

Chapter 1

The New World of Green Careers

In This Chapter

- ▶ Making sense of where it all stands
- ▶ Understanding what the green economy really is
- ▶ Getting a handle on the opportunities within the green economy
- ▶ Discovering tactics you can use to find a green position

This is a very exciting time. We're in the earliest stages of a new economic era, and the first paths into this future are just beginning to be defined. Many more paths will emerge as new industries take form over time. To risk a metaphor, it's a bit like the Old West, with nascent opportunities beckoning those with the courage to strike out for them. Think of yourself as a pioneer in the first wave of many who will take this journey. As with any frontier situation, you must keep your wits about you as you find the right path through uncertainty to your chosen destination.

Transforming business-as-usual into a new green/clean/sustainable economy is likely to take decades, as new technologies are invented, tested, and adopted, as new policies are shaped and implemented, and as new behaviors become second nature. Each new element of the economy will become a stepping stone for the next level of innovation, just as the inventions of textile machines, steam engines, and ironmaking techniques led to a series of innovations during the Industrial Revolution. The economic landscape of the green future will be defined and shaped by the goals and actions put in place now that can turn our unsustainable way of life into a sustainable one.

Welcome, then, to the new Wild West of the career world. To understand why this world is different from the one you're familiar with, let's look at where we've been and how we got to where we are.

Taking a Step Back in Time

The Industrial Revolution brought incredible progress with an amazing number of breakthrough inventions, mechanized production methods, more-effective transportation methods, and newfangled contraptions. If you scan the inventions that have come on the scene since the Industrial Revolution, you notice that our lives have been forever changed by the advent of consumer goods, synthetic materials such as plastics and polyester, and electronic gadgets. Progress!

What we didn't know at the time, and haven't known for certain until recently, is that the factories that manufactured all the stuff we've come to love and need were also spewing out more human-generated carbon dioxide and other greenhouse gases in a shorter span of time than the planet had ever seen before. These emissions have created an unintended problem for our entire planet. With more emissions in the atmosphere, more solar heat is trapped, creating slowly rising global temperatures. (For more details on global warming, see Chapter 2.)

Looking back, we can also see that the Industrial Revolution set us on a path of pulling a tremendous amount of minerals, materials, and natural resources from our surrounding environment. Over time the United States and other industrialized countries turned to importing resources from other countries without regard to how our harvesting impacted the natural systems of their country or ours.

The modern economy's fuel habit is another part of the problem. We've grown accustomed to using as much fuel as we need to live very cushy lifestyles. In fact, the Center for Environment and Population (www.cepnet.org) notes in its recent U.S. Population Energy and Climate Change Report, that "while the U.S. represents about 5% of the global population, it consumes about 25% of the world's energy, and generates 5 times the world average of CO₂ emissions."

Where does this leave us? With the unpleasant knowledge that our lifestyle is utterly unsustainable. If we continue living the way we've been living, we'll run out of oil, forests, animals, and land at some point in the future. You might not live to see that day, but your kids and their kids might.

Thomas Friedman, in his book *Hot, Flat, and Crowded*, notes that the world's population is growing dramatically (the crowded part), with a larger and larger percentage of people around the world making enough money to strive for a decidedly American lifestyle (flat), in a world that's been heating up since the Industrial Revolution (hot).

It all adds up to a serious problem.

Understanding the Green/Clean/Sustainable Economy

We're now being called upon to take bold new actions to solve this problem that has the potential to cause catastrophic harm. The good news is that we have the technology and know-how to solve this problem. What we seem to lack is the political and personal will to make the necessary changes to bring our world back into a sustainable balance.

As this book outlines, innovative thinking and groundbreaking actions are occurring right now in many of the industries we depend on. Of course, the transformation we're likely to experience is not going to take us back to the lifestyles of past centuries. Instead, innovations will move us forward to a new way of living that has a much lighter *footprint* (impact) on the planet.

Before we proceed, let's take a look at a few key terms:

✓ **Green:** You've no doubt noticed that it's a word that gets thrown around a lot by the media, activists, and politicians. With the exception of companies that are *green-washing* (leading you to believe that their product or service is beneficial to the planet even though it's not), the people committed to solving this problem use *green* as shorthand for something that improves the state of the environment in a discernable way. It might refer to a product, industry, company, job, process, or organization that conserves energy and resources, generates clean, renewable energy, minimizes waste, eliminates hazardous materials, or restores the environment and biodiversity.

