

## Natural Capitalism: Harnessing Corporate Power to Heal the Planet

BY HUNTER LOVINS

Director of the Natural Capitalism Group

Humankind faces many challenges, but perhaps none so severe as the way we are now doing business is undermining the ability of the planet to support life. The environmental movement seeks to address just this concern. But many of the tools that the movement uses have created a confrontation in which people are told they must decide whether they want greater prosperity or environmental protection.

This is a false tradeoff. Obviously we want both. Furthermore, it should be clear from today's politics that unless capitalism — the greatest engine in the history of the planet for the creation of wealth — can be harnessed to the service of environmental renewal, the steady erosion of all of the world's ecosystems will continue, to the point where it threatens the ability of business to prosper.

A report released in 2000 by the United Nations, the World Bank, and the World Resources Institute says, "There are considerable signs that the capacity of ecosystems, the biological engines of the planet, to

produce many of the goods and services we depend on is rapidly declining." A 2001 article in the journal "Nature" warned, "Humanity's assault on the environment has left many ecosystems in such a fragile state that the slightest disturbance may push them into a catastrophic collapse. Human impacts on many of the world's ecosystems could cause them to abruptly shift with little or no warning from their apparently stable natural condition to very different, diminished conditions far less able to support diversity of life, including human."

Ecosystem services are the natural processes vital to the planet's metabolism, such as cycling nutrients and water, regulating atmosphere and climate, providing pollination and biodiversity, controlling pests and diseases, and assimilating and detoxifying society's wastes. These free and automatic services provide tens of trillions of dollars of worth each year. Calculations published in Nature conservatively estimated the value of the Earth's ecosystem services to be at least \$33 trillion a year, a sum close to the gross world product. And this probably understates the



Hunter Lovins, co-author of *Natural Capitalism*, is the evening keynote speaker for the Colorado Sustainability Summit.

value: there is no known substitute at any price for most ecosystem services, and without them there is no life and therefore no economic activity. But none of this value is reflected on anyone's balance sheets.

The best technologies can't substitute for water and nutrient cycling, atmospheric and ecological stability, pollination and biodiversity, topsoil and biological productivity, and the ability to assimilate and detoxify society's wastes. There is no longer any serious scientific dispute that every

major ecosystem service in the world is in decline. With 10,000 new people arriving on earth every hour, more people are chasing after fewer resources. The limits to economic growth are coming to be set by scarcities of natural capital. These ecosystem services underpin all life and thus all economic activity.

Fortunately there is now a business model, detailed in the 1999 book "Natural Capitalism: Creating the Next Industrial Revolution," which shows that behaving in ways that also protect and enhance the environment is the basis of increasing profits and competitive advantage.

Most businesses don't consider the loss of nature to be their problem. But as they seek ways to enhance profitability, they find that using resources more productively reduces costs and drives innovation.

This is the cornerstone of natural capitalism. It offers ways to do business that not only protect the biosphere and the future but also improve profits and competitiveness. This approach yields benefits both for today's shareholders and

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## Q&A with Summit Featured Speakers

The following are interviews with three of the featured speakers for the Colorado Sustainability Summit, taking place on campus April 24 - 25.

**David J. Eagan, University of Wisconsin-Madison**

**Tell us a bit about yourself.**

This year marks my thirteenth year of involvement with the Green Campus movement. Back in 1990, when the national Earth Day 1990 office sponsored the Campus Environmental Audit project, the term "green campus" was scarcely in existence. Things sure have changed. I was fortunate to be in the right place at the right time, and as a grad student pulled together the first collection of detailed stories on campus environmental innovations around the country. The result was "The Campus and Environmental Responsibility," a book I co-edited with David Orr of Oberlin College, published in 1992.

For several years I coordinated applied, campus-focused research projects at the University of Wisconsin-Madison in a seminar with environmental studies students. The object of their projects was to try to achieve a tangible outcome — to make a real change, however small — in one semester. For many students, it was quite successful. And everyone learned a lot about working with a complex organization and crafting feasible projects.

