Making Everything Easier!™

Green Gadgets FOR DUMMIES®

Learn to:

- **Choose environmentally friendly gadgets and dispose of gadgets more responsibly**
- **Understand product labels and avoid "greenwash"**
- **Calculate how much energy your gadgets consume**
- **Offset your carbon footprint**

Joe Hutsko
JOEyGADGET.com

Foreword by Tom Zeller Jr., Editor, *New York Times*

Green Gadgets FOR DUMMIES®

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by Joe Hutsko

Foreword by Tom Zeller Jr.
Editor, Green Inc.
The New York Times

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About the Author

Joe Hutsko lives in Ocean City, New Jersey and blogs about green gadgets for the Green Inc. section of the *New York Times.* For more than two decades, he has written about computers, gadgets, video games, trends, and high-tech movers and shakers for numerous publications and Web sites, including *Macworld, PC World, Fortune, Newsweek, Popular Science, TV Guide, The Washington Post, Wired,* Gamespot, MSNBC, and Salon.com. You can find links to Joe's stories on his tech blog, JOEyGADGET.com, and on his green gadgets blog, gGadget.org.

As a kid, Joe built a shortwave radio, played with electronic project kits, and learned the basics of the BASIC programming language on his first computer, the Commodore Vic 20. In his teens, he picked strawberries to buy his first Apple II computer. Four years after that purchase (in 1984), he wound up working for Apple, where he became the personal technology guru for the company's chairman and CEO. Joe left Apple in 1988 to become a writer and worked on and off for other high-tech companies, including Steve Jobs' one-time NeXT. He authored a number of video game strategy guides, including the best sellers *Donkey Kong Country Game Secrets: The Unauthorized Edition,* and *Rebel Assault: The Official Insiders Guide.*

Joe's first novel, *The Deal,* was published in 1999, and he recently rereleased a trade paperback edition of it with a new foreword by the author (`tinyurl.com/hutskodeal`).

Dedication

This book is lovingly dedicated to my closest friend, considerate neighbor, and frequent dog walker and supper-supplying feeder, Frances Hutsko. Thank you, Mom, for being you.

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This book wouldn't have my name on its cover if my literary agent, Carole Jelen, hadn't reached out on LinkedIn.com last summer to say hello after we had fallen out of contact since meeting in the 1980s, when I was working at Apple. Thank you, Carole, for pitching me to Wiley acquisition editor Amy Fandrei — and thank you, Amy, for saying yes!

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Foreword

The very idea of "green gadgets," to many, might seem an oxymoron. After all, it is a fundamental tenet of the environmental movement that less stuff is better, and that consumerism — the thing that makes us want to have that snazzy new cell phone, or to covet that nifty new digital camera — is at odds with maxims like "reduce, reuse, recycle."

There's some truth to this paradox — but it is hardly the only way to frame the contribution that technology can make to a greener, cleaner world. Setting aside the efforts underway to develop large-scale, clean-energy technologies like wind and solar power, which promise to address the steady march of climate change, there remain myriad ways for ordinary consumers to make simple adjustments in how they live — and what they buy — to generate substantial environmental gains.

In many cases, gadgets can help. Sure, we could all do better to manage our electricity consumption at home — but what if there were a product that could provide detailed data on when and where we were being most wasteful? What if there were "greener" versions of the technologies — like computers and cell phones — that we use frequently, and upgrade regularly?

Of course, such technologies do exist, and that's part of what Joe Hutsko has assembled here: A guide to green gadgetry and how you can best deploy it to your own personal environmental advantage.

But this is not just a buying guide, and there's a key point in that: Making better, less wasteful use of the gadgets you already own, and finding sensible ways to reduce, reuse and recycle those things you no longer need, are first-order strategies for consumers seeking to limit their overall footprint.

So, too, is learning to understand the increasingly complex eco-friendly and energy-efficent labeling systems used to keep consumers informed. You'll find guidance on these matters here as well.

There is no magic wand — no magic gadget — that will neutralize consumers' impact on the planet. But I think few green advocates would quibble with the idea that every consumer can make simple, informed choices about the technologies they buy and the energy they use — and that these decisions, factored collectively, are an indispensable part of any environmental movement.

Tom Zeller Jr.
Editor, Green Inc.
the *New York Times*

Introduction

If you're in interested in finding out all about the latest environmentally and economically friendly gadgets and computers, if you want to use more efficiently the gadgets you already own, and if you want to know how to get rid of those gadgets in a responsible way, *Green Gadgets For Dummies* is the book for you.

