to suffer unspeakable horrors so that our loved ones can have a happy Valentine's Day. 🍫

—Andrew Korfhage

## Green America's Chocolate Scorecard

Ratings determined by policies in place to monitor and prevent child labor.

COMPANY/PRODUCT	GRADE	LABOR CERTIFICATION	BITE-SIZE CANDIES	SEASONAL SPECIALS/GIFTS
<b>Alter Eco<sup>m</sup></b> altereco-usa.com	A			
<b>Coco-Zen<sup>m</sup></b> Coco-zen.com	A		✓	✓
<b>Divine<sup>m</sup></b> Divinechocolateusa.com	A		✓	✓
<b>Equal Exchange<sup>m</sup></b> Equalexchange.coop	A		✓	
<b>Shaman<sup>m</sup></b> Shamanchocolates.com	A			✓
<b>Sjaak's<sup>m</sup></b> Sjaaks.com	A		✓	✓
<b>Sweet Earth Organic<sup>m</sup></b> Sweetearthchocolates.com	A		✓	✓
<b>Theo Chocolate<sup>m</sup></b> Theochocolate.com	A			✓
<b>Green &amp; Black's</b> "Maya Gold" Fair Trade Bar	A-			
<b>Dagoba Conacado Bar</b> Dagobachocolate.com	B			
<b>Green &amp; Black's (all bars)</b> Greenandblacks.com	B-	Moving to Fair Trade USA		
<b>Kraft</b> Kraftfoodscompany.com	D+		✓	
<b>Mars</b> Mars.com	D+		✓	
<b>Nestle</b> Nestle.com	D-		✓	
<b>Hershey</b> Hersheys.com	F	None	✓	

### TELL HERSHEY TO RAISE THE BAR

Every major chocolate company is adopting third-party certification for at least some of its cocoa to trace and eliminate the worst forms of worker abuse—but not the Hershey Co. Join Green America's Valentine's Day action to tell Hershey's to cut its ties to child slavery and worker exploitation. Learn more by reading our report, *Time to Raise the Bar*, at [RaiseTheBarHershey.org](http://RaiseTheBarHershey.org). Then, join us by signing our petition at [GreenAmerica.org/TakeAction/Hershey](http://GreenAmerica.org/TakeAction/Hershey), by hosting screenings of the film *The Dark Side of Chocolate* (order the film from us for \$6 at [GreenAmerica.org/go/MovieScreening](http://GreenAmerica.org/go/MovieScreening)), and by sending Valentine's cards to Hershey that ask them to "have a heart" for the people who grow their cocoa. (Find templates at [FairTradeAction.org](http://FairTradeAction.org).) Mail them to:

**The Hershey Company, Attn: David J. West, CEO,  
200 Crystal A Drive, Hershey, PA 17033-9783**



# Dialogue: A Powerful Shareholder Strategy

Four decades ago, the socially responsible investing (SRI) movement began with dialogue. By calling on companies to not do business in South Africa because of the government's policy of apartheid, a group of concerned investors helped spur a movement of shareholders who regularly demand that companies put people and the planet on par with profit.

Today, investor coalitions and institutional investors, such as socially responsible mutual funds and pension funds, use their deep pockets and strong standing to communicate directly with corporations about social and environmental issues, through methods such as open letters and face-to-face meetings with management.

This year, shareholders engaged in dialogues with companies on issues as diverse as divesting from military-ruled Burma (Myanmar) and eliminating bisphenol-A from consumer products.

## Why Dialogue Works

These investor groups are able to get access to corporate management for dialogues because they have a huge amount of capital behind them. In fact, 55 US institutional investors representing a total of \$740 billion in assets used that considerable

**WHAT?** Learn how your socially responsible mutual fund managers and other institutional investors use their clout to dialogue with corporate managers.

**WHY?** Institutional investors often hold stock in "borderline" companies to encourage greater corporate responsibility.

**WOW!** Your investment in a socially responsible mutual fund or pension fund helps pressure companies to improve.

economic clout to dialogue with corporate managers from 2008 through the first half of 2010, according to the Social Investment Forum's *2010 Report on Socially Responsible Investing Trends in the United States*.

"As we've been engaging in corporate dialogues for nearly 40 years, [we are able to convene] effective, face-to-face discussions with management that bear fruit in the form of meaningful reform," says Laura Berry, executive director of the Interfaith Center on Corporate

Responsibility (ICCR), a coalition of faith-based institutional investors.

So while shareholder resolutions may get the lion's share of media attention, it is often dialogue (in which all parties know the next step is likely a shareholder resolution) that gets the job done.

"Because we understand ensuring a good return and safeguarding the health of the planet and its inhabitants aren't mutually exclusive goals, we propose realistic solutions that are often adopted in dialogues that make further actions, such as filing shareholder resolutions, unnecessary," says Berry. "For that reason, corporate dialogues are generally our preferred and first course of action."

Below are highlights of recent dialoguing successes and ongoing challenges.

## Human Rights/Discrimination

Three years of investor dialogue, led by Trillium Asset Management, Domini Social Investments, Boston Common Asset Management, and the Interfaith Center on Corporate Responsibility, convinced a Toyota affiliate this year to fully divest from a joint venture with the Burmese (Myanmarese) military regime. The regime has been accused of human rights violations by the United Nations and global human rights organizations, including the absence of an independent judiciary, Internet restrictions, forced labor, human trafficking, child labor, and sexual violence.

In August, these investors received a letter from Toyota North America stating that its trading arm Toyota Tsusho Corp. had sold its stake in the venture in Burma.

On the home front, after seven months of dialogue, NorthStar Asset Management scored a major victory by getting package delivery giant FedEx to provide domestic partner health benefits to same-sex couples by 2012.

## Health and Safety

The chemical bisphenol-A (BPA), a likely hormone disruptor, has become a big concern among investors (see p. 22 for more on BPA on store receipts). Canada recently declared it a toxin and banned its use. In the absence of a US federal response to regulating the chemical used to line metal food and beverage containers, investors are taking action.

Investment advisory firm Green



Century Capital Management<sup>m</sup> and As You Sow<sup>m</sup>, a nonprofit working to increase corporate accountability, have been dialoguing with companies about using BPA in products and packaging for years. To speed up improvements, these investors released two well-publicized reports grading companies on their progress in phasing out BPA—one in April 2009, and the latest this past November.

“We believe companies may face financial risks from the presence of BPA in product packaging and should act quickly to eliminate the chemical to help protect shareholder value and preserve company reputations,” write Green Century and As You Sow in the new report.

In the 2009 report, agriprocesssing giant ConAgra (which owns Chef Boyardee, Hunts, and Healthy Choice) received a D- grade, and HainCelestial (which owns Health Valley, Earth’s Best, and Westbrae Natural) led the pack with a not-so-impressive C-. Thanks in part to investor dialogues and the bad publicity from the report, both companies received an A grade in the 2010 report for introducing BPA-free packaging for some of their products and committing to a timeline for phasing out BPA altogether.

### The BP Oil Catastrophe

Following the most recent environmental catastrophe along the Gulf Coast, 58 global investors and government entities managing \$2.5 trillion in assets sent letters—often the first step in initiating a dialogue—to 27 major oil and gas companies in August pressing them to disclose information on spill prevention and response plans for deepwater drilling operations around the world.

The investors—which were led by Ceres<sup>m</sup> (co-founded by Green America, which holds a seat on its board) and included the New York State Comptroller, the Florida State Board of Administration, and the UK-based Local Authority Pension Fund Authority Forum—sent a second letter to 26 insurance companies asking them if they are going to reassess their exposure to offshore oil and gas operations and if they will change their underwriting criteria to take increased safety risks into account.