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## 2003 Campus Environmental Awards

The 2003 Campus Environmental Awards recognize the significant environmental achievements and extraordinary efforts of the selected individuals and departments. The awardees exemplify CU's continuing efforts to become a sustainable institution. They set the example for environmental stewardship and responsibility. Some of the awardees have made groundbreaking efforts which will change the overall way CU operates, and others made an impact on the community and campus environment with their everyday actions. Congratulations and thank you to the 2003 awardees! This program is sponsored by the Vice Chancellor for Student Affairs and the UCSU Environmental Center.

**Professor John Taylor, Department of Physics - Honorable Mention, Alternative Transportation**

John Taylor has used his bicycle as his daily transportation to the University, four seasons a year, since 1966. In 37 years, 18,000 trips, cycling 108,000 kilometers, Taylor has saved 18,000 liters of gasoline and prevented release of 41,000 kilograms of carbon dioxide green house gas into the atmosphere as vehicle exhaust. Professor Taylor has maintained a healthy lifestyle and decreased traffic con-



CU's award-winning Solar Decathlon home, currently on display near Benson Earth Sciences.

gestion on campus through daily bicycle commutes.

**Solar Decathlon Team - Special Recognition, Green Building**

CU students designed and built the winning home in the Department of Energy's Solar Decathlon. CU's Solar Decathlon home was a collaboration between students in the College of Engineering and Applied Science at CU-Boulder and the College of Architecture and Planning at CU-Denver and CU-Boulder. Architectural engineering Professor Michael Brandemuehl served as faculty adviser. The Department of

Energy organized the Solar Decathlon to showcase renewable energy and energy efficient technologies. The competition involved students at 14 universities, who competed to design and build the best solar-powered home. Each house, limited to a maximum of 800 square feet for purposes of the competition, was judged on 10 criteria ranging from design and livability to heating, cooling, lighting, refrigeration, and powering an electric car. The contest was held from September 26 to October 5, 2002 on the National Mall for thou-

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for future generations.

But such eco-efficiency is only the first step of natural capitalism. The journey involves three intertwined shifts in business practices. These are:

► Radically increase the productivity with which all natural resources are used. Through fundamental changes in both production design and technology, farsighted companies are developing ways to use natural resources — energy, minerals, water, forests — five, ten, even 100 times more efficiently. Just this one step will solve most of the environmental problems facing the world today. The resulting savings in operational costs and capital investment can pay for implementing the other two principles. For example, by using such resources as energy, water and materials more efficiently, the microchip maker STMicroelectronics was able to announce that by 2010 it would have zero net emissions of carbon dioxide, with a 40 fold increase in productivity. Implementing this approach enabled them to move from the number 12 chipmaker in the world to number six.

► Shift to production models and materials that mimic how nature does business. Natural capitalism seeks not only to reduce waste but also to eliminate the concept of it. Closed-loop production systems modeled on nature's designs use outputs either as composted nutrients returned harmlessly to the ecosystem, or as inputs for some other manufacturing process(es). Manufacturing modeled on nature's benign chemistry reduces dependence on nonrenewable inputs, makes possible more efficient production, and results in products superior to anything man-made. Ricoh Electronics announced a zero waste policy in which they are completely recovering and using everything that used to go to landfills. Their President said, "We do not take action to preserve our environment simply for the sake of complying with regulations; we do so because it is fundamental to our continued success as a business."

► Reinvest in natural capital. Capital begets more capital; a company that depletes its own capital is eroding the basis of its future prosperity. Pressures on business to restore, sustain, and expand natural capital are mounting as human needs expand, the costs of deteriorating ecosystems rise, and the environmental awareness of consumers increases. Fortunately, these pressures all create business opportunity. The Interface carpet company's adherence to the principles of natural capitalism by using resources efficiently, biomimicry, and behaving restoratively has returned almost \$200 million to the company's bottom line, driven its innovation, and enabled the company to stay in business in a down economy. The company's chair, Ray Anderson, is now giving speeches stating how his company's commitment to behaving in ways that are more sustainable is contributing to every facet of increasing shareholder value.