Whether you're reading this book to get greener with gadgets to help save the planet — or just to save some green in your wallet — one thing is certain: Reading this book can help you achieve both goals at the same time. But this book can't cover everything there is to know about green gadgets the world over. Even the most ardent green gadget activist, thinker, blogger, designer, or enthusiast would be hard pressed to tell you everything there is to know about green gadgets. (There's just that much to know.) *Green Gadgets For Dummies*, however, gives you a running start along a much greener path.

About Green Gadgets For Dummies

Technology moves at the speed of light, and although high-tech companies were comparatively slow to jump on the get-green bandwagon, they're now falling all over each other in an effort to claim the title of World's Greenest Company that created the World's Greenest <insert gadget name here>.

I climbed aboard that get-green wagon 25 years ago as a household recycler when I lived in California. Though I'm a little older now, I'm also a lot wiser, but I'm as passionate as ever about finding, figuring out, using, and writing about green gadgets, gizmos, and high-tech gear. I've written this book to share that passion. Here are some of the things you can do with this book:

- Understand the role that gadgets play in affecting the environment
- Instantly take action to begin living a greener lifestyle with the gadgets and electronics you own
- Get a handle on green gadget factors to make the most energy-efficient choices possible when buying new mobile phones, computers, and other electronic devices

- Find ways to "do the right thing" by donating, gifting, trading, or selling working and useful but unwanted computers and other gadgets
- Properly dispose of broken or hopelessly useless gadgets and electronics with the smallest impact on the planet
- Protect your identity by securely erasing your personal information from gadgets and computers before getting rid of them

Foolish Assumptions

In writing this book, I made a few assumptions about you, dear reader. To make sure we're on the same page, I assume that

- You give a darn about the planet.
- You don't think we should live in caves, but you do believe we should be conscious about how we use energy to power our gadgets.
- You know your way around your Web browser.
- You're comfortable turning your gadgets and computers on and off, and you use them for the basic purposes for which they were intended.
- You want practical advice on making green gadget purchases and using the gadgets you own so as to save energy and a little money, too.
- You know that following that practical advice and saving energy will make a difference in the world but that you and your gadgets can't (unfortunately) completely save it overnight.
- You understand that products used to illustrate green (or not-so-green) gadget qualities don't constitute endorsements, unless otherwise explicitly stated, of said products and the companies that manufacture and sell them.
- You appreciate the speed at which technology-based products change, with newer, sleeker, better, faster models replacing previous versions in as little as a few months. (Which is to say, the products used to illustrate green gadget features, qualities, and behaviors might be replaced by newer models by the time you read this book.)
- You realize that it's therefore up to you to go online to find updated information about the companies and products described throughout this book.

- You know that keeping up with the topic of green gadgets and green technologies and trends (even as a full-time job, as it is for me) still can't make a guy the Ghandi of Green Gadgets. You will, accordingly, alert me to cool stuff you discover in your green gadget odyssey so that I can consider including it in the next edition of this book.
- You don't expect general green living advice, especially because you can buy, or might already own, the best book on the subject — *Green Living For Dummies,* by Yvonne Jeffery, Liz Barclay, and Michael Grosvenor (Wiley Publishing).

Conventions Used in This Book

To help you navigate this book as efficiently as the green gadgets it helps you get the most from, I use a few style conventions:

- Terms or words that I *truly* want to emphasize are *italicized* (and defined).
- Web site addresses, or URLs, are shown in a special monofont typeface, `like this`.
- Numbered steps that you need to follow and characters you need to type are set in **bold**.

What You Don't Have to Read

You don't have to read anything that doesn't pertain to what you're interested in. In fact, you can even skip a chapter entirely. I hope you don't, though, because I believe that reading all chapters can make your overall reading experience more efficient and (dare I say it?) enjoyable.

As for sidebars you encounter throughout this book, feel free to ignore them because they contain, for the most part, tangential thoughts, miniature essays, or otherwise forgettable blathering that you're just as likely to forget anyway after you read them. Ditto for any of the text you see alongside the Technical Stuff icon.

How This Book Is Organized

Because all *For Dummies* books are structured in a modular way, you're free to remove your seatbelt and roam about this one in whatever way you like. *Green Gadgets For Dummies* is split into six parts, and the book's table of contents can help you find the topic you're looking for. From there, you can go directly to the part, chapter, or section you're interested in and skip all the rest. You'll find no required reading here. In this section, however, I briefly describe which green-gadget-related information you'll find in each part.

Part I: Settling into a Green Gadget Mindset

In this part, I explain what green gadgets are (and aren't), describe the effect they can have on the planet, and tell you about the mostly good, though sometimes bad or ugly, effects they can have on the environment when they're improperly disposed of. I also give you a bunch of instant-action tips and steps you can take to get greener with the gadgets, gizmos, and other consumer electronics devices you tote on your person or use in your home or at work.