Peyton Fleming, Ceres’ senior director of strategic communications, tells the *Green American* that so far they have

## SRI Shareholder Votes Hit Record Highs

Socially responsible investors have the power to influence companies through filing and voting on shareholder resolutions, or requests to corporate management that are voted on at a company’s annual meeting. Anyone with at least \$2,000 of stock who has held it for at least 12 months can file a resolution. Because many investors do not have the time or the money to reach these meetings, proxy voting allows shareholders to vote on resolutions by mail or online, including through sites like MoxyVote.com<sup>m</sup> (see p. 10).

Even a small vote of 10% puts the pressure on a company to change its policies. And sometimes the company will take action just because of the threat a resolution may come to a vote—and generate bad publicity.

In 2010, there was a “pronounced upward spike” in the number of shareholder resolutions receiving votes of 30% or more, with several receiving majority support, according to the Social Investment Forum’s<sup>m</sup> *2010 Report on Socially Responsible Investing Trends in the United States*. Five years ago, 15% would have been considered significant support.

Meg Voorhes, co-author of the report, noted that part of the increase in shareholder support for socially responsible resolutions is due to the fact that “shareholders are becoming more knowledgeable about these issues.” She also attributes the spike to events like the Massey coal mine collapse and the BP oil spill catastrophe in 2010. “These events were clearly a sign that labor issues and occupational health and safety have a material impact on companies,” says Voorhes.

As of August 15th, a total of 360 social and environmental resolutions have been filed with 164 voted on and nearly a third of those receiving more than 30% support. Of the rest, 59 proposals were omitted and 118 were withdrawn—likely due to shareholders reaching some sort of agreement with corporate managers.

The five proposals receiving the

highest votes in 2010 include Walden Asset Management’s<sup>m</sup> resolution asking Layne Christensen to publish a sustainability report, which received a 60.3% vote; NYC Pension Fund’s proposal asking Massey Energy to perform a climate change impact assessment, which received a 53.1% vote; Calvert Funds<sup>m</sup> asking Gardner Dever and NYC Pension Fund asking KBR to both adopt sexual orientation anti-bias policies, which received votes of 49.1% and 48.7% respectively; and NYC Pension Fund’s call for Coventry Health Care to report on political contributions, which received a vote of 46%.

Other highlights:

#### ENVIRONMENT:

- Coal ash waste resolutions received high vote totals at CMS Energy (43.1%), and Southern Company (21%), a strong showing for first-time ballot measures.

- Investors are asking natural gas companies to report on the environmental impacts of the hydraulic fracturing method. Several companies had resolutions on the ballot by shareholders that garnered over 20% support—Ultra Petroleum (21.3%), ExxonMobil (26.3%), Cabot Oil & Gas (35.9%), and Williams Companies (41.8%).

#### HUMAN & LABOR RIGHTS:

- A resolution calling on Abercrombie & Fitch to examine potential child labor abuses in their supply chain received a vote of 32.8%.

- Chevron had a human rights resolution on the ballot regarding doing business with Burma (Myanmar) that garnered 24% of the shareholder vote.

#### GOVERNANCE:

- Political contribution disclosure resolutions received high vote totals at Abbott Labs (43.9%) and Halliburton (39.2%).

- Three companies had their executive compensation pay packages voted down with non-binding votes of more than 50%—Motorola, Key Corp. and Occidental.

—Joshua Marks

## EXERCISE YOUR SHAREHOLDER POWER

Green America plays a key role in helping individual investors vote their shareholder proxies easily and in a more informed manner. As part of that work, we have teamed-up with MoxyVote.com<sup>™</sup>, an innovative Web site that enables users to see how Green America and our allies recommend that socially responsible investors vote on specific resolutions. MoxyVote also allows registered users to vote their proxies directly on its Web site—for free—so you don't have to fuss with your paper ballots. Register free at [MoxyVote.com/support/GreenAmerica](http://MoxyVote.com/support/GreenAmerica), and Green America will receive a small royalty.

received responses from at least a dozen oil companies and a number of insurance companies. Ceres is currently evaluating the responses and will soon release the information to the public.

Also in response to the BP oil spill, shareholder activists will be engaging in dialogues with oil companies asking for very specific disclosures on health and safety practices, says Sanford Lewis, a lawyer who provides legal support for shareholder advocates such as the Investor Environmental Health Network<sup>™</sup>.

Look for concerned investors to be asking oil companies for more details on drilling practices in the near future. “For example,” says Lewis, “[federally] documented violations that are severe or health-threatening and orders to close facilities, withdraw products, suspend production are not necessarily disclosed now. They should be.”

### Climate Change

Sometimes a public policy issue comes up that would so fundamentally alter the investing landscape that socially responsible investors take a public stand. This was the case recently in California when climate activists scored a big victory by defeating Proposition 23—a ballot measure bankrolled by out-of-state oil companies that would have gutted the state's landmark climate change law.

In October, a group of 68 major investors managing \$415 billion in assets, delivered a joint written statement to the media as part of a public campaign opposing Prop. 23. The statement, whose signatories include Domini and Pax World Funds<sup>™</sup>, said the measure would “negatively affect job growth, economic competitiveness, private investment, energy price savings and stability, and air pollution and public health.”

Green America is leading a campaign

aimed at shareholders and consumers to get Southern Company—one of the top five utility polluters in the world—to curb its emissions by increasing its investments in clean energy and energy efficiency and shutting down their dirtiest coal-fired power plants. Visit [GreenAmerica.org/takeaction/southern/](http://GreenAmerica.org/takeaction/southern/).

### Political Disclosure

Socially responsible investors are fighting back against the 2010 US Supreme Court *Citizens United v. Federal Election Commission* ruling. The decision, in a nutshell, allows corporations to contribute unlimited amounts of money to political campaigns. The immediate consequences are reflected in the recent midterm elections, which were the most expensive ever in American history.

Corporate giants such as Target, Best Buy, 3M, and Pentair faced shareholder backlash in the form of a public pressure campaign and proposals filed by Walden, Trillium, and Calvert after the Minnesota-based companies gave large donations to MN Forward, which was created after the *Citizens United* ruling to funnel corporate contributions to extreme candidates such as climate-change denier and anti-gay gubernatorial nominee Tom Emmer.


“Companies may be legally allowed to make donations, but they are still going to face a lot of pressure from investors and customers to show that the money being spent really does enhance shareholder value. And if it leads to boycotts and bad publicity, that's not good for shareholder value,” says Annie C. Logue, author of *Socially Responsible Investing for Dummies*.

It wasn't all doom and gloom this year as socially responsible investors claimed a major victory by reaching the point where half of the corporations on the S&P 500 have agreed—through dialogue

and shareholder resolutions—to disclose their political contributions. Microsoft, Time Warner, and Starbucks are some of the high-profile companies that have committed to fiscal transparency. But according to Bruce F. Freed, president of the nonprofit, nonpartisan Center for Political Accountability, some companies have been resistant to disclosure, including JP Morgan Chase, Goldman Sachs, Wells Fargo, Citigroup, and AT&T, and investors will keep the pressure on these big political spenders.

“Citizens United has made it much more difficult to regulate political donations legislatively, so it makes the corporate governance route that much more important,” says Freed.

### Proven Investor Power

As these examples demonstrate, dialogue is a proven method that continues to get results by harnessing the collective power of socially responsible investors. Dialoguing is just one strategy that experienced investor coalitions employ on a case-by-case basis, along with filing shareholder resolutions and divesting, to change corporate conduct for the better. 

—Joshua Marks



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# GREEN BUSINESS NEWS

THE LATEST FROM OUR GREEN BUSINESS NETWORK™ OF  
SOCIAL AND ENVIRONMENTALLY RESPONSIBLE BUSINESSES

[GreenBusinessNetwork.org](http://GreenBusinessNetwork.org) + Find green companies in our National Green Pages™ [greenpages.org](http://greenpages.org)

## gDiapers: the People's Choice for Green Business of the Year

At the San Francisco Green Festival™ this past November, Green America proudly presented the 2010 People's Choice Award for Green Business of the Year to gDiapers™, a five-year-old business based out of Portland, OR. Green America gives the People's Choice Award annually to a member of our Green Business Network™, through an online voting contest by Green America members, supporters, and green consumers nationwide.