The next industrial revolution is underway, led by companies that are profiting and gaining competitive advantage from these three principles.

*Hunter Lovins will speak on Thursday, April 24, at 7:00 p.m. in UMC 235. See page 3 for more information.*

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**Q** You helped author "Green Investment, Green Return," a report on how universities have saved money through environmental programs. Tell us more about the general findings of the report.

**A** I co-authored "Green Investment, Green Return" in 1998 with Julian Keniry for the National Wildlife Federation's Campus Ecology program. Information about it can be found online ([www.nwf.org/campusecology/gigr.cfm](http://www.nwf.org/campusecology/gigr.cfm)). The report gives details on the cost-savings for 23 projects at 15 colleges and universities. Together these projects saved an impressive \$16.7 million — in one year — in a variety of areas such as energy, water, waste disposal, transportation, and landscaping. The point was to show that managing campuses with the environment in mind can make sense economically, too. Savings ranged from \$9 million annually in energy costs at SUNY-Buffalo to \$1,200 in reduced use of landscape chemicals by Seattle University.

**Q** What campuses and topics were most successful and why?

**A** As you know, CU-Boulder is a green campus leader nationally and three of its projects were featured in the report. Your campus bus program saved an estimated \$1 million dollars, thanks to its value in forestalling the need to build new parking lots and ramps. In 1998, recycling at CU was worth around \$107,000, with roughly half coming from earned income and half from avoided disposal costs. And a composting program — in which scrap wood and landscape waste were trucked off-campus, with the resulting compost bought back at a discount — saved \$1,300.

Reducing campus energy costs typically offers the most significant and readily attained savings, and the report featured six case studies. Three schools — SUNY-Buffalo in New York, Brevard Community College in Florida, and Elizabethtown College in Pennsylvania — together saved over \$11 million in annual costs. Good planning and forward-thinking investment are often the keys to reaping impressive savings. If staff are diligent about keeping track of the numbers, early projects can often leverage later, sometimes more expensive efforts. There are tremendous opportunities out there on the 3,700 colleges and universities in the U.S. to conserve resources in a cost-effective way. The report highlights just a few of the possibilities.

**Dr. John DiBiaggio, President Emeritus, Tufts University**

**Q** Tell us a bit about yourself.

I have had the good fortune of serving as president of three universities, the University of Connecticut, Michigan State University, and Tufts University. Each of those institutions has had programs focused on environmental issues. However, neither of the first two provided the level of leadership exhibited by Tufts University.

In 1990, my predecessor, Jean Maier, brought together leaders of many of the world's finest universities to discuss the role of institutions of higher education in addressing growing international concerns about the environment. The meeting was held at the Tufts European Center in Talloires, France. The attendees became signatories to a declaration which has since been signed by over 200 other university leaders. I was then president of Michigan state and I enthusiastically joined the others in signing the document. In essence, it commits all of the participating institutions to not only teach and do research on environmental issues, but also to engage in practices on their campuses which could serve as models for others to emulate.

**Q** Tufts University made one of the most significant commitments to addressing climate change. Tell us a little about these efforts and why you as a President support them.

