

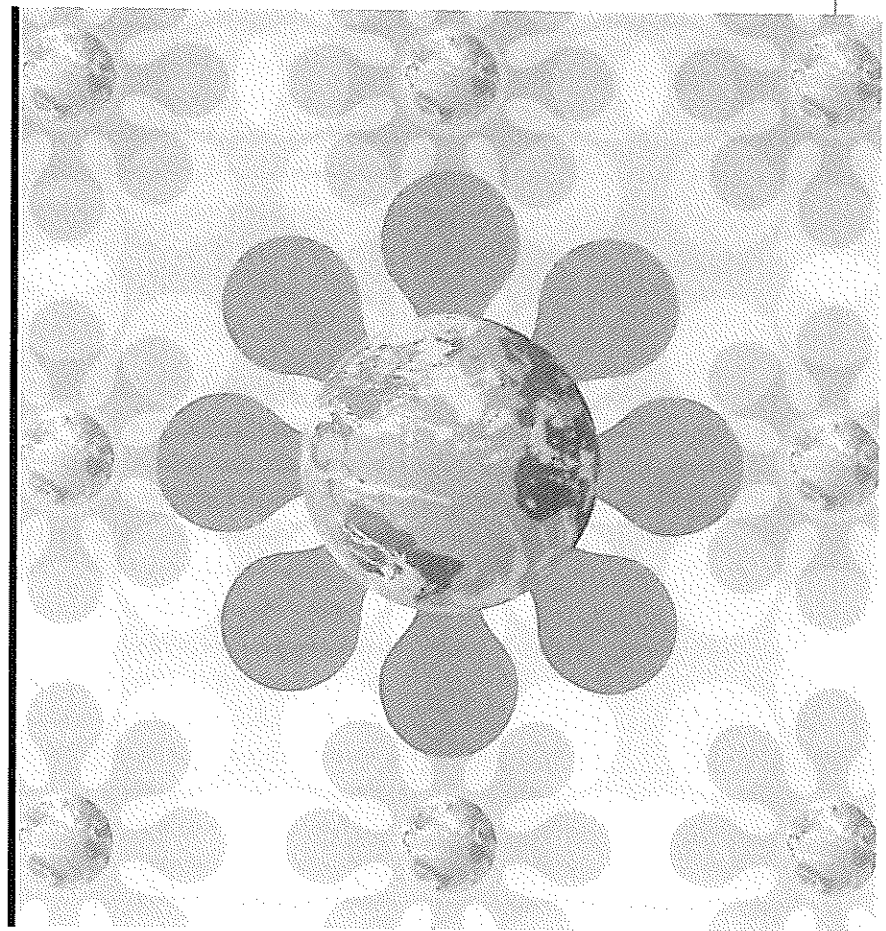
# Financial Planning

## Inconvenient Truths

THE ECONOMIC EFFECTS OF CLIMATE CHANGE AND OIL SHORTAGES PRESENT A UNIQUE CHALLENGE FOR PLANNERS. BY RICHARD VODRA

WE'VE GOTTEN USED TO PAYING \$3 for a gallon of gasoline and come around to the idea that global warming is a real phenomenon. Helped by United Nations reports backed by thousands of scientists, and our own ability to observe reality, Americans are accepting the idea that global climate change is real. What consequences should we be preparing for? And as financial planners, what specific steps can we recommend to clients?

In the October 2005 issue of this magazine, I wrote about the concept of Peak Oil—the idea that sometime soon, possibly even in this decade, the world will not be able to continue increasing its production of petroleum, regardless of demand or price. Substitutes for oil such as biofuels (including ethanol), tar sands and coal derivatives may eventually come on line, but they are unlikely to appear quickly and plentifully enough to replace the declining production of gasoline, diesel and jet fuel. The impact of Peak Oil will be to make transportation and production much more expensive and difficult, affecting many aspects of material life that we have come to take for granted, such as plastics and other synthetic materials, and plentiful year-round fresh produce. Natural gas faces a similar shortage, especially in North America where peak production has already been reached.



Since my previous article, nothing has happened to challenge the original forecast. American oil production has not yet recovered from Hurricanes Katrina and Rita, and it suffered yet another blow from pipeline problems in Alaska. Two of the world's three largest oil fields—in Kuwait and Mexico—tipped into decline. In 2006, for the fifth year in a row, no one

announced new giant field discoveries, defined as those capable of producing more than 500 million barrels over their lifetime; and the world again discovered only one barrel of oil for every five or six barrels produced. Furthermore, world demand for oil continued to grow even as political and military unrest in Iraq, Iran, Nigeria, Venezuela and elsewhere kept addi-

# THE CLIENT

tional production off the market.