As the first packaged consumer product to receive official "Cradle-to-Cradle" certification, gDiapers are made entirely of materials that have a neutral or beneficial effect on the planet when discarded. With 20 billion disposable diapers ending up in US landfills every year, gDiapers represent a solution for diverting landfill waste that can take up to 500 years to biodegrade.

Combining the best features of cloth and disposable diapers, gDiapers allow parents to reuse their outer diaper covers several times before laundering, and discard their disposable components without sending them to landfills. Parents can choose from a range of colors for the outer reusable shell of the gDiaper, and then line this cloth outer layer with either a flushable and 100-percent biodegradable "gRefill" or a reusable "gCloth."

"Winning Green America's People's Choice Award is the most rewarding accolade we could receive. Nothing means more to advancing the environmental cause than the collective voice of individuals calling for and believing in change," says Kimberley Graham-Nye, president of gDiapers.

Kimberley's husband, Jason Graham-Nye, gDiapers' CEO, learned of his company's win while on a trip to the United Kingdom to launch gNappies, the British version of gDiapers. "We couldn't have done it without



courtesy of gDiapers

*gDiaper founders Kimberley and Jason Graham-Nye,  
with their gDiaper-wearing baby.*

all of the amazing moms and dads committed to changing the world, one diaper at a time," he said.

Contact: gDiapers, 866/55-FLUSH,  
[gDiapers.com](http://gDiapers.com).

## Canvas Dreams Wins Green Business Leadership Award

The more that green businesses work together to solve problems, the sooner the entire economy will go green. That's why Green America created the Green Business Leadership Award to recognize companies that not only run a green operation, but also work to build the green-business community. Each year, green businesses nominate and vote for one of their peers to win the award.

This year's Green Business Leadership Award goes to Canvas Dreams, LLC™, a Portland-based sustainable Web host. Canvas Dreams was one of the country's earliest Web hosts to use 100 percent wind energy to power its business. It donates a portion of its profits to nonprofits such as Patagonia Rising and Friends of Trees. And it features a permanent Sustainability Desk focused on

greening its office and operations, as well as an active telecommuting program and mass-transit reimbursement for staff.

"We are honored to receive this award," says David Anderson, principal of Canvas Dreams. "A primary goal of our company's Sustainability Program is to serve as an example from which other businesses can learn to adopt and incorporate sustainable principles and Web-based technology into their business model. This award signifies all that we have worked to achieve, and we will strive to continue our service to the green community as we move forward."

Contact: Canvas Dreams at 800/574-4299,  
[CanvasDreams.com](http://CanvasDreams.com).

## 2011 GREEN FESTIVALS™ Save the dates!

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Oct. 29–30 • San Francisco,  
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To reserve exhibit space, contact  
828/236-0324, ext. 300.

### Resolve to Take Action for a Green Economy in 2011

No matter what your hopes were for the elections in November, one outcome that we're all too likely to see is political gridlock.

That makes the work we do together—advancing social justice and environmental responsibility through economic action—more important than ever.

Resolve to take action with us all year long:

**1. By working together to close the filthiest coal-fired power plants, the US can work to meet its climate goals—without one new piece of legislation.** Sign onto our campaign demanding that Southern Company—one of the largest utilities in the US and also one of the largest American polluters—embrace clean energy solutions: [GreenAmerica.org/takeaction/Southern](http://GreenAmerica.org/takeaction/Southern).

**2. By creating Clean Energy Victory Bonds (CEVBs), the US can finance the next big wave of solar and wind—without one penny of taxpayer dollars.** Our Climate Action team is working with Congress to enact CEVB legislation. Help make it happen by signing our petition at [GreenAmerica.org/takeaction/CEVB](http://GreenAmerica.org/takeaction/CEVB).

**3. By focusing on energy efficiency, we can help every American family save hundreds or thousands of dollars a year—better than a tax break, since it will happen year after year with no Congressional vote required.** Reduce your energy use by 50 percent in five years. Learn how at [GreenAmerica.org/go/EfficiencyFirst](http://GreenAmerica.org/go/EfficiencyFirst).

**4. By accelerating the transition to clean energy, we ensure the next big wave of good jobs.** Be on the lookout for



Denise Hamler

*A pair of Green Americans at the Takoma Park Festival in Takoma Park, MD.*

the May/June *Green American* focused on green jobs, and sign up for our e-newsletter at [GreenAmerica.org](http://GreenAmerica.org) to keep up to date on our actions for clean energy.

**5. By going local and organic with our food, and rebuilding local food systems, we can make sure there is healthy, affordable food for all.** Stay tuned for the July/August *Green American* for the latest on the local food revolution, and visit [GreenAmerica.org/go/goodfood/](http://GreenAmerica.org/go/goodfood/) for "how to" food-related articles on everything from composting to canning.

**6. By choosing Fair Trade, we can help families around the world lift themselves out of poverty.** Visit [FairTradeAction.org](http://FairTradeAction.org) to join our Fair Trade

campaigns and to sign up for our Fair Trade Alliance to get free resources and ideas for bringing Fair Trade to your city.

**7. By switching to community banks and credit unions, we can take support away from the mega-banks who were at the center of the global economic crisis—and invest in our local communities.** Our new community investing guide will be available in February. Learn more at our Web site [CommunityInvest.org](http://CommunityInvest.org).

**8. By supporting green businesses, we can rebuild our Main Streets and create new jobs.** Buy from local green businesses whenever possible. Find businesses across the country that we've screened for social and environmental sustainability in our *National Green Pages™*, available for \$9.95 + shipping by calling 800/58-GREEN, or free online at [GreenPages.org](http://GreenPages.org).

**9. By choosing green products and services, people can improve their health, live better and save money when they go green.** Sign up for our new green discounts e-newsletter at [GreenDeals.org](http://GreenDeals.org) for valuable discount codes and coupons to help you get the green products and services you need at a great price.

### MATCHING GIFT DEADLINE EXTENDED

Please help us ramp up our ambitious 2011 agenda with a vital donation to Green America. If you give before March 15, your donation to Green America will be matched dollar for dollar. So your gift to Green America of \$25 becomes \$50, or a gift of \$50 turns into \$100. Use the enclosed envelope, visit [GreenAmerica.org](http://GreenAmerica.org), or call 800/58-GREEN to donate.



**10. By using our consumer and investing power, we can make real, lasting change.** Steps forward include Home Depot shifting to sustainably harvested wood and other eco-friendly products and Ben & Jerry's committing to be 100% Fair Trade with its flavors by 2012. Let's keep up the pressure on Hershey's to go Fair Trade. Visit [FairTradeAction.org](http://FairTradeAction.org) for details.

Americans can and do come together for clean energy and jobs, healthy food, a fair deal for all, and financing systems that rebuild our Main Streets. As we work together on strengthening local businesses and local communities, we're also building alliances across political divides, reknitting the fabric of our country. We have powerful tools at our fingertips for accelerating the shift to a just and sustainable economy.

## Alcohol and Health Insurance Industries Under the Microscope

Our ResponsibleShopper.org researchers tackled the alcohol and health insurance industries over the last few months, and we uncovered some pretty disturbing information.

As a nation, Americans spend more than \$100 billion a year on alcohol. The industry has a powerful lobby that has allowed them to skirt some regulations for other beverages. For example, nutrition labels, which are required on most foods and beverages, are not required on alcoholic beverages, so you won't be able to know how many calories or how many grams of sugar you're consuming just by looking at the bottle.

Large breweries are also harming the environment. Anheuser Busch is listed as number 40 on a 2010 University of Massachusetts at Amherst list of the 100 worst polluters in the world.