**A** When I arrived at Tufts as president in 1992, I was pleased to discover that the institution had indeed met the objectives of the Talloires Declaration. Teaching and research on the environment had become a signature of the University and a number of energy conservation and recycling programs were underway. At that time, funds were forthcoming from the federal government to support many of these programs. During my tenure, much of that funding was lost, due to changes in federal priorities. Nonetheless, the University maintained its commitment, finding resources from its existing budgets to sustain the programs. Indeed, a commitment has been made by Tufts to satisfy the requirements of the Kyoto Protocol by 2011. Faculty, students and staff are all fully committed to that objective and my successor, Larry Bacow, has indicated his strong support as well. Tufts sees sustaining the environment and active citizenship as being integrally intertwined. While we are very proud of our achievements thus far, we believe we can do it even more. For instance, we have learned that if students at Tufts were to turn off their computers during the day, when they are not in their rooms, the university could save at least \$50,000 and 490 tons of carbon dioxide. We are pleased that Colorado joins us in providing leadership on this important matter.

**Scot Case, Director of procurement strategies, Center for a New American Dream**

**Q** Tell us a bit about yourself.

**A** I am the Director of Procurement Strategies for the Center for a New American Dream, a non-profit organization that is helping Americans buy responsibly to protect the environment, enhance quality of life, and promote social justice. I have been exploring the link between business and the environment for the past ten years and have come to believe that market-based environmentalism is a critical evolutionary step for both the business and environmental communities. Environmentally

preferable purchasing (and eventually sustainable purchasing) are important stepping stones towards a truly sustainable society, a society I hope my newborn daughter will experience in her lifetime. My daughter, wife and I live in Pennsylvania in a 150-year old farm house we restored using environmentally preferable building materials.

**Q** What is environmentally preferable purchasing and what successful initiatives (policies, programs, etc.) are taking place at institutions? What makes these efforts successful?

**A** In its simplest form, environmentally preferable purchasing means buying less polluting products from less polluting companies. The act of buying common, every day items has tremendous environmental impacts that contribute to global climate change, deforestation, rising cancer rates, increasing reproductive disorders, falling water tables, species extinctions, growing asthma rates, and other human health and environmental concerns. One ton of virgin office paper, for example, requires 98 tons of resources to produce. Its production also releases 5,700 pounds of climate changing greenhouse gas emissions, and 2,200 pounds of solid waste.

Growing numbers of institutional and individual purchasers are beginning to realize that their purchases are directly contributing to the destruction of our natural environment. Thankfully, many are also taking steps to significantly reduce their environmental impacts by buying less polluting products. Buying recycled-content paper, for example, can reduce greenhouse gas emissions by 37 percent, cut solid waste emissions in half, decrease water use by 50 percent, and practically eliminate wood use.

Institutional purchasers are leading the charge by developing purchasing policies and practices that consider environmental impacts along with more traditional factors like price and performance when making purchasing decisions. Their large scale purchasing decisions are making less polluting products more widely available and affordable for all of us.

**Q** What strategies can a campus use to buy more recycled paper?

**A** A campus that is truly interested in buying more environmentally preferable paper would begin by making a public commitment to reduce the environmental burdens of its paper purchases. When developing contract specifications for its paper purchases, the campus would incorporate environmental requirements including high post-consumer recycled-content requirements, prohibitions against specific polluting bleaching technologies, and incentives to use tree-free papers when economically feasible. Just as importantly, the campus would also implement an aggressive plan to significantly reduce paper use. Reducing paper use is the most significant environmental improvement possible. The resulting cost savings can then be applied to ensure that any paper that is used is the most environmentally preferable paper available.



## Colorado Sustainability Summit Forging Solutions at Colleges and Universities

**April 24-25, 2003**  
**University Memorial Center**

### Registration Info

Advance registration is required. The deadline to register is April 16. Registration cost is \$45 (regular rate) and \$25 (student rate). Due to the significant funding provided by the CU-Boulder campus, registration fees are waived for CU-Boulder faculty, staff and students. However, advance registration is still required, and there is a \$25 fee for CU-Boulder individuals planning to attend conference-provided meals. Registration forms are available at [www.colorado.edu/ecenter](http://www.colorado.edu/ecenter) along with other info on the Colorado Sustainability Summit.

