

# **BUSINESS IN ACTION CONFERENCE**

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Keynote Address by Brad Wyche

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Good morning. It's great to be with you, and I want to thank all of the sponsors for their generous support of this conference.

I've been thinking about how much Greenville has changed over the last 10 years. That's really not that long ago, but think back for a moment to the year 2000.

There was no ICAR.

No Verdae.

No downtown baseball stadium.

No Kroc Center.

No River Place.

No Swamp Rabbit trail.

No Lake Conestee Nature Park.

No Liberty Bridge at Falls Park.

All of these projects became a reality over the last 10 years, and they have dramatically reshaped and enhanced our community. Small wonder that Greenville now regularly appears on national lists of the best places to live.

We've witnessed the same kind of dramatic change in the green movement over the last 10 years, not only in our community but across our state and country.

In 2000, there wasn't a single LEED certified building in South Carolina—now there are 56.

In 2000, there were only two hybrid cars on the market—now there are over 30.

In 2000, the GE plant in Greenville wasn't making any wind turbines—now they have a backlog of orders.

In 2000, very few people were going green. The green movement was widely viewed as the domain of radical, wild-eyed tree huggers.

In 2001, not quite 10 years ago, when the Greenville County School District announced its \$900 million school construction and renovation project, at Upstate Forever we saw a spectacular opportunity and launched our "Green Schools for Greenville" campaign, urging that every school construction and renovation project be LEED certified. Our campaign received little support—most people thought we were crazy. But if that project were announced today, I have no doubt that the result would be entirely different. We would have green schools everywhere.

Green has now moved into the mainstream. Now everyone is going green. Why? What has caused this dramatic shift?

I think there are two basic reasons—first, finally there is widespread recognition that our planet is in serious trouble, and second, there is widespread recognition that, as the brochure for this conference states, "Green is good for business."

Our world faces a monumental crisis—the shocking and accelerating degradation and depletion of the very resources on which life itself depends. Every living system on the planet is declining at an unprecedented rate. In the past 50 years, we have lost one-fourth of the planet's top soil and one-third of its forest cover. And this loss continues at the rate of 750 metric tons of top soil every second and 5,000 acres of forest cover every hour.

At the present rate of destruction, we will lose 70 percent of the world's coral reefs in our lifetime. In just the past 30 years, we have consumed one-third of the planet's natural resources. At the present rate of consumption, with the world's population increasing at the rate of 10,000 people per hour, there will be little left by the end of this century.

We are witnessing a massive extinction of plant and animal species—at the rate of 27,000 per year.

An estimated 90% of the world's large predator fish are gone, and 75% of marine fisheries are overfished or fished to capacity.

And on top of all of this is the greatest destructive force of all—climate change and its impacts of increasing temperatures, melting glaciers, rising sea levels, and more frequent and intense storms.

The brutal reality is that our current economic system is not sustainable. People in developing countries aspire to Western standards of living, and rightfully so, but let's just consider China. If China had two cars in every garage and consumed oil at the U.S. rate, they alone would need 80 million barrels of oil per day—more than the entire world now consumes. If carbon emissions per person in China were to reach the U.S. level, this alone would double global emissions. If annual paper use in China ever reaches U.S. levels, that country would need more paper than the entire world now produces.

Why is this happening? Why are we allowing the depletion and destruction of the very systems on which life depends? The main reason is that capitalism, as traditionally practiced, assigns little or no value to natural systems and fails to account for the impact of production and depletion on those systems.

Take the example of the fisherman who tosses a stick of dynamite into a coral reef and harvests the stunned fish for local markets and the broken pieces of coral for the pharmaceutical industry. He takes these items to the market and receives cash. Under generally accepted accounting methods, the only costs considered relevant in this transaction are the cost of the dynamite and the cost of the labor. But we know that is wrong. We know that there is another cost here, and it's a huge one—the cost of destroying the coral reef.

Similarly, we know that the cost of draining or filling a wetland, the cost of over-pumping an aquifer, the cost of paving over huge areas of a watershed, the cost of building in flood plains, the cost of applying pesticides, the cost of oil spills, and on and on includes more than just the cost of the material and the labor—much, much more.

