

# the **optimistic** environmentalist

**It's not an oxymoron to be an optimistic environmentalist.**

**And it's not a contradiction to base that optimism on the power of the market.**

It is profitable to reduce your energy consumption, appeal to your customers' sense of propriety, avoid regulatory penalties and show profits. This is carbon management – simply twenty-first century business. Climate change is the driver of transformation and increases our awareness of how to improve business performance and governance. Andrew Hoffman illustrates how business innovation and keen strategies are all part of being an environmentalist.

**ACCORDING TO ROBERT** Metcalfe, founder of 3Com and now a venture capitalist, "We're going to solve the energy problem in 30 years, just like we solved the Internet problem in 30 years." While this claim may sound nuts, especially in the wake of the Bali disappointment and an energy bill that barely mentions renewable energy, it is not far-fetched. And, more importantly, it is this kind of thinking that is our only hope of solving the climate change problem. Personal virtue is great, and I applaud anyone who chooses to make a personal commitment to being green. But if the market does not drive companies to do the same, solutions will never emerge on the scale necessary. The plain and simple truth is that no solution to climate change will ever occur without the involvement of business. And, while there is still much to do, there is reason to be optimistic. The market is slowly shifting. Green is becoming sexy, it is becoming desirable and it is becoming smart.

Look at green building. What used to be a movement of people in tie-dye shirts offering straw bale and rammed-earth homes is now populated by major corporations such as Siemens, GE, Turner, Trane and Skanska, all drawn by real market returns. While single-family housing starts fell by 14.7% and sales of lumber and construction materials fell by 12% between December 2005 and 2006, makers of green building products reported increased sales over the same time period. Attendance at Greenbuild, the largest green building conference in the US, exploded from 4,200 in 2002 to 21,000 in 2007. The truth is that green building makes sense for moral and economic reasons. In fact, it's a no-brainer. Companies are finding that if they have never looked at building efficiency before, energy reductions upwards of 30% are easy to achieve. Still don't believe it? Wall Street does. The Bank of America announced a new programme in March 2007 that involved earmarking \$20 billion in funds over ten years towards, among other things, financing green buildings and energy-efficient technologies. Others such as Citigroup and Morgan Stanley are following suit. It would seem that environmentalists can now be found wearing grey pinstripe suits in the corner office. And this is the kind of sustainable solution that should warm an environmentalist's heart.

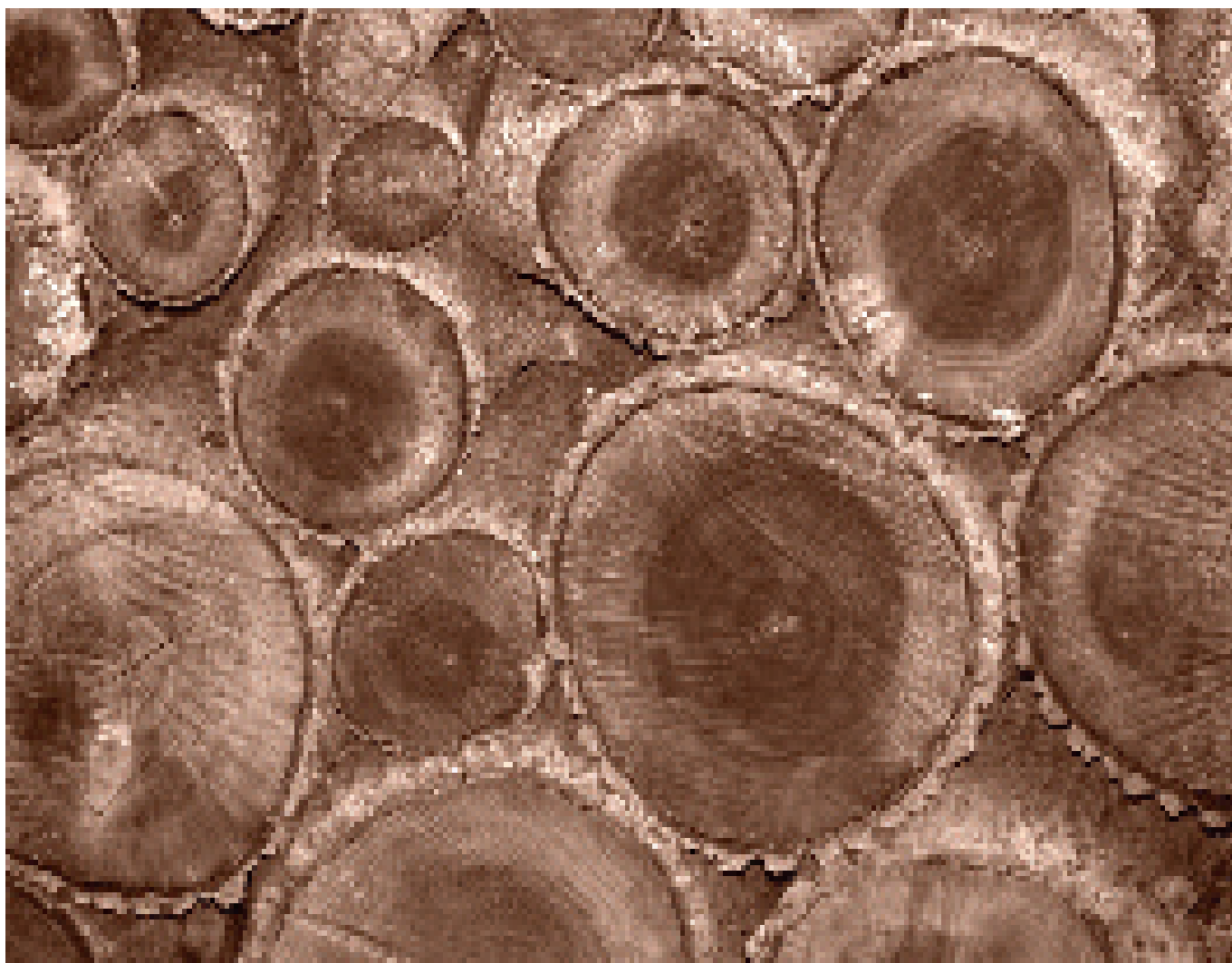
This is not about asking whether it "pays to be green." That's a non-sensical question. It's the same as asking, does it pay to innovate? And that is what we are talking about here: the challenge of innovation to capitalise on market shifts that are afoot in resource and energy prices, consumer demand, capital costs, insurance premiums and regulatory programmes. Success depends on who, when and how it is done. Business is engaging environmental issues because of market reasons, not 'do the right thing' moral reasons. The motivations appeal to the profit motive and not a sense of guilt or shame. Only with a systems-wide market shift will the tremendous powers of the world's corporations be turned to solving