### Conference Agenda At a Glance

#### Thursday, April 24

**8:30-9:00 a.m.**

Registration  
Continental Breakfast

**9:00-10:20 a.m.**

Concurrent Sessions  
• Designing and Expanding Campus Recycling  
• Building Greener Ivory Towers  
• Applied Academics

**10:30-11:50 a.m.**

Concurrent Sessions  
• Calling All Recyclers  
• From the Fryer to the Streets: Fueling Campus Vehicles with Biodiesel  
• Planning Ahead

**12:00-1:50 p.m.**

Luncheon Keynote Address  
• "Citizenship and Sustainability: A Vision for Higher Education," John DiBiaggio, Tufts University

**2:00-3:20 p.m.**

Concurrent Sessions  
• Computer and Electronics Reuse and Recycling  
• Taking Bicycling to a New Level  
• Green Investment, Green Return: Good for the Environment and the Campus Bottom Line

**3:30-4:50 p.m.**

Concurrent Sessions  
• Recovering Construction and Demolition Waste  
• Finding a New Way: Sustainable Mobility for Campus Communities  
• Implementation at the Administrative Level

**5:00-6:00 p.m.**

Round One Caucuses

**6:00-7:00 p.m.**

Reception

**7:00 p.m.**

Evening Keynote Address  
• "Natural Capitalism: Practical, Affordable Solutions for Corporations, Colleges & Communities," L. Hunter Lovins, Natural Capitalism Group of the Global Academy

#### Friday, April 25

**8:30-9:00 a.m.**

Registration  
Continental Breakfast

**9:00-10:20 a.m.**

Concurrent Sessions  
• A Rind is a Terrible Thing to Waste  
• The Nuts and Bolts of Energy Efficiency  
• Campus Environmental Centers

**10:30-11:50 a.m.**

Concurrent Sessions

• Getting Control of Pests while Reducing Harmful Pesticides  
• Campus Energy Initiatives: Heading Toward the Sun  
• Close the Loop: Buy Recycled

**11:00 a.m.-3:00 p.m.**

Green Purchasing Expo

**12:00-2:00 p.m.**

Buffet Lunch  
Round Two Caucuses  
Visit Green Purchasing Expo

**2:00-3:20 p.m.**

Concurrent Sessions  
• Cleaning with Health in Mind  
• Feeding the Masses  
• Organizing and Educating the Campus Community

**3:30-4:40 p.m.**

Concurrent Sessions  
• Improving Indoor Air Quality  
• Every Drop Counts  
• Making the Campus Dollar Count

**4:45-5:00 p.m.**

Closing Session

### Featured Events (free and open to the public; registration not required)

- Hunter Lovins, "Natural Capitalism: Practical, Affordable Solutions for Corporations, Colleges & Communities." Thursday, April 24, 7:00 p.m., UMC 235.
- Green Purchasing Expo. Friday, April 25, 11:00-3:00 p.m., UMC 235.

### Sponsors

- Odwalla
- University of Colorado at Boulder Environmental Center
- University of Colorado at Boulder Cultural Events Board
- Fort Lewis College Environmental Center
- Wirth Chair at the University of Colorado at Denver
- National Wildlife Federation
- Regis University
- University of Southern Colorado
- Western State College
- University of Northern Colorado

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sands of people to tour as one of the homes in the "Solar Village." The CU home was named the overall winner on Oct. 5, with its blend of aesthetics, energy production and energy efficiency. CU also won first-place in individual contests for engineering, interior comfort, and graphics and communication. The solar-powered home was brought back to Colorado and reassembled on the Boulder campus south of the Benson Earth Sciences Building.