Part II: Getting Green with Gadgets You Own

Making the most of the gadgets you already own by using them more efficiently — and saving money by using less energy — is what it's all about in Part II, Alfie. From tweaking your mobile phone settings to turning off features you aren't using, this part is where you can find out how to do your part in reducing the toll your gadgets take on the environment.

Part III: Minimizing Your Computer's Carbon Footprint

Lowering your system's consumption can shave as much as $75 from your yearly electricity expense. You don't do it by using a screen saver to save energy (that's the type of myth I debunk in this part), but you can make adjustments to your Windows or Mac computer's power-saving settings to save energy for real. I also give you tips and tricks for reducing the number of energy-consuming things you connect to your computer, such as printers and mobile phones.

Part IV: Acquiring Green Gadgets and Gear

There's no other way to say it, so I'll just say it: Let's go shopping! Maybe you're looking for a super-efficient HDTV to replace that conked-out tube TV that finally gave up the ghost. Or, you might be in the market for the most environmentally friendly mobile phone (and wireless provider) money can buy. Chances are good that you'll find what you're looking for in these chapters.

Part V: Ridding Yourself of Gadgets the Green Way

You need to know all your options when the time comes to get rid of gadgets you no longer use. In this part, I cover organizations and take-back programs that can find grateful homes for your working but unwanted computer or mobile phone. I help you find the closest drop-off location for your fried notebook, and I also describe the many ways to properly dispose of your digital stuff.

Part VI: The Part of Tens

Here's where things start out a little kooky — in a good way. The first two chapters in Part VI contain a total of 20 cool green gadgets. The first 10 are green add-ons and accessories for your computer. The items in the second set — with the exception of one — aren't real products that you can acquire. Not yet, anyway. They represent the ten design finalists from the 2009 Greener Gadgets Conference, which I attended a week before finishing this book. The last two chapters are where you'll find ten green gadget buying tips and answers to ten frequently asked questions about green gadgets.

The companion Web site

Throughout this book, I provide several Web site URLs where you can go to find more information about companies, gadgets, and general green issues. To help you navigate to some of these places more easily, I have provided a list of links on the companion Web site. Just go to `www.dummies.com/go/greengadgetsfd` and click the link for whatever site you want to peruse.

Icons Used in This Book

What's a *For Dummies* book without icons pointing you in the direction of focused information that's sure to help you along your way? The icons you encounter throughout *Green Gadgets For Dummies* are tiny road signs to attract or steer your attention to particularly useful information — or, in rare instances, potential trouble.

The Tip icon points out useful nuggets of information that can help you get things done more efficiently or direct you to something helpful that you might not know about.

When you spot this icon, it grabs your attention so that I don't have to say something like "Remember: Unplug your cellphone charger when your phone is fully charged so that it doesn't continue to draw and waste electricity."

Danger, Will Robinson! When you see the Warning icon, you know to proceed with caution in regard to a topic, an issue, or a series of steps that it's cozying up next to.

This icon highlights actions you can take — now or in the future — to make you an especially greener person.

Techie types, such as me, wouldn't dream of missing these byte-size bits of nerdiness. Everyone else, feel free to skip them.

Where to Go from Here

If you want to know what defines a green gadget and how you can instantly take action on the ones you own, without a lot of preamble, Part I is the starting point for you. If you're looking to spend some green on a green smartphone, computer, or wind-up charger so that you can keep your gadgets alive when you hit that remote campground, by all means step right up to Part III. If you aren't quite sure what your carbon footprint is, dive in at the beginning to wrap your brain around the basics, which can help you understand the sum of the other parts contained in all the other chapters that await you in *Green Gadgets For Dummies*.

Welcome to the world of green gadget living!

Part I

Settling into a Green Gadget Mindset

"Russell! Do you remember last month when I told you to order 150 SMART phones for the sales department?"

In this part . . .

Understanding what makes a gadget green (or not so green) and how it affects the planet can give you a greater appreciation and confidence regarding your relationship with the gadgets in your life.

The first chapter in this part provides insight into how electronics products are manufactured, distributed, used, reused, and eventually recycled when they're no longer useful — and how all those tasks affect the planet. You find that the three Rs of green gadgets — reduce, reuse, and recycle — join forces with a fourth: rethink.

The second chapter lists numerous ways you can instantly get greener with the gadgets you own by taking steps to decrease energy consumption while increasing savings. The chapter also includes ways to reuse, repurpose, and properly recycle the gadgets you want to get rid of.