green is becoming  
**SEXY,**  
 it is becoming  
 desirable  
 and it is becoming  
 smart

environmental problems like climate change. And that is what's happening.

Consider the following examples. Automobiles that recapture energy as they brake; elevators that use the same principles as they descend; plastics made from corn stalks or other cellulosic materials and are biodegradable; washing machines that use 65% less water and energy but clean more effectively; dishwashers that can be programmed to run when energy demand is lowest; car-sharing programmes that reduce the number of cars on the road, particularly in urban centres; composite woods that use recycled plastics; and on and on. This is not fantasy. It's reality; a reality that today's seasoned professionals and newly minted MBAs alike see and want to get on board.

Announcing a set-aside of \$100 million for investments in cleaner energy, transportation, air and water technologies, venture capitalist John Doerr of Kleiner Perkins Caufield & Byers said, "This field of greentech could be the largest economic opportunity of the twenty-first century. There's never been a better time than now to start or accelerate a greentech venture." Robert Metcalfe puts it more bluntly: "You'd have to be an idiot not to notice the huge opportunity in energy." And there are many smart people who feel the same way. In 2006, the total U.S. venture capital (VC) investment devoted to clean energy companies reached \$2.4 billion, over 9% of all VC spending. Why? Look at the numbers. Annual combined revenue for solar photovoltaics, wind power, biofuels and fuel cells jumped nearly 39% from \$40 billion in 2005 to \$55 billion in 2006. Other estimates



put the number at a record \$70.9 billion. Clean Edge, a cleantech market research and consulting firm, projects that these four technologies could become a \$226 billion market by 2016.

Still sceptical? That's okay. Even if you see business as the problem, you can still see it as the lever for sustainable change. Reflecting this pragmatic tone, one of my students, Doug Wein, put it this way: "If you've got an 18 wheeler flying down the highway, running over property, disobeying the road signs and causing general havoc, you can try to set up road blocks, throw rocks at the windows or try to slash the tyres. Or you can climb into the cab and try to talk the driver into slowing down. Better yet, you can grab the wheel and slow it down yourself."

Sometimes the market leads the government, and responding to climate change is one of those times. It's up to people in business to roll up their sleeves and get to work. There are market opportunities to be had and when government finally catches up to the market, those opportunities will expand even further. And in the process, the public debate on climate change will shift at a more rapid pace. The strange truth is that while

scientific assessments by the Intergovernmental Panel on Climate Change (IPCC) can still be met with scepticism in a wary public, business assessments that climate change is a real concern will sway minds. If businesses spend money on it, then it must be true.

#### biographical notes



#### ANDREW (ANDY) HOFFMAN

is the Holcim (US) Professor of Sustainable Enterprise at the University of Michigan; a position that holds joint appointments at the Stephen M. Ross School of Business and the School of Natural Resources & Environment. He holds a Ph.D. from the

Massachusetts Institute of Technology, awarded jointly by the Sloan School of Management and the Department of Civil and Environmental Engineering.