However, it's not all bad news. Many alcohol companies are introducing environmental initiatives, such as Diageo—parent company of such popular brands as Bailey's, Hennessy, and Johnnie Walker—which has been building a bio-energy facility in Scotland that will cut the company's annual carbon emissions by 56,000 tons. And Heineken has pledged to cut its brewery emissions by 40 percent by 2020.

Responsible Shopper researchers also looked into the health insurance industry, which seems to be on everyone's mind lately. There were more than 50 million uninsured Americans in 2010, and for those people

lucky enough to have health insurance, getting coverage is often a bumpy ride. So it's probably not a surprise that our researchers dug up some dirt on this industry.

According to the American Medical Association, the nonprofit insurance company Anthem Blue Cross Blue Shield processes information incorrectly 26 percent of the time, meaning 1 in 4 of claims filed may not be processed correctly.

Kaiser Permanente is one of the highest earning insurance companies, yet it is also a nonprofit, so unlike most insurance companies, Kaiser doesn't need to pay taxes on its profits. Many health insurance industry reform advocates question Kaiser's nonprofit status and are urging state governments to reconsider its tax exemptions.

ResponsibleShopper.org examines the social justice and environmental practices of the world's largest corporations in over 30 industries and ranks them accordingly. It's a one-stop-shop where consumers can learn about how their hard-earned money will be used by the companies at which they shop.

Find more about the alcohol and insurance industries at [Responsibleshopper.org](http://Responsibleshopper.org).

Contact: [ResponsibleShopper.org](http://ResponsibleShopper.org).



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Igor Vorobyov/iStockPhoto.com

# Danger Calling?

Read on before you dismiss the warnings about cell phones. There's real cause for concern behind the industry smokescreen.

**T**his is the first time I've written an introduction to one of our Green American features addressed directly to you, our members. I've always been content to let the subjects of our articles do most of the talking. But when it comes to cell phones, I don't want to just dole out research. If I could, I'd knock on each of your doors and ask you to take care with how you're using these devices.

Don't get me wrong. I like cell phones. I appreciate being able to catch my constantly on-the-go family members anytime I need them. I was grateful to have one with which to call for help after a distracted driver plowed into the side of my small car last year. And don't get me started on the upside of being able to

play Tetris while waiting for the dentist.

But all of us at Green America, and several members, have been wondering for a while whether there was something to the reports that were trying to connect these nifty little gadgets with brain cancer. We did some preliminary research, which indicated there just might be.

So in the last issue of the Green American, I wrote a brief about how the city of San Francisco is taking precautions when it comes to cell phone radiation and is requiring its retailers to prominently display the specific absorption rate (SAR) of the cell phones they sell on store shelves. SAR is the amount of radiation a cell phone causes a user's body to absorb.

The response from some of you wasn't pretty, though the letters were polite and

written by thoughtful, smart people.

Member Julie Ebersole wrote, "As a Green American who also treasures the application of rational thought and scientific evidence to all areas of life, I am dismayed to see Green America giving credence to the fear of cell phone radiation."

"Come now—give us a break," added Jack Ryan, a longtime member. "I guess it would be harder to sell magazines or raise money telling everyone that there is no conclusive evidence linking [cell phones] to higher tumor rates."

Was there something to all this concern that Green America's editorial staff had put on our tinfoil hats and gone off the deep end? Should I have decided against running the San Francisco piece, with its implication that people may have something to fear from cell phone radiation? Were we just dead wrong?

So we decided to tackle the subject in depth. I expected us to turn up some inconclusive evidence that excessive cell phone use may be linked to some ill health effects, and people should be a bit careful about talking on a cell for hours a day—but really, there's not a lot to worry about.

Then we dug into the research. And what we found was truly frightening.

## A New Silent Spring?

Our initial research uncovered enough information to make me rethink my cell phone habit.

- A 2009 meta-analysis of 11 studies, published in *Surgical Neurology*, found that using a cell phone for ten years or more "approximately doubles the risk of being diagnosed with a brain tumor on the same (ipsilateral) side of the head as that preferred for cell phone use."

- A 2009 analysis of 23 studies, published in the *Journal of Clinical Oncology*, found that people who used cell phones for ten years or more had a 10-30 percent higher chance of developing cancer than those who rarely or never used cell phones.

- When the Dutch city of Alphen aan den Rijn witnessed an epidemic of sick deciduous trees five years ago, local officials asked researchers at Wageningen University to study the phenomenon.



In late 2010, the scientists released the results, which found that exposing various types of local deciduous trees to radio-frequency radiation emitted by wireless Internet networks (the same type of radiation as that from cell phones) resulted in bark fissures, leaf discoloration, and “various forms of tissue death” in all of them.

Thanks to studies like these, the French government has made it illegal to market cell phones to children, and it has banned cell phones in public schools. The reason for the latter is not to prevent students from talking or texting during class, but to “apply the ‘principle of precaution’ in the absence of guarantees that the electromagnetic radiation emitted by mobile phones is perfectly safe for young children,” according to *ComputerWorld UK*.

Israel has legally mandated that cell phone manufacturers display the SAR level on every cell phone for sale in the country. And the governments of Finland, Switzerland, Germany, the UK, Canada, and Russia have also issued warnings advising cell phone users, especially children, to use headsets to minimize exposure to radio-frequency radiation.

The US President’s Cancer Panel report, released in 2010, advises taking care with cell phones, stating that their increasing use “is of great concern.” While the report is careful to state that no link has been proven between cell phones and cancer, the authors write that more studies are “urgently needed” to assess safety.

All of this was just the tip of one large, alarming iceberg, a fact I discovered when I talked with Dr. Devra Davis.

A lecturer at Harvard and Georgetown, Davis has a rock-solid reputation as one of America’s top-tier scientists (see p. 16). She initially dismissed the concerns about cell phones and cancer as overblown—until she looked into the studies behind the warnings and saw that researchers she respected had authored them. So Davis spent years poring over every study she could find on cell phones and cancer. The results “astonished” her.

“Every case-control study that’s ever

looked at people who’ve used a cell phone heavily for ten years or more finds a doubled risk of brain tumors,” she told me. When I questioned her word choice, she said, “Every study that’s large enough to find an effect finds one.”

The results of this work culminated in her new book detailing the evidence she found warning of the potential dangers of cell phone radiation. *Disconnect: The Truth About Cell Phone Radiation, What the Industry Has Done to Hide It, and How to Protect Your Family* (Dutton, 2010) is just as courageous and groundbreaking as Rachel Carson’s *Silent Spring*. It could save even more lives.

“Invisible radio-frequency radiation can alter living cells and create the same types of damage that we know increase the risk of cancer and neurological disease,” she writes in *Disconnect*. “Neither the danger nor the safety of cell phones is yet certain. How we manage that uncertainty could avert a global public health catastrophe.”

### **Plant Doubt, Make More Money**

When it comes to cancer and cell phones, one thing is certain, say Davis and others: consumers can’t rely on cell phone companies for protection.

“The telecom industry is running a classic tobacco campaign,” said one Washington political insider who asked to remain anonymous. “Buy more time; make more profit off a product that could be causing major health problems for millions of people. The model is well, well worn: Deny, deflect, distract. First, create a false impression of total safety and when the scientific evidence builds up, challenge the science and plant doubt.”

It took decades of anecdotal evidence, scientific studies, and consumer and investor pressure to get the tobacco industry to come clean about the links between smoking and cancer. And we’re seeing the story repeat itself with hormone-disrupting chemicals in consumer products.

In 1998, I read Dr. Theo Colborn’s acclaimed book, *Our Stolen Future*, detailing what endocrine disrupting chemicals were and what kind of harm they could cause. Back then, the idea of an


endocrine disruptor was foreign to most people. Companies using suspected endocrine disruptors in their products continued to do so, armed with the fact that no one had “proven” that these chemicals were dangerous.

And still, somehow, Colborn’s message got out to the world.