Our current energy economy, based primarily on fossil fuels, is fundamentally flawed and unsustainable. The real costs are staggering—on our health, air and water quality, and natural resources. If these impacts were truly reflected in the cost of gasoline, we would be paying \$11 per gallon. The geopolitical impacts are equally staggering as nations obsessively pursue

strategies for ensuring access to steady supplies of fossil fuels. As Thomas Friedman has written, “Fossil fuels are exhaustible, increasingly expensive, and politically, ecologically and climatically toxic.”

Sadly, and tragically, capitalism, as traditionally practiced, does not assign any value to the largest stocks of capital that we use—our natural resources and living systems. Acting as though these resources and systems have no value has brought us to the brink of disaster.

But thankfully and finally, we are turning away from the brink.

We are beginning to practice a new form of capitalism—a form described as Natural Capitalism by Paul Hawken, Amory Lovins and Hunter Lovins in their ground-breaking book: *Natural Capitalism: The Next Industrial Revolution*. They are not overstating what is happening. A new industrial revolution is truly underway—a revolution that is good for the planet and good for business.

There are four basic principles of Natural Capitalism: radically increased productivity; a service and flow economy; reinvesting in natural systems; and biomimicry.

The first principle—radically increased productivity—is based on using energy and natural resources—metals, minerals, water and forests—in dramatically more efficient ways.

We are already seeing the astonishing results of this principle in action. Green buildings use 30 to 70 percent less energy, sell and lease faster and at higher prices and rates, and reduce employee absenteeism by over 15 percent and improve employee productivity by 6 percent because they are such nice places to work. Think of the positive impact of those percentages on a company’s bottom line.

Energy efficiency itself has the potential to be one of South Carolina’s leading industries. Total energy efficiency investments of \$2.7 billion in our state over the next 10 years could deliver direct energy savings of \$8.1 billion and create over 24,000 direct jobs. That is the equivalent of two Boeings.

As Duke Energy President Jim Rogers said: “Energy efficiency is the fifth fuel—after coal, gas, renewables, and nuclear. Today it is the lowest cost alternative and emission free. It should be our first choice in meeting our growing demand for energy as well as in solving the climate challenge. The

most environmentally sound, inexpensive and reliable power plant is the one that we don't have to build because we've helped our customers save energy."

Across the country and the world, the vast stock of existing buildings affords a spectacular opportunity for energy efficiency. Existing buildings are the largest consumers of energy and the largest emitters of greenhouse gas emissions in the world, accounting for nearly half of the total. We have little hope of effectively addressing these impacts unless we significantly improve the performance of existing buildings. But the good news is that these buildings are the proverbial low-hanging fruit—their performance can be significantly improved through modest investments that pay for themselves through reduced energy bills.

We've been doing some work on this issue at Upstate Forever. We took an old building on Pettigru Street in Greenville that had been vacant for over 20 years and brought it back to life with an amazing array of energy efficient and environmentally friendly technologies and features, including solar, recycled carpet, spray foam insulation, energy efficient windows, sun tunnels, pervious pavement, a green roof, rain barrels, solar hot water, and native plant landscaping. We also restored and reused everything we could from the original building. We're very proud to have received LEED Platinum certification for the project—only the third Platinum project in South Carolina and one of only 250 in the world. It's now our main office, and we've had hundreds of people come to see it and hopefully be inspired for their own renovation projects. All of you are invited.

The second principle of Natural Capitalism is a service and flow economy, where consumers obtain services by leasing or renting goods rather than buying them outright. For example, instead of purchasing a refrigerator, a consumer would pay a monthly fee for the service of cooling and freezing. The refrigerator would remain the property of the manufacturer who would be responsible for replacing and repairing it. The concept could apply to computers, cars, washing machines, and almost every durable product that people now buy, use up, and ultimately throw away. Products would be returned to the manufacturer for continuous repair, reuse and remanufacturing—a true "cradle to cradle" process.

The service model has been successfully adopted by several businesses. Under its "Evergreen Lease," Interface Carpets leases a floor-covering service for a monthly fee. When the carpet is worn out, Interface picks it up, puts in a

new carpet, and recycles the old one. The result: the customer gets less expensive and better services that cost the supplier far less to produce.

Other examples include Schindler, which leases vertical transportation services rather than selling elevators; Dow Chemical, which leases dissolving services because they can reuse the same solvent scores of times; and United Technologies, which is shifting its mission from selling air conditioning to leasing comfort.