**Environmental Health and Safety**

**Hazardous Materials/Hazardous Waste Unit - Hazardous Materials Use and Waste Reduction**

Even with the best of efforts throughout UCB, hazardous wastes are inevitably created. These materials cannot remain in the laboratories where they were generated. They must be quickly and safely removed, rendered harmless, or permanently isolated and disposed. This demanding responsibility is carried out by the personnel of the Hazardous Materials Program at the Environmental Health and Safety Center. Brandon Boger leads this crew. He and Ralph Bogle, Derek Hayes, Mark Lapham and Bob Sweeney undergo this work that contributes so much to the health and safety of so many students and faculty on this campus. The team has been creative and innovative in managing an amazing array of many different chemicals and compounds. Some containers are filled with unknown substances that must be investigated, identified, isolated and safely disposed. Hundreds of tons of substances potentially harmful to the environment have been mitigated and recycled. Thousands of gallons of water have been safely returned to Boulder's wastewater treatment facility. The campus owes recognition to the members of the Hazardous Materials Program at EH&S who are dedicated to making CU-Boulder a safer, healthier, and more productive environment within which to work, learn, and live.

**Tom Cowing - Outstanding Alumni**

Tom Cowing recently retired from CU Facilities Management after over 20 years. He has been an asset to the energy conservation program in his years at Boulder. Through his work and accomplishments at CU, Cowing played a key role in revitalizing the energy conservation work happening now at CU. He was around during the first wave of energy conservation several years back, and helped to provide information about what was done in the past and set up the pilot program that we have today. He has always been willing to help in these endeavors and was a vital connection to Facilities Management.

**Robin Newsome-Suits - Individual Achievement**

Robin Newsome-Suits has done an extraordinary job leading current energy conservation efforts at CU. Furthermore, she has gone above and beyond her job description and busy schedule to personally implement energy saving measures in Regent Hall. In the fall of 2000, Vice Chancellor for Administration Paul Tabolt made a commitment to reducing energy use per square foot on campus. He then established the Campus Resource Conservation Committee which is chaired by Newsome-Suits. In the first year, Newsome-Suits did a terrific job in creating structure among the committee, laying out committee goals and guidelines, and putting together an end of the year

report outlining accomplishments, and future actions. Since then she has worked diligently with Moe Tabrizi to move forward on energy saving projects, promotion, and the creation of a new website. Newsome-Suits' most impressive work has been in her own building, Regent Hall. She has filed many delamping requests, and taken upon herself to create posters, and educate the building members about their energy use, and steps to decrease use. There has been a substantial decrease in energy due to her work.

**Wilderness Study Group - Recycled Product Purchasing**

The CU Wilderness Study Group has worked with the Department of Facilities Management to replace existing paper towels and toilet tissue with high-recycled content products. Kasey Gallogly, a student with the CU Wilderness Study Group, deserves much of the credit for initiating this effort. Facilities Management has agreed to purchase recycled-content toilet paper for all General Fund buildings that will not only save countless numbers of trees, but will be done at no additional cost to the University. Facilities Management purchases over 38,000 rolls of toilet paper every year. The new toilet paper is 100% recycled with at least a 20% post-consumer recycled content.

In cooperation with Jay Townsend and Lisa Adair of Facilities Management, Gallogly worked closely to review current products, find alternatives that would not cost more and were available using the state contract, and to test the quality of the recycled content papers. The Wilderness Study Group is now working with the Housing Department and the UCSU buildings (UMC, Rec Center and Wardenburg) in order to expand the program to the entire campus. The Wilderness Study Group's ultimate goal is to eliminate the use of virgin paper products and work toward a "tree-free" campus.

**Carly Wier - Outstanding Alumni**

Carly Wier has made significant contributions in the recycling field after graduating from CU-Boulder. As the Executive Director for Summit Recycling, Wier has continued a long tradition of minimizing waste and building public support in Summit County and surrounding areas. The Summit Recycling Project increased its volume by ten percent in the past year. This increase demonstrates local commitment to recycling, despite a slowing tourism base in the area. Her program also hosted its second annual used computer round-up this year, where almost 40,000 pounds of electronic waste was collected. In addition, their household hazardous waste collection day served a record number of households. Finally, the Summit Recycling Project responded to last year's drought impacts by quickly developing a program to divert almost 30 tons of slash and wood waste from area landfills.