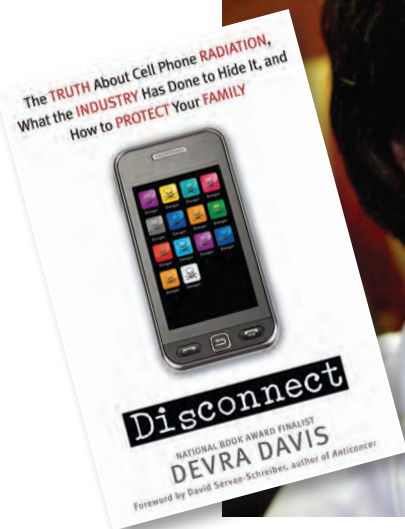
Twelve years later, has science proven without a doubt that Colborn was right about endocrine disruptors? No. Have we learned enough about these chemicals to know that we probably shouldn’t be exposed to them? Hundreds of scientific studies say so, though the government and industry have taken only very limited protective action.

So it’s everyday citizens who have used their economic power to pressure corporations like ConAgra to phase the endocrine disruptor bisphenol-A (BPA) out of food packaging (see p. 9), SIGG and EvenFlo to stop using BPA in beverage and baby bottles, and Appleton Papers to phase BPA out of its thermal paper products (see p. 22). Canada banned its use in consumer products outright, and some US states have banned its use in children’s products. Precaution, or taking protective action even in the absence of proof that something causes harm, is becoming the rule when it comes to hormone disruptors, not the exception.

We can do the same with cell phones. We can demand responsibility from the telecom industry and pressure it to produce safer phones and take other steps to protect the public.

Read our interview with Dr. Davis. Take it to your families, your schools, your book clubs, and your communities, and tell people there’s good cause to be worried about cell phone safety. Taking just a few simple steps now (see p. 17) can go a long way toward protecting ourselves and our vulnerable children—but we have to stop doubting Cassandra first. Because unlike the soothsayer who predicted the fall of Troy but couldn’t get anyone to believe her, this Cassandra has a fistful of scientific evidence backing her up. And I for one am not willing to bet my children’s lives that she’s wrong. 

—Tracy Fernandez Rysavy, Editor



Paula Beezhold

Dr. Devra Davis takes a comprehensive look at the cell phone industry and its potential links to cancer.

## A Leading Scientist Answers Your Questions (and Doubts) About Cell Phone Hazards

Over her distinguished career as a scientist, professor, and author, Dr. Devra Davis has racked up her share of laurels. With a Ph.D. in science studies and a post-doctoral Master's of Public Health in epidemiology, Dr. Davis has worked for the National Academy of Sciences, and as a senior advisor in the US Department of Health and Human Services. She was appointed by former President Bill Clinton to his Chemical Safety and Hazard Mitigation Board. And she served as a lead author of the Intergovernmental Panel on Climate Change, which was awarded the Nobel Prize in 2007 along with former Vice-President Al Gore. She was the founding director of what is reputed to be the world's first Center for Environmental Oncology at the University of Pittsburgh, and she currently lectures at Harvard University and Georgetown University.

Her book, *When Smoke Ran Like Water* (Basic Books, 2002), was a finalist for the National Book Award, and her book *The Secret History of the War on Cancer* (Basic Books,

2009) is being used at major public health universities, including Harvard, Emory, and Tulane.

But it's her 2010 release, *Disconnect: The Truth About Cell Phone Radiation, What the Industry Has Done to Hide It, and How to Protect Your Family* (Dutton, 2010), that may put her in the history books as the 21st century's Rachel Carson. In it, Davis examines the controversy surrounding cell phone use and its possible link to brain cancer and other human health impacts.

Like many of us, Davis was initially skeptical about the ties between cell phone use and cancer. But after spending the past seven years poring over the research, she's become one of the most vocal and credible voices warning about the dangers of cell phone radiation.

Green America editor Tracy Fernandez Rysavy talked to Dr. Davis about why she's concerned about widespread cell phone use, and why it's so vital to protect our children from cell phone radiation, even in the face of some uncertainty of harm.

**GREEN AMERICA/TRACY FERNANDEZ RYSAVY:** What made you start to worry about the connection between cell phones and brain cancer?

**DR. DEVRA DAVIS:** I initially figured this was just one of those issues that attracts people who aren't very credible. There's a kind of arrogance that those of us who've been at the center of American science tend to have: I frankly assumed if there was anything important to know about cell phones and cancer, I would of course know it!

Then I came across a report by Sir William Stewart of the Stewart Commission of Great Britain. Sir William has been the president of the British Association for Science, the president of the Scottish National Academy of Science, and he's one of Britain's most distinguished scientists. He was an advisor to Margaret Thatcher. He's very highly regarded among both conservatives and liberals in England—a scientist's scientist. And he issued a warning in 2000 that said children should not be using cell phones.

I thought, "Well, the British, they're eccentric, you know."

Then I got a hold of the report, and I was flabbergasted.

Sir William and his colleagues were concerned about the biological properties of cell phone radiation, which I knew nothing about at the time. The report cited studies showing that pulse signals from cell phones could damage DNA and could weaken the blood-brain barrier.

**TRACY:** So then you looked through seven years' worth of research on this topic. What have the studies that have found possible links between cell phones and cancer had in common?

**DR. DAVIS:** Every study that's ever looked at people who've used a cell phone heavily for ten years or more finds a doubled risk of brain tumors.

**TRACY:** Every study?

**DR. DAVIS:** Yes. Every single study that is large enough to find an effect finds one.

The majority of studies on cell phones and brain cancer have been negative—



they've not found anything. Those studies have defined a user as a person who averaged one call a week for six months. And the average person in the study used a phone for less than six years.

Brain cancer takes a minimum of ten years to develop. So if you're studying a bunch of people who've made very few phone calls and have used a phone for a very short period of time, of course you're not going to find anything. It would be shocking if you did.

Today, three out of every four children under 12 uses a cell phone, and many households have eliminated their landlines and use cell phones exclusively. There are now nearly five billion cell phones in use worldwide.

Another thing those studies have had in common is that they've almost all been independently funded. In other words, when funding comes from industry, it really tends to discourage results from being positive in terms of a link between cell phones and brain cancer. Now that's not to say that everybody who works for industry is on the take. But there are these subtle ways in which it affects conclusions.

There's a general reluctance on the part of scientists to agree that something is a problem, because then their research might be over. So the more uncertainty we can find, the more we need to continue doing the research. Uncertainty becomes a very convenient thing to perpetuate.

I say this as someone who's worked in science for more than 30 years. In the cases of asbestos and passive smoking, which I was involved in leading studies of at the National Academy of Sciences, it was a tremendous struggle before we could get results released suggesting there was a problem. The struggle arose not because of debates about the science of these hazards, but because of the political and economic influence of these highly profitable industries.

**TRACY:** You're not the first person I've heard compare the studies on cell phones and brain cancer to the struggle to prove that tobacco and asbestos caused harm.

## 11 Ways to Protect Yourself

Ninety-one percent of Americans and nearly 5 billion people worldwide use a cell phone. Increasingly, cell phones are becoming a vital part of our lives, functioning as our primary mode of personal and business communication as well as our calendars, cameras, MP3 players, and address books. It is hard to imagine a world where we didn't have all these functionalities at our fingertips. But at what cost to our health?