What has changed in the last year-and-a-half is awareness of the accelerating pace of global climate change. The Atlantic hurricane season of 2005; record wildfires in the western part of the U.S. in 2006; new information on the melting of glaciers, the Greenland Ice Cap and the ice in the Arctic Ocean; the death of coral reefs; record low rainfall across southern Australia; and drought in the Amazon Basin led to major magazine covers. Al Gore's documentary on global warming, *An Inconvenient Truth*, won an Oscar as well as hearts and minds. The world sci-

back loop of misfortune: More energy spent leads to more pollution, which leads to more warming, which forces us to use more energy...and so on.

As financial planners, we need to help our clients address the challenges that these developments pose in both their personal and investing lives.

## SCENARIO ONE: BUSINESS AS USUAL

Traditional financial planning has operated within a framework I call "business as usual." It assumes that, for the simple reason that it's tough to make accurate predictions, life will remain basically

and environmental costs will increase until the system simply can't keep up.

Fortunately, we can take steps now as individuals, corporations, communities and nations to prepare for Peak Oil and to reduce the carbon dioxide emissions that will lead to further global climate change. In fact, many of us are doing so. Developing new systems for energy production and conservation, transportation and other aspects of modern life will take plenty of effort and capital. But if we wait until shortages are obvious and prices for energy and goods have gone way, way up, the task will be much more

**The investment plan should anticipate rising prices and a weakening dollar. The personal plan should include reducing energy use and moving closer to family.**

entific community agrees that human activity, including deforestation and the burning of fossil fuels, is a major cause of climate change. Some cities and states are beginning to respond, and public opinion may be at a tipping point for making climate change a policy priority. Yet few people in public life are talking about Peak Oil.

As it turns out, Peak Oil and global climate change are closely connected. After all, we wouldn't be facing global climate change if people around the world didn't use so much fossil-fuel energy. What's more, some substitutes for conventional oil, such as tar sands and coal-based diesel, generate even more carbon dioxide and other greenhouse gases than regular oil. Furthermore, so-called alternative energy, such as solar, wind, water or geothermal power, is not yet available in large quantities in most places. The result is a feed-

the same. What that means: America's economy will continue to grow, but China's and India's will grow faster. People everywhere will continue to build suburbs, roads, airports, cars, factories and power plants. Resources in this model are not constrained, nor are there limits to growth. Under this scenario, planners use historic asset returns to plan our clients' 40-year-long retirements, beginning years or even decades from now. This conceptual framework informs the way much of the planning community works today.

Unfortunately, the business-as-usual scenario is probably a fantasy. If we continue along our current path, global warming will accelerate and become irreversible as we burn all the oil, coal and gas we can, and attempt to replace a declining oil supply with new fuels that are more polluting, cost more and are less convenient to use. Financial

difficult. The sooner we start, the lower the costs will be, both in terms of money and lifestyle.

## SCENARIO TWO: THE COMING DURABLE SOCIETY

The coming durable society accepts the reality of Peak Oil and global climate change, but assumes that people will take the necessary steps to address these problems by creating sustainable and more localized economies. Under this scenario, some aspects of our lives, such as energy consumption, may eventually more closely resemble 1957 rather than 2007. But we will also harness human creativity to develop new technologies and efficiencies that reduce the impact these changes will have on how we live.

This scenario is based on the idea that natural resources will continue to be scarce and expensive, making access to energy and transportation less reli-

able. Inflation may rise as new capital projects, such as mass transit, crowd out consumer activities, much as they do in times of war. Meanwhile, as climate change continues around the world (albeit, one hopes, at a slower pace), disasters and displacements will require major expenditures—whether through insurance premiums or public spending. As a result, economic production may slow somewhat.

Of course, we cannot accurately predict all the ways people will respond to the challenges of Peak Oil and global climate change. After all, most of the major transitions of the twentieth century, including two world wars, the Great Depression, nuclear weapons and the collapse of the Soviet Union, were surprises at the time. That said, it is likely that windmills, solar panels and nuclear plants will all become more commonplace. We'll probably live, work and gather in smaller, more efficient buildings. Food production and water usage will have to become more efficient, and more local travel will be done via bicycles, mass transit and ride-sharing. These changes will take years or perhaps decades to implement.

### A NEW FINANCIAL PLAN

There are two parts to a financial plan for this second scenario—an investment strategy and lifestyle changes. The investment framework anticipates a world in which normal economic activity will continue, but with a high probability of rising prices, a weakening U.S. dollar, energy and natural resource constraints and widespread feelings of insecurity and disruption.