As new trends take hold, it's common for words to evolve quickly and fluidly, so keep these things in mind:

- No industry, company, or job is 100 percent green, though some are making impressive strides in the right direction. Making anything greener is a process that occurs over time.
- Some companies or initiatives may be described as light green (more casual, cursory, and surface attempts) or dark green (very serious, dedicated, and taking real action).
- Look not only at the final product, but delve into its entire life cycle. We must review the materials and processes that went into creating the product, how the product is used, and how it's disposed of at the end of its life.
- Our definition of *green* will evolve with new technology and regulations. As the definition becomes more stringent, the bar will be raised, motivating us to push for better results.



- As green ways become integrated and common, it's likely that the term *green* will fade away. Right now the term distinguishes new innovation from traditional ways. When green policies are standard, we won't need to call attention to them.

✓ **Clean:** Products, processes, and services that depend on renewable energy sources, minimize waste, and use natural resources judiciously are deemed to be clean. You'll often hear this term used to refer to clean energy or *cleantech*. If you look at the fine print on some cleantech Web sites you may find emphatic declarations that they are *not* green. Apparently they are attempting to distance themselves from a previous iteration of *green*, when green groups focused on advocacy or addressed issues of pollution control. Times have changed.

✓ **Sustainable:** Humans in industrialized cultures tend to live in ways that are unsustainable. In other words, we take far more from the Earth than it can regenerate in a reasonable amount of time. As a result, we're making it harder for future generations to have the same standard of living. To become sustainable we need to change our ways: We must find energy sources that are naturally renewable and create effective ways to handle our own waste so we don't foul the planet. One way to become sustainable is the triple bottom line approach — attending to the economic *and* social *and* environmental impacts of our choices.

In this book I use all three terms because the situation calls for all three. That said, it's not always feasible to include all three terms in every discussion. I may also use the word *green* as shorthand for the multi-faceted concepts that create green, clean, and sustainable ways of doing business.

The *green economy* refers to the industries that are producing greener products, using cleaner processes, and offering more sustainable services in an effort to move us toward a new standard. Some industries are farther along the trail than others. You'll be amazed at the activity in this new economy that some experts are already calling the New Industrial Revolution (http://en.wikipedia.org/wiki/New_Industrial_Revolution).

Thar's Green in Them Thar Hills

Are you depressed now? Does all that sound hopeless and impossible? Well, recall that the United States was built by people who took risks during challenging times under seemingly impossible circumstances.

- ✓ Colonists crossed oceans to settle in a land of opportunity.
- ✓ Pioneers traversed the plains and clamored over mountain ranges to reach the West Coast for the promise of gold.

- ✓ Inventors and businesses transformed the economic landscape by implementing innovations to create the industrial revolution.
- ✓ In just 15 years people overcame the incredible hardships of the Great Depression and won World War II.
- ✓ In less than a decade scientists set and reached the unbelievable goal of putting a man on the moon.
- ✓ The Internet, a geeky obscurity just 20 years ago, has completely transformed how we all do business, communicate, and live.

Innovative thinking has always led us to achieve amazing goals, reap astounding profits, and gain personal satisfaction and fulfillment along the way. Just as in previous eras, the opportunities that accompany our huge challenges are enormous, the innovations are inspiring, and the potential benefits are incredible.

Clarifying Your Place in the Green Economy

The transition from where we are now to where we need to be will require a large number of people playing a variety of roles. There are so many opportunities in this transformative process that it's impossible to track them all. The green economy experts I know say that tracking the entire green economy is like drinking from a fire hose.

To find your green career, you have to identify where your skills fit early in your quest. Although it may feel as though it's adding time to your journey, knowing your focus actually shortens your path to your green career. With a clear vision of your target industry and profession, you have a rudder you can use to steer your actions as you prepare for your job search. You'll know what information to read, what meetings to attend, what training to obtain, and who to contact to discover more about your chosen green career. Having this clarity saves you time, frustration, and missed opportunities.



Use the steps outlined in Chapters 4 through 6 to review your interests and skills from various parts of your life. That helps you identify the best way to apply your talents in the green economy. Don't worry if you aren't sure what's possible — you'll find a collection of industry profiles to explore to help you identify the industries that are likely to be the best fit for you.

Opportunities Are Everywhere

Some industries that contribute to the green economy are obvious: Renewable energy, green building, ecotourism, and natural resources are no doubt industries you've heard of. Others are not so obvious. In fact, I've made new green industry discoveries just while researching this book:

- ✓ Green ports
- ✓ Environmental education
- ✓ Waste-to-energy
- ✓ Green medical practice
- ✓ Organic/green textiles and fashion

The green industries that are likely to have the most impact are those that touch the parts of our lives that are so familiar to us that we take them for granted.