Here's what you can do to protect yourself from potential harm from radio-frequency radiation emitted by these devices:

- 1 ALWAYS USE A HANDS-FREE HEADSET OR THE SPEAKERPHONE SETTING WHEN TALKING ON YOUR CELL PHONE.** Some researchers say a wired headset, especially a "hollow tube" headset you can special-order—which will be labeled as such and uses hollow tubes rather than wires to conduct sound—is the best. But even a Bluetooth wireless headset will reduce your radio-frequency radiation exposure by several thousandfold.
- 2 KEEP THE PHONE OFF YOUR BODY.** Carry your phone in a purse or bag with the antenna (back of the phone) pointed away from you, not in your pocket or bra. When you're talking on it (with a headset or on speakerphone) put it on a table in front of you. Just a few inches can substantially reduce your radiation exposure.
- 3 TEXT INSTEAD OF TALKING.** Holding your cell phone away from your head to send text messages exposes you to less radiation than talking on it without a headset.
- 4 TURN IT OFF.** Phones only emit radio-frequency radiation when they're searching for or receiving a signal, so a phone that's off or in "airplane mode" is safe.
- 5 REPLACE CORDLESS PHONES WITH CORDED MODELS.** Cordless phones can emit as much radiation as cell phones, and the charging station constantly emits radiation.
- 6 USE A LOW-RADIATION CELL PHONE.** Unless you live in San Francisco, cell phone retailers aren't required to display the specific absorbency rate (SAR), or the amount of radiation a phone causes your body to absorb. Search [FCC.gov/cgb/sar](http://FCC.gov/cgb/sar) to find out the SAR level of your model, or consult the Environmental Working Group's online database: [EWG.org/cellphones](http://EWG.org/cellphones). But no matter how low the SAR of your phone is, it's still important to keep the phone away from your head and body whenever possible.
- 7 KEEP YOUR CELL PHONE, CORDLESS PHONE, AND WIRELESS MODEM AWAY FROM YOUR HEAD.** All three will expose you to radio-frequency radiation, so banish all three from the bedroom or, at least, keep them away from your head and body. If you must have wireless Internet, turn off your router when you're not using it, especially at night—a power strip with a timer can help.
- 8 KEEP YOUR PHONE FULLY CHARGED.** When a cell phone's signal strength is weak or blocked, it has to work harder—and consequently emits more radiation.
- 9 BE WARY OF DEVICES THAT CLAIM TO BLOCK EMF EXPOSURE.** A Google search yielded 236,000 results for "EMF protection," most of which were sites selling "protective" devices ranging from pendants and crystals to microchips and herbal remedies. Most experts agree that many are based on quasi-science and there's no evidence that they work. Some "EMF shields" for your phone can actually increase the amount of radiation that it emits, since they block the signal and the phone has to work harder.
- 10 DON'T GIVE CELL PHONES TO YOUNG CHILDREN AS TOYS OR PACIFIERS.** If you occasionally let your small tot play Pac-Man on your cell phone, put it into "airplane mode" so it won't search for a signal—which means it won't emit radiation.
- 11 TAKE CARE WITH OLDER CHILDREN.** Children are more susceptible to potential harm from radio-frequency radiation than adults. If you give your children a cell phone for safety reasons, also give them a headset and encourage them to text or use the speakerphone instead of putting the phone close to their heads.

—Victoria Kreha

# Kucinich to Introduce Cell Phone Bill



This past summer, Rep. Dennis Kucinich (D-OH), a frequent Green Festival™ speaker, announced his plan to introduce a bill aimed at making cell phones safer. The bill would create a new national research program to study cell phones and health, require an update to antiquated cell phone safety standards, and mandate warning labels on cell phones.

Kucinich has been working on this issue for the past few years, since he first became aware of the potential link between cell phones and cancer. In 2008, he called a Congressional hearing on the state of current research on cell phone safety—and telecom industry representatives refused to appear.

With the recent *Citizens United* Supreme Court ruling, which lifted

restrictions on corporate political donations, Capitol Hill watchers who support the bill fear that cell phone companies could dump millions of dollars into the political coffers of candidates running against those who embrace a precautionary stance on cell phone radiation. But that threat isn't stopping Kucinich, who is working on draft legislation that will likely be available for comment in 2011.

Kucinich says that Americans have the right to know just how much radiation our phones are emitting, he says, noting that requiring warning labels on cell phones could push the telecom industry in the right direction.

"Most people want to use their hard-earned money on things that are good for the environment and for our health. But we can't do that if we don't have the information to make the decision," says Kucinich. "If we knew which phones were more likely to make someone ill, we would buy a different phone, sending a clear signal to cell phone companies: 'We want you to develop technologies that are safer for us.'"

—Tracy Fernandez Rysavy

**DR. DAVIS:** In both of those situations, I noticed a pattern: First you'd have reports of harm of people. And then industry steps in to raise doubt of that harm.

Now with the publication of the tobacco papers, we have evidence of what went on, which is a campaign where the tobacco companies exaggerated doubt so they could keep selling their products.

A book by Dr. David Michaels called *Doubt Is Their Product* (Oxford University Press, 2008) talks about a phrase that appeared in a memo from the tobacco industry referring to the idea that smoking caused lung cancer: "As long as we can raise questions in people's minds, then we've succeeded."

That's the modus operandi here: raise doubt, confuse people.

**TRACY:** Let's get more specific about how cell phone radiation can damage DNA. There's a belief out there—which was published last fall in *Scientific American*—that cell phone radiation can't cause cancer, because it's non-ionizing radiation.

**DR. DAVIS:** That was a very unusual piece for *Scientific American* to run on several accounts, one of which was that it used language that science usually doesn't use. It said that it's "physically impossible" for cell phone radiation to have a biological effect that causes cancer, because it doesn't damage DNA by breaking chemical bonds.

Let's break that sentence down. First of all, yes, it's certainly true that cell phone radiation is too weak to break DNA. No one has ever suggested that

it does so like X-rays. In fact, X-rays are ionizing radiation. That means they break the chemical bonds that hold things together.

Non-ionizing radiation, by definition, cannot do that. That doesn't mean that it's safe. It may damage DNA in other ways.

The amount of power in a cell phone is several thousand times weaker than that of a microwave oven, but they both use the same frequency. A microwave oven will boil a cup of water in two minutes. And cell phones are being held next to your brain for hours a day.

Studies are showing that cell-phone radiation produces free radicals that we know can cause damage. It is destabilizing DNA, impairing the ability of DNA to repair itself. And we know it's causing weakening of the blood-brain barrier and weakening of cell membranes. All of these are biological impacts that can lead to cancer.

We also know you can get cancer without damaging DNA, as what happens with asbestos and hormone replacement therapy; these two agents cause cancer but do not directly damage DNA. So this idea that you can't have cancer because you don't damage DNA is wrong, on its face.

Finally, we know that cell phone radiation has profound biological effects from studies that have been done in cell cultures in animals and some experimental studies on humans. For all of those reasons, the *Scientific American* article was really mistaken. It's incredible that it took such a strong tone.

**TRACY:** I want to go back to the blood-brain barrier, because I thought that was so important when I read your book. Can you explain what it is, and how cell phone radiation affects it?

**DR. DAVIS:** The blood-brain barrier is a natural barrier that protects the brain from undesirable materials that could enter it through the bloodstream.

I talked to Dr. Allan Frey for my book, who performed a study involving the blood-brain barrier with the Office of Naval Research. What he basically did was to take a rat, inject blue dye into its veins, and show that while everything



## Who's Most At Risk?

else inside the rat turned blue, the blue dye didn't get into the brain. That showed we have a blood-brain barrier protecting the brain.

Then what he did was to perform the same experiment exposing the rat to a microwave-sized, pulsed digital radio-frequency signal before injecting the dye—and the brain turned blue. That was pretty powerful.

And then he was told by his superiors to stop working in that area if he expected to continue getting support for his research.

Well, a pseudo-replication of this study was done by a group connected to industry where they injected the dye into the abdomen, not into the bloodstream. The brain, of course, didn't turn blue, so they concluded that Frey was wrong. That's the kind of misleading science that has characterized this field.

The blood-brain barrier work, by the way, is really relevant to Green America's work on toxins. Since radio-frequency radiation weakens the blood-brain barrier, that means you will enhance the uptake of toxicants through the brain by using a cell phone. So all of our policies to protect us from toxins will do nothing if we do not also deal with this exposure.

**TRACY:** Why is it that we have to worry most about children and cell phones?

**DR. DAVIS:** Children are not just little adults. They have thinner brains, they have thinner skulls, and their brains contain more fluid. The more fluid something contains, the more vulnerable it is to microwave radiation. After all, a cell phone is just a small, two-way microwave radio.