The third principle is reinvesting in natural capital. The foundation of traditional capitalism is the prudent reinvestment of earnings in productive capital. Natural Capitalism works the same way—we must reinvest in, restore and sustain the ecosystems that provide the services on which industry and life depend. That means changing industrial processes so that they replenish and magnify the stock of natural capital rather than depleting and degrading it.

It is not only the right thing to do, but it can be extremely profitable because nature handles the production. For example, in California, the Sacramento Valley rice fields are now flooded after harvest rather than burned. The result: seasonal wetlands for wildlife; replenished groundwater; improved fertility; and no more air pollution.

The same principles apply to the development of the land itself. The conventional approach to development is to prepare the design first and then "make it fit" the site. This typically means massive grading of the property, the flattening of hills, the obliteration of trees, and the destruction of wetlands. The philosophy of green development is just the opposite: The natural conditions of the site are given paramount consideration in designing the development. As a result, there is usually little or no impact on the significant resources and features of the property. It might take a little more time at the front end to plan the development, but studies show that the end results are reduced infrastructure costs for the development (mainly because there are not as many roads) and lots that sell for more because the development is so attractive.

The final principle—biomimicry—is based on doing it the way nature does it. Spiders make silk that is tougher than Kevlar without needing vats of boiling sulfuric acid. A tree turns sunlight, water and air into a wonderful material called wood and produces oxygen and no waste. Knowing that they can manufacture their products in the same way, more and more companies are making binding commitments not just to reduce waste, but to generate zero

waste.

The central premise of Natural Capitalism is that the Earth can be restored and protected and that people and businesses can prosper economically. Yes, that's right, ***we can have it both ways—environmental protection and economic prosperity***. It's the ultimate win-win. As Interface Carpet Chairman Ray Anderson says, "You can do well by doing good."

The question is no longer whether there will be a new industrial revolution based on the principles of Natural Capitalism—that revolution has begun.

Rather, the question is who will lead it.

Here's my proposal. The United States should lead the world, South Carolina should lead the United States, and the Upstate should lead South Carolina.

I enthusiastically agree with Senator Lindsay Graham, who recently said, "There is no state in the union better positioned to help lead this nation to energy independence and a green economy than South Carolina."

In fact, I would submit that this represents the greatest economic opportunity in our state's history. Will we seize it?

We have it all in South Carolina:

- Abundant natural, geographic, industrial and human resources
- A business-friendly climate
- An outstanding track record in public-private partnerships.
- A deep water port
- Centrally located between the Northeast and the Gulf
- An underutilized agricultural and forestry base suitable for biomass—South Carolina has been described as the "cellulose capital of the nation"
- A strong existing manufacturing cluster
- A strong and innovative power industry cluster, include Duke, Santee-Cooper, SCANA, and Progress.
- Three research universities
- The Savannah River plant
- And on and on.

Now let's take a look at what we have right here in the Upstate:

More engineers per capita than any place in the country.

A phenomenal array of corporations, who are global leaders of the sustainability movement, including:

GE—Their Eco-Imagination initiative is an inspiring model for other companies and the headquarters for their work in the energy field is right here in Greenville.

BMW—Just a few of their sustainability initiatives include using methane gas from the Palmetto landfill—a gas 20 times more harmful than CO<sub>2</sub>—to supply 60 percent of their power needs at the Greer plant; designing their cars so that 95% of the parts can be reused or recycled; and recycling 95% of waste at all their plants.

Michelin—“Respect for the environment” is one of the company's five core values. It has developed the “Michelin Environmental Footprint” to keep track of progress in six specific areas—energy consumption, water consumption, VOC emissions, CO<sub>2</sub> emissions, waste produced and waste landfilled. Their goal is to reduce levels in all categories by at least 30% by 2013, as compared to 2005, and they are on track to achieve that goal.

Milliken—Before most people had even heard of the term “sustainability,” Milliken was actually doing it, tracking and reducing water and energy use company-wide since 1971. They now recycle 100% of their paper waste and 98% of all waste and have reduced the use of chemicals by 88% in last 10 years. And of course, we are all familiar with Mr. Milliken's devotion to trees.

Fujifilm—has adopted a green policy which states that “sustainable development is the most important issue for our planet, the human race and all business entities in the 21<sup>st</sup> century.” They have adopted eco-efficiency goals that require reductions in six areas—greenhouse gas emissions, VOC emissions, water consumption, natural resource consumption, packing materials, and waste generation.