- ✓ Look at electricity. As you live now, you probably don't know exactly where your electricity comes from, how it was generated, or how it reaches your house to power your appliances. All you know is that when you flip that switch you have power. As our electric grid is redesigned and smart components are added that enable us to assess our power usage in real time, we'll develop a more conscious relationship with the power we use at home and at work. We'll know how much power we are using and which appliances are costing us the most money. With this knowledge we'll be in a much better position to conserve energy and save money.
- ✓ Another example is how we handle waste. When you put your trash on the curb, it disappears, never to be thought of again. In actuality, trash is taking up more and more landfill and polluting our world with toxins and materials that don't biodegrade. What we know about waste and how we handle it is likely to change dramatically as we move to a more sustainable world. New innovations will transform packaging to reduce waste at the front end, while new technologies will allow us to reuse and recycle more and more of the products we use at home and at work.

To grasp the range of industries that are becoming more sustainable and green, scan the industry profiles in Chapters 7 through 13.



The green economy is changing quickly. For nearly half the industries I researched, I found key announcements that had been made within the previous week or month. Even with the final last-minute check on the status of fast-changing industries, I know that the minute I turn in my final manuscript, the green economy will continue moving forward. It's the nature of the beast! But don't worry, I've got you covered. My Web site, Green Career Central, has

been tracking industry developments since this book was published. Visit www.greencareercentral.com/updates to discover what continues to unfold in your target industry.

Taking the Initiative: It's Up to You

Although every career change and job search takes commitment and dedication, finding a green career takes a bit more initiative. Given that the green economy is just now forming, the tools you may be accustomed to using for a job search may not be very effective. The resources you use to research your target industry may not have any information about cutting-edge industries, companies, and jobs. Your usual networking methods may not produce the leads you need.

The tactics included in this book give you insider tips to help you move your green job search forward faster. Although plugging into the resources I discuss gives you advantages other green job seekers may not have, it's impossible to predict exactly how long your job search will take. Your journey will depend on how your target industry is developing, as well as your target position and how many other people are searching for that job.

The key to success is starting your preparations for your green career as soon as possible, even while you're working in the traditional economy. The deeper your network, the more you know about your target industry; and the better you've developed your skills, the more likely you are to attract the attention of those who will hire you.

Finding Green Job Opportunities

Finding job openings in any economy is challenging. Within the green economy you have a few more challenges that can hinder your progress.



The first thing you must know about finding potential green job openings is that, just like in the traditional economy, *the vast majority of the jobs are not posted on job boards or even on company Web sites*. Sorry. I know that makes it harder, but it's true. It's up to you to ferret them out.

The people in your target green industry are the ones you need to connect with to hear about job openings. They also know the inside story of what's happening in various green companies. Having a strong green network and being in close contact with those in your network are the most effective ways to find potential green opportunities. Chapter 15 spells out the best ways to build your green network.

To make the most of your network connections, you must be able to articulate in crystal clear terms what kind of position you are looking for. Your network can't help you if you haven't figured it out or you don't know how to describe it so others understand you. (For tips on this, see Chapter 17.)

If you can tell your contacts about the companies you're targeting, all the better — but how do you know which companies to target? Unfortunately, at this early stage, there aren't many lists of green companies you can count on. If you do find a list with the top companies in a particular industry, bookmark it, print it out, tape it to your fridge, and use it as a starting point for your own research.

Three factors make finding green jobs challenging (for tactics to help you counteract these challenges, check out Chapter 18):

- ✓ Most likely you want to work in a company in a particular geographic area. You aren't interested in just any solar company — you want to work in one in your city or another city you've already targeted.
- ✓ You also need to discern whether the companies that look appealing to you hire people with your skills and talents. You need some way to get inside these companies to understand them.
- ✓ You also need to determine whether the companies are green/clean/sustainable. Not easy to do, but there are ways.

The Green Economy Is Your Oyster

There is — or will be — a place in the green economy for everyone. Your skills, passions, talents, and education make you uniquely suited to fill a particular position. The trick is finding it. This book gives you the information and resources you need to find your place in the green economy.

If you don't see a place to apply your skills right now, don't despair. New positions are evolving as new technologies emerge, policies are enacted, and goals are defined. While you wait for the perfect fit, continue to build your network, develop your talents, and track movements within your target green industry. Consider applying what you discover to your current position or taking an active role in moving your industry into the new sustainable age.

Ultimately, the opportunities of the green economy are going to be what you make of them. It's up to you to find what part you'll play in designing and implementing a green, clean, sustainable world.