Wier is also making contributions to recycling beyond the mountain towns that Summit Recycling serves. She made a presentation to the National Recycling Congress last year and currently serves the Colorado Association for Recycling on its planning committee. Her program's upcoming plans include a local business excellence campaign and a relocation of the operation to the Summit County Landfill. Both are important steps to make recycling more convenient and institutionalized. Wier's passion and professionalism reflects well on the University of Colorado. People like her will continue to be the innovators of new approaches to recycling.

## UPCOMING EVENTS

**HOWARD LYMAN, "SAVING THE PLANET, ONE BITE AT A TIME"**

WEDNESDAY, APRIL 16, 2003, 7:00 P.M., MCOL W100

Howard Lyman, acclaimed environmental and animal rights activist will speak at CU. Lyman is the author of "Mad Cowboy: Plain Truth from the Cattle Rancher Who Won't Eat Meat," and was co-defendant with Oprah Winfrey in her meat defamation trial. His lecture will focus on modern factory farming's toll on the environment, human health, and animals raised for food. He will also discuss the large-scale benefits of a vegetarian diet. Admission is free and refreshments will be provided. For more information, contact CU Partnership for Animal Welfare at 303-735-5599.

**EARTH DAY CELEBRATION WITH PARTNERS FOR ANIMAL WELFARE**

TUESDAY, APRIL 22, 11:00 - 3:00 P.M., UMC FOUNTAIN AREA

Partnership for Animal Welfare's goal is to celebrate the earth through raising awareness about how food choices affect the environment. Food, speakers, music, and fun. For more information, call 303-735-5599.

**COLORADO SUSTAINABILITY SUMMIT: FORGING SOLUTIONS AT COLLEGES AND UNIVERSITIES**

THURSDAY AND FRIDAY, APRIL 24 - 25, UMC

REGISTER BY APRIL 16

(See expanded summit agenda, page 3.)

**HUNTER LOVINS, "NATURAL CAPITALISM: PRACTICAL, AFFORDABLE SOLUTIONS FOR CORPORATIONS, COLLEGES & COMMUNITIES"**

THURSDAY, APRIL 24, 7:00 P.M., UMC 235

L. Hunter Lovins is the director of the Natural Capitalism Group of the Global Academy and co-founder the Rocky Mountain Institute in 1982. A well-respected figure in environmental sustainability, she served as a delegate to the United Nations prep conference for Europe and North America for the Earth Summit Conference. She co-authored the book Natural Capitalism and has dedicated herself to creating and implementing practical and affordable solutions for corporations, colleges, and communities. Her talk is free and open to the public and is held in conjunction with the Colorado Sustainability Summit. (Other portions of the Summit do require advance registration.) Co-sponsored by the Cultural Events Board and the CU Environmental Center. Visit [www.colorado.edu/ecenter](http://www.colorado.edu/ecenter) for more information.

**GREEN PURCHASING EXPO**

FRIDAY, APRIL 25, 11:00 - 3:00 P.M., UMC 235

The Expo (held in conjunction with the Colorado Sustainability Summit) will feature vendors, manufacturers and distributors showing a wide variety of innovative, sustainable and cost-effective products, and services geared to institutional applications. Companies attending the Green Purchasing Expo include: Constantine Commercial, Diversified Imaging Services, Inc., Hard Copy Recycling, Interface, Inc., Kare, Inc., Solutia, Inc., Siemens Building Technology, Trane, Inc., and 21 Wheels

**FOR A LISTING OF EARTH DAY-RELATED EVENTS IN THE BOULDER COMMUNITY, VISIT [WWW.ENVIRONMENTALAFFAIRS.COM](http://WWW.ENVIRONMENTALAFFAIRS.COM).**

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