Fluor—was the recipient of The New Economy's Best Clean Energy Company of the Year Award for its innovative work in the fields of energy efficiency, renewable energy, and emission controls. Fluor, of course, has a major presence in Greenville with over 2,500 employees.

Duke Energy—Its commitment to energy efficiency through its Save-A-Watt program and other initiatives is setting the standard for other utilities.

And this is just a partial list—there are many other companies in the Upstate doing great work in this field—a lot of them are represented at this conference.

And we have the amazing success story of CU-ICAR, an advanced technology research campus where academia, industry and government are working together in designing and testing new transportation technologies. Although CU-ICAR opened only 4 years ago, it has already generated more than \$215 million in public and private investments and created more than 500 jobs, a number that will soon increase.

Proterra, the electric bus manufacturer, will locate an R&D and assembly facility at CU-ICAR and bring 1,300 green jobs to the Upstate. They plan to turn out 3,000 buses a year at the facility.

We have great universities in our region:

Clemson University—Not only a key partner at ICAR but it recently received a \$45 million grant from the Department of Energy, matched by \$53 million in state and federal funding, to build and operate a facility to test and enhance the performance, durability and reliability of utility scale drive trains for the next generation of wind turbines.

Furman University—has been at the forefront of the sustainability movement for many years under the leadership of its retiring President, David Shi. These efforts will now be housed in the recently opened and appropriately named David E. Shi Center of Sustainability.

Wofford College—will do even more through the opening of its new Goodall Center for Environmental Studies in the renovated Glendale Mill.

USC Upstate—which has done outstanding work in improving regional cooperation and coordination in the Upstate.

Not too far away are the great research initiatives on hydrogen being conducted at the Savannah River plant and at the University of South Carolina.

Connect all the dots, and look at what we have in the Upstate—***the potential hub of the green economy in the United States.***

How do we make it happen?

First, it must be a top priority, high profile and well-coordinated campaign, strongly supported by leaders in the private and public sectors across the Upstate and with zero tolerance for petty jealousies and conflicts among counties and cities.

Second, someone or some organization needs to be given the responsibility and authority to manage the campaign—someone who wakes up every day with only one thought on his or her mind—how do we make the Upstate the green hub?

Third, we need help and support from Columbia. While the General Assembly has recently passed some good laws and incentives in the clean energy area, it must do more. In 2008, after 18 months of work, Governor Sanford's Climate, Energy and Commerce Advisory Committee, of which I was honored to be a member, released its report, with 51 recommended policies to reduce greenhouse gas emissions and address energy related issues in the State. All of the recommendations should be implemented, but most urgently needed is a Renewable Portfolio Standard for South Carolina in order to jump start and expand the renewable energy industry in our state. I don't think it's possible to have the hub of the green economy in a state that doesn't have a renewable portfolio standard. Look at what North Carolina has done. It passed its standard in 2007 and has already moved into the top ten states in the country in renewable energy production.

Fourth, we need to protect the outstanding quality of life that we have in the Upstate. This is essential in order to continue to attract high tech and clean energy businesses and workers to our region.

But our quality of life is gravely threatened by sprawl and uncontrolled growth—the Upstate has the dubious distinction of being the fifth most sprawling region in the United States, ranked just behind Atlanta. This sprawl and the increasing driving and congestion associated with it will almost certainly mean that the Upstate will be declared in “nonattainment” with the new ozone air quality standard. This will make business recruitment efforts extremely difficult—businesses are reluctant to locate in places with air quality problems.

But the good news is that there are proven policies, programs and incentives that can manage growth effectively and keep our air and water clean

and our quality of life high. All that is needed is the political will, mainly at the County Council level, to adopt and implement them.

The American Revolution was won in South Carolina—more battles were fought here than in any other colony, and the Patriot victories in the Upstate at Cowpens and Kings Mountain and other crucial engagements were the turning points of the war.

So too can the Natural Capitalism revolution be won in South Carolina. As Thomas Friedman has said, “Green is the new red, white and blue,” and as South Carolina native and Vermont Law School Dean Gus Speth has said, “There is still world enough and time enough for this century to see the coming of a future more wondrous, intimate and bountiful than we can imagine. But this world cannot be won without a profound commitment to urgent action.”

Let’s make that commitment today. Thank you.