Just as planning for the business-as-usual scenario allows for a range of portfolios from cautious to aggres-

sive, investing in the coming-durable-society scenario can be accommodated with a variety of allocations. A moderate portfolio under this scenario would include a substantial amount of cash in dollars and other currencies (20%), energy investments (20%), a commodity index fund (10%), inflation-adjusted bonds (10%), global bonds (10%), common-stock investments (25%) and real estate (5%). Clients who believe the transition will be smoother may want to have more in equities and less in fixed income, while clients who are less sanguine may want to put more into cash, commodities and non-U.S. securities.

At this point, it's probably too early to identify the companies that will win in this transition. For even when the shape of a new economy is becoming clear, the investment options seldom are. Look, for instance, at the automobile, a transforming technology if ever there was one: Every publicly listed automaker in 1919 eventually went bankrupt. All the early PC makers of the late 1970s failed except for Apple; and the dot-com boom famously went bust (although several companies survived). Guessing who will emerge on top in such fields as alternative energy, water distribution and mass transit is, to my mind, sheer speculation.

At the same time, portfolio allocation is only part of what we need to advise clients about. Other changes will be necessary to position clients to live successfully in a resource-constrained world. These include:

- reducing or eliminating personal debt, since economic changes could disrupt incomes;
- making personal investments in items such as insulation, new windows

## WHAT TO DO

Now that the issue of global warming has taken center stage, many of your clients may be looking for ways to make a positive difference through investment and lifestyle choices. Here are some ideas:

**Invest Green:** Environmentally responsible investing continues to gain ground with mainstream investors, with more options available all the time. For example, New Resource Bank in San Francisco ([www.newresourcebank.com](http://www.newresourcebank.com)), a full-service community bank, finances loans for environmentally conscious projects. For additional investing resources, go to [www.socialinvest.org](http://www.socialinvest.org).

**Buy Carbon Offsets:** Several websites allow you to calculate the greenhouse gases you create because of, say, your monthly commute or electric use, then let you purchase "offsets" that will reduce your net effect on the atmosphere—such as truck-stop electrification, which saves truckers from having to run their carbon-spewing engines all night long so they can sleep in a heated cab. Look for companies that have passed an audit by a reputable firm and whose offsets support specific projects, not vague claims of planting trees somewhere nice. For more information visit The Climate Trust at [www.carboncounter.org](http://www.carboncounter.org) or TerraPass at [www.terrapass.com](http://www.terrapass.com).

**Know What You Own:** In today's world of holding companies and spinoffs, it's hard to know exactly what you're buying when you purchase a security or products for that matter. Several websites now break out this information, and provide details about shareholder activism and regulatory concerns. Visit [www.ceres.org](http://www.ceres.org) or Responsible Shopper at [www.coopamerica.org](http://www.coopamerica.org). —Jennifer A. Lipton

- and fuel-efficient cars to save energy;
- living near work, community and family members to reduce energy use;
- taking a dream trip now, while travel is affordable;
- becoming more active in the community to create and support local networks; and
- tending one's personal health, since healthcare will likely become

# THE CLIENT

more expensive and people will need to rely more on their own strength.

## HOW TO DISCUSS THESE CHANGES WITH CLIENTS

Good financial planning involves reconciling a client's goals, dreams and fears with available resources. Therefore, your clients' responses to Peak Oil and global climate change will depend on their ages, occupations and family and other relationships, as well as their general approaches to life. Most will not like the idea of the coming durable society, but neither will they be surprised by it. Instead, they will likely recognize that something must be done, even if they may not be ready to shift behavior immediately.

One way to bridge the gap is to ask clients how much they believe in the viability of the business-as-usual scenario versus that of the coming durable society, and have them allocate their money accordingly. So if their current portfolio has 80% in stocks and they want to commit one-third of their money to the coming-durable-society model—which calls for a 25% stock allocation—then they can move to 61% stocks for now (two-thirds at 80% plus one-third at 25%) and gradually increase their positions in energy and inflation hedges.

Similarly, it is not necessary to make a complete change in lifestyle, but it is good for clients to be aware of the issues the next time they buy a car,

move their residence, change jobs or hear about a community meeting.

Peak Oil, global climate change and related issues around water and other natural resources will increasingly affect our lives in the years to come, and could well shape every public decision by the year 2010. The sooner we and our clients become active participants in this process, the more successful we'll be in our transition to whatever is to come. **FP**

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**Asset allocation does not assure a profit or protect against a loss. There is no assurance that a diversified portfolio or asset allocation will achieve a better return than a non-diversified portfolio.**

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