Children today are growing up in a sea of radio-frequency radiation that did not exist even five years ago. They need to be protected.

**TRACY:** I was surprised to learn that men who'd like to become fathers also need to be careful of cell phone use.

**DR. DAVIS:** Yes. If you take sperm from healthy men and split it into two samples, it will die naturally, because sperm don't live that long. But sperm



*These computer models from the University of Utah show how radio-frequency radiation from cell phones passes further into the brain of a child than that of an adult. Research that Dr. Om P. Gandhi and Dr. Devra Davis are currently working on indicates that children may be exposed to twice as much radio-frequency radiation from a cell phone as an adult.*

Source: Brain graphics courtesy of Professor Om P. Gandhi, Univ. of Utah; photos from iStockPhoto.com

exposed to cell phone radiation will die four times faster, and they will develop biological signs of damage that we know indicate they've been harmed.

Studies showing sperm damage in human males have been done by leading researchers in Australia, in Greece, in Turkey, and in the US at the Cleveland Clinic. In addition, studies have followed men who have reduced sperm count and found that those who use their phone for four hours a day have half the sperm count of others.

Finally, studies in Greece have shown that exposing fruit flies to cell phone radiation doesn't kill them. But when you expose them and then magnify them under a microscope, you can see that their testes and ovaries are shrunken.

These studies have also led to researchers raising the issue of whether cell phone radiation has anything to do with the hive collapse phenomenon that's endangering honeybees.

**TRACY:** One thing you point out in your book that I think people don't realize is that industry is issuing warnings about cell phone radiation and human health—though very quietly.

**DR. DAVIS:** The ultimate indication of this now comes from the insurance industry. You cannot buy secondary insurance for cell phone damages from Lloyds of London, Swiss Re, or many of the companies that provide this insurance.

And the cell phone companies are all issuing fine-print warnings in the paperwork that comes with all the smart phones. What are you supposed to do if you have an iPhone 4 that says you can't put it into your pocket without exceeding the FCC exposure guidelines?

**TRACY:** And many of the warnings also recommend holding your cell phone about an inch from your head.

**DR. DAVIS:** Yes, go ahead and try getting everyone to do that.

# A Call for Corporate Responsibility

People around the world are exposed to radio-frequency radiation every day from cell phone towers, wireless Internet routers, cordless phones, and even the otherwise beneficial “smart meters.” Only time will tell for sure what the health effects will be. It’s up to us to demand safer, low-radiation forms of these devices—especially cell phones, which are more dangerous because they are held directly against the body. Green America supports Dr. Devra Davis’s Campaign for Safer Cell Phones ([EnvironmentalHealthTrust.org](http://EnvironmentalHealthTrust.org)), which is calling on government and industry to take the following steps:

1. Require that warning labels about safer cell phone use appear prominently on cell phones.
2. Require that cell phones be sold with speakerphones and earpieces.
3. Increase public awareness about the specific absorption rate (SAR) of all phones and ways to reduce exposures to radiation.
4. Conduct a major review and revision of safety standards, incorporating state-of-the-art science that takes into account the fact that billions of cell phone users are people who are much smaller and younger than the heavy-set tall man on which standards are now based. And support a major multidisciplinary independent research program on cell phones.
5. Develop recommendations about lowering direct radiation to the head.
6. Conduct a national survey of radio-frequency radiation exposure (the last one was done in 1980), and develop monitoring of heavy cell phone users by creating access to cell phone billing records to qualified researchers.



**Web exclusives:** For copies of the health warnings that are now appearing on cell phones, for more about the Campaign for Safer Cell Phones, and to get sticker templates for your cell phone to remind you to keep it away from your head, visit [GreenAmerica.org/go/cellphones](http://GreenAmerica.org/go/cellphones).

**TRACY:** I know your campaign ([EnvironmentalHealthTrust.org](http://EnvironmentalHealthTrust.org)) is asking for more visible warnings directly on the phones themselves. What would this accomplish?

**DR. DAVIS:** It would accomplish two things: First, people would have to look at this warning every time they picked up their phone and think about how they have to keep it away from their body and their brain.

Second, it would also help the phone companies reduce their liability, so it’s not a losing proposition for them.

**TRACY:** Would it also push them to create safer phones, too?

**DR. DAVIS:** Yes. The newer phones now have the antennas on the back, pointing away from the body when you talk on them. That feature is safer than in the past, when the antennas were on the front.

But the newer phones are also more dangerous, because if you turn that phone and keep it in your pocket with the antennas pointing toward your body, as that phone is searching for a signal—which is what they do when they’re on—it’s pumping radiation into you.

Plus, studies indicate that the newer 3G and 4G phones may be even more harmful than the 2G phones. *[Editor’s note: One 2008 study cited in Davis’ book found a ten times higher rate of damaged DNA in human cells exposed to radio-frequency radiation from 3G phones compared to 2G phones.]*

**TRACY:** Can they make a low-radiation phone that isn’t as much of a concern, or is any radiation bad for us?

**DR. DAVIS:** They can make very low-radiation phones. But there’s no guarantee of safety, no matter how low the radiation is, if you’re going to use the phone next to your head for hours.

**TRACY:** How problematic is the fact that when the FCC [Federal Communications Commission] establishes threshold safety levels for radiation exposure from cell phones, it’s basing them on the SAM model?

**DR. DAVIS:** SAM stands for “standard anthropomorphic male,” and he was taken from the top ten percent of military recruits in the 1989. He was six-foot-three, weighed 220 pounds, and had an 11-pound head.

Most people in the world do not have SAM’s head. Radiation goes more deeply into a smaller head than a larger one. And today, three out of every four 12-year-olds, and half of all ten-year-olds, have a cell phone.

Plus, the safety standards for cell phones also presume calls last only up to six minutes. Our heads—especially children’s heads—are getting a lot more exposure than SAM would get. We need a major revision of the safety standards that takes into account that billions of cell phone users are much smaller and younger than SAM.

**TRACY:** One thing in your book that really worried me was that cordless home phones are emitting similar radiation to cell phones.

**DR. DAVIS:** Yes. And the base station is radiating all the time. When you hold the handset next to your head, you’re getting a whopping dose. We recommend that people not use cordless phones, and certainly not have the base station close to your bed.

**TRACY:** Which, of course, is where mine has been.

**DR. DAVIS:** Which is where most people’s is. I’ve actually replaced my cordless phones with corded landlines. In France, people are starting to buy them more, and the Israelis have recommended that people replace their cordless phones with corded phones.

The good news is that experimental studies show that good nutrition—literally exposing animals or cells to the natural hormone melatonin or vitamins A, E, or C before you expose them to radio-frequency radiation—may help repair



damage. So whatever you have done in the past, go forward with good cell phone practices, and good nutrition can help repair past damage.

**TRACY: How worried do we have to be about wireless Internet? Is it as much of a worry as cell phones?**

**DR. DAVIS:** No, it's not as big of a worry because we're not holding the wireless routers against our bodies. But again, distance is your friend. Your routers should not be located in your bedroom or anyplace where your family spends a lot of time. Turning wireless devices off at night makes sense because it protects health, saves energy, and reduces demand for energy grid access.

What I'm very concerned about now are children sleeping with phones under their pillows so they can text at night, and young girls are keeping phones in their bras.

**TRACY: I didn't know that was an epidemic!**

**DR. DAVIS:** Well, apparently, it's pretty common among teenagers and athletic women. Several physicians have contacted me about breast tumors in women right at the site where they've kept their phone.

**TRACY: Is there anything else you'd like to our readers to know?**

**DR. DAVIS:** Those of us working in this field want to encourage safer design. We want to encourage people to use cell phones in a safer way and to encourage more corporate responsibility. I am pleased that the businesses joining our Business Campaign for Safer Cell Phones are agreeing to provide headsets and simple warnings to all their employees. That's why I wrote my book and why I'm speaking around the world.

And I do think people need to use their phones less. I realize that cell phones are going to be driving economic forces. It's not like I want people to turn off their phones. It's not realistic. But we really do need a national conversation and a cultural change about a lot of aspects of cell phone use. 🌱



Bakaleev Aleksey, iStockPhoto.com

## Why It's Vital to Recycle That Cell Phone

**T**antalum. You've may never have heard of this rare metal, but it's inside your cell phone. Valued for its ability to resist corrosion and extreme heat, it's become a vital material in portable electronics. And it's directly linked to child labor and the civil war in the Democratic Republic of Congo (DRC), where millions of civilians have been killed or raped.

Tantalum is derived from a metallic ore called columbo-tantalite, or coltan for short. The United Nations (UN) states that coltan can be found in "major quantities" in the eastern areas of the DRC. Both the Congolese military and militarized rebel groups control mining operations, and many children toil for long hours in deep mine pits, often staying in these foul-smelling holes for days, says Annie Dunnebacke, who works on the Congo campaign at the human rights nonprofit Global Witness (GlobalWitness.org) and has visited the DRC mines.

"Competition over control of the mineral trade is not necessarily the primary reason the conflict started, but in recent years, it's become a primary reason warring parties are continuing to fight," says Dunnebacke.

DRC coltan mines are also located in eastern gorilla territory, destroying critical habitat and further pushing this already endangered species to the brink of extinction.

A new US law enacted in July may help encourage companies to avoid funding violence in the DRC. The law requires publicly traded US companies to disclose steps they are taking to ensure that any coltan, tin, and tungsten sourced from the DRC and neighboring



Mvembo Phezo Dizalele

*Child laborers mining coltan in the Democratic Republic of Congo.*

countries are "conflict-free." The new law also mandates independent chain-of-custody audits for these minerals.

Conservationists and human rights activists are calling on people to recycle their cell phones to help lessen the need for coltan, tin, and tungsten. Many US zoos accept and responsibly recycle cell phones via Eco-Cell (Eco-Cell.com). You can also drop off your old cell phones for recycling at any Green Festival™ (GreenFestivals.org) or at your local Best Buy retailer, which partners with responsible e-waste recyclers such as Electronic Recyclers International™. Or, send them to an "E-Stewards" recycler certified by the Basel Action Network (E-Stewards.org).

ProjectKopeg.com™ and Recycle Place.com™ also offer fundraising programs where groups earn cash for collecting and sending in 30 or more cell phones for recycling.

—Tracy Fernandez Rysavy

## Disposing of BPA-Ridden Receipts

I recently read the letter concerning bisphenol-A (BPA) contamination on store receipts (Nov./Dec. 2010). I had no idea! My question is: Is it safe to put thermal paper into the recycling bin, or will it contaminate the other paper?

I appreciate all your research—you're a great source of information!

Judy Gritzmacher  
Rock Hill, SC

**TRACY:** I'm so glad the information was useful for you, Judy. You definitely don't want to throw your thermal paper receipts into the recycling bin. Their problems aren't limited to the studies that have found BPA coating them. This kind of paper also contaminates the recycling stream, so it cannot be recycled. When it's made into new recycled paper, it creates brown spots. Plus, no one wants to spread a hormone disruptor like BPA around! I know it's painful, but your best bet is to throw them in the trash.

## Wanted: More Guidance on Efficiency Steps

In a recent issue ("Efficiency First!," Nov./Dec. 2010), the magazine listed "10 Easiest Ways to Cut Your Energy Use in Half," which is super-interesting and helpful! I was wondering if you could tell me what data sources you used? I have been having problems finding consistent savings percentages for some

## Appleton Papers Announces BPA-Free Receipt "Label"

**Y**ou've gotta love responsible companies. In the Nov./Dec. issue of the *Green American*, I answered a letter from a reader concerned about the news that many store receipts are coated with bisphenol-A (BPA). BPA is a hormone disruptor that has been linked to fetal development problems, obesity, and cancer. Three studies conducted this summer found BPA on store receipts printed on thermal imaging paper (the kind where if you scratch it, it leaves a mark), and another found that dollar bills are being contaminated by BPA, likely from thermal paper receipts, as well.

Appleton Papers, Inc., one of the nation's largest manufacturers of thermal imaging paper for receipts, phased BPA out of all of its thermal papers back in 2006. But since Appleton's thermal paper looked identical to BPA-coated thermal paper from other manufacturers, there was no way for customers to know whether a receipt was contaminated with the chemical or not—until now.

Shortly after the last *Green American* started arriving in your mailboxes, Appleton announced that it will now embed small red fibers into its thermal receipt paper, making it easy for people to spot BPA-free receipts at the store. This technology is similar to the small red and blue fibers embedded in US paper money. The company says the red fibers are now in 75 percent of its thermal receipt paper and will be in all of it in the first quarter of 2011.

When you shop, ask store managers if their thermal receipt paper is from Appleton ([www.AppletonIdeas.com](http://www.AppletonIdeas.com)). If not, explain why it should be, and tell them you'll be looking for those little red fibers.

—Tracy Fernandez Rysavy, Editor

of these energy-use reduction actions—often I find different numbers reported by different sources. Would you recommend the sources that you used for additional action items (including some of the "advanced" action items you mentioned)?

Belinda  
e-mail

**TRACY:** The average savings percentages for a given energy-efficiency step are indeed all over the place if you're looking at a variety of sources. The primary reason

may be that each source is based on a different "average home"—our percentages were based on an average US home using 11,000 kWh electricity and 19,000 cubic feet of natural gas per year.

Much of our information came from Paul Scheckel's book, *The Home Energy Diet* (New Society Publishers, 2005), the US EPA Web site ([EnergyStar.gov](http://EnergyStar.gov)) and the nonprofit American Council for an Energy Efficient Economy ([aceee.org](http://aceee.org)), all of which we recommend.

Scheckel's book, in



TRACY  
FERNANDEZ  
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particular, is filled with well-written advice on how to take specific steps to make each room of your home airtight. Green America printed an interview with Scheckel—who has been working in the energy-efficiency field for more than 20 years—in our 2008 energy-efficiency article series (also a good source for more details): [GreenAmerica.org/pdf/CAQ75.pdf](http://GreenAmerica.org/pdf/CAQ75.pdf).

The ACEEE's regularly updated *Consumer Guide to Energy Savings* is also a terrific how-to guide to efficiency.

## Finding a Good Bank

How can I locate a community development bank in my area?

Mark  
Newport, KY

**TRACY:** I'm so glad you asked. Visit our online database at [CommunityInvestingCenterDB.org](http://CommunityInvestingCenterDB.org) and search by state to get a list of community development banks and credit unions that serve your area, as well as loan funds and venture capital funds. (Our new community investing guide, coming in February, will help, too.) If you can't find one that's convenient for in-person transactions, many offer online banking. Kentucky's Louisville Community Development Bank (MoreThanABank.com) may be a great place for you to start. It only offers CDs, but some have the accessibility of savings accounts.



Please send your letters to: Editors, Green America, 1612 K St. NW, Ste. 600, Washington, DC 20006. Or e-mail [editors@GreenAmerica.org](mailto:editors@GreenAmerica.org). Letters used in this column may be edited for length and clarity.





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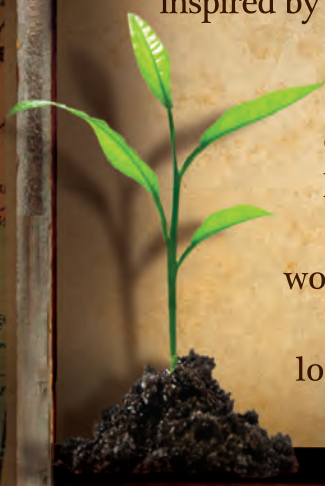
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