

# Commentary & Analysis

## What the Grand Cathedrals Tell Us about Sustainable Practices

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**Roger Saillant**

### **Introduction**

**T**oday's forward-looking businesses rarely, if ever, take their cue from the Middle Ages.

Now is the time to start.

If the move to sustainable practices is to have any future, businesses must move beyond addressing environmental issues as public relations strategies and build sustainability into their very DNA. In doing so, they will find ready role models in a most unlikely source: the anonymous craftspeople who built the grand cathedrals of Europe.

### **Taking the (Decades-) Long View**

If Rome wasn't built in a day, neither were the great works of medieval architecture. The Gothic cathedrals at Amiens and Chartres took over 60 years to complete. Many masons, therefore, may have spent large portions of their working lives on the cathedral, never seeing the finished work.

If anything, corporate sustainability will take even longer to reach its fullest potential. Our economic system's emphasis on material throughput, and the environmental degradation that has resulted from it, stretch back at least a century. Clearly, then, sustainable practices will not remedy the situation in a decade or two.

That fact alone makes for a paradigm earthquake—because it renders quarter-to-quarter management obsolete. Creating a sustainable economy will require businesses to incorporate not just short-term financial results, but longer-term sustainable practices into their performance reports. Make no mistake: this will take courage on the part of executives who must defend these policies to shareholders. Yet with the urgency of many ecological issues—rapid deforestation, fossil fuel depletion and climate change, to name three—the well-being of future generations, and of the planet itself, may depend on such courage.

Ironically, the long-term window serves as an opportunity—because one need not tackle everything at once. When we drive sustainable practices into Plug Power, we often hear that the task is too overwhelming. My response is, "What'll happen if you just get started?" By empowering our people simply to start down the path, on a time frame they designate, we set in motion a process that will, in time, get the task done.

That said, it is essential to start doing the right thing now, and again the cathedral masons provide an example. The realization of the architect's grand vision depended on what each mason did *on each day*—cutting and laying the hewn stone exactly true. Without each humble step done correctly, no vision, however grand, would become reality.

So it is today. Inevitably, when people begin truly to face up to the enormity of ecological issues, they go through a "despair" phase:

"I'm only one person, I can't make a difference, why try?" Yet once they realize that they *can* do something—that their contribution, however small, is vital to achieving the vision—they are empowered to move forward.

### ***Sustainability as Core Imperative***

Work was generally regarded as "worldly" in the Middle Ages, but it is difficult to imagine the cathedral builders seeing their work entirely that way. Because theirs was a highly specialized craft, they essentially devoted their lives to building for the Church. Their work, in one sense, was their core imperative—their calling, if you will—in an era awash with the sacred.

With some exceptions, today's corporations do not yet view sustainable practices in the same light. Often such practices take the form of an initiative, a program, the domain of a particular department, while the rest of the business remains unaffected. Certainly these initiatives are commendable: they do, after all, contribute to the cause. But we can go deeper.

I see this playing out at Plug Power. It would be easy for us to cite our core business—the design and manufacture of fuel cells—as our contribution to sustainability and let it go at that. But we need to do more. So we have asked every employee to find new ways to incorporate sustainable practices into the business. As you read this, they are looking into a range of options, from remanufacturing old fuel cells to using renewable materials to, on a personal level, driving hybrid vehicles.

Certainly, such an effort consumes time and resources. And it cannot be the work of a single product or idea champion within an organization. Rather, sustainability must be part of the corporate mission, inspiring departments and employees to establish sustainable practices throughout the enterprise.

### ***Toward a Quiet Credibility***

Who built the grand cathedrals? Their names are lost to history because, among other rea-

sons, they never signed their work. This indifference to fame extends through many medieval endeavors, from manuscript illumination to music to literature. The work, quite simply, was more important than the individual.

Naturally, such an attitude is impractical for today's marketplace. Yet above and beyond the natural tendency of today's businesses toward self-promotion, some organizations spend a great deal of time trumpeting what turn out to be rather minor advances in sustainability. A company might, for instance, announce a new sustainable product, find that it must delay the launch because of technical issues, then proclaim the relaunch with just as much fanfare. Not only does this use a great deal of resources—resources that, perhaps, could be used toward more meaningful advances in sustainability—but it also breeds cynicism among the public.

Far better that we eschew short-term PR victories to focus on an ongoing commitment to sustainability. Certainly we should proclaim news when there is news to be proclaimed. But when our accomplishments support our words, such announcements carry credibility, which reinforces the idea among the public that sustainable practices are indeed viable.

### ***Innovation Required***

The craft of the medieval cathedral builders was anything but straightforward. As one source puts it, "Theirs was a unique calling. All other buildings were wholly unlike cathedrals.... Their craft was peculiarly difficult, and involved the possession and learning of many uncommon trade secrets."<sup>1</sup> Undoubtedly, it also involved new ways of applying those secrets to new and unexpected challenges.

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<sup>1</sup> H. L. Haywood, "Freemasonry and the Cathedral Builders," in *Chapters of Masonic History* ([http://mastermason.info/education/files/jan04/chapters\\_of\\_masonic\\_history.htm](http://mastermason.info/education/files/jan04/chapters_of_masonic_history.htm)).

After two centuries of using non-sustainable materials and processes, we will need to do the same—devoting our innovation resources in part to fulfilling the call to sustainability. This effort will happen on several fronts. Researchers will need to develop new reusable or recyclable materials. The percentage of recyclable materials per unit must be increased. Engineers must find new applications for non-sustainable materials to enhance their reuse. Processes must be reengineered for re-manufacturability and energy conservation. And this list doesn't begin to speak to sustainability's social and organizational dimensions.

Fortunately, people and organizations have already marshaled their intellectual resources to explore fundamental issues in innovation. A prime example comes from the Society for Organizational Learning,<sup>2</sup> a global group that connects companies, organizations, researchers and consultants to collaborate on projects involving fundamental change. The society's Sustainability Consortium explores a range of issues that relate to the triple bottom line: the intelligent use of materials; creation of market pull for more sustainable products; initiation of culture change around sustainability; clean energy and more.

One telling fact comes from a look at the consortium's membership list: it includes a dozen or so companies as diverse, and as influential, as BP, Coca-Cola, Ford, Nike and Unilever. The presence of these companies stands as a sign that the imperative of sustainability has reached the highest levels of the marketplace.

### **How Do We Get There?**

None of our sustainability imperatives can be forced upon businesses and individuals. Neither should they be. Yet all require whole-hearted buy-in from stakeholders on many levels—especially the investing community. How can we make this happen?

<sup>2</sup> See <http://www.solonline.org/>.

Any effort, I believe, must start with education to build awareness. Now some might object that the sustainability movement has been educating for the last 40 years, and they would be right. Just look at the number of books published on nature and ecological topics then and now: in 1962, there were six, while 2003 saw 1,216.

But the education required for culture change on this scale must be something far more extensive:

- It must be *continual*. With so many distractions and so many messages bombarding people in today's society, only education at saturation levels will suffice to build awareness and change behavior.
- It must be *positive*. The tone of many environmental messages produces guilt in too many individuals, preventing them from taking meaningful action. Showing them positive, practical possibilities can galvanize this population to produce incremental, but essential, change.
- It must *come from leadership*. Only executives have the power to effect culture change across their entire enterprise. That means the first task in many organizations is to educate the executives.
- It must *reach thought leaders*. Researchers Paul Ray and Sherry Anderson estimate that 50 million Americans are what they call "cultural creatives," who use their intellectual curiosity and concern for the world to explore major issues and ideas.<sup>3</sup> In some ways, these cultural creatives represent the human version of a sentinel species—a species that mutates first in the face of a seismic ecological shift. This demographic's interest in the environment helped generate the increase in ecological

<sup>3</sup> Paul H. Ray and Sherry Ruth Anderson, *The Cultural Creatives: How 50 Million People Are Changing the World* (Three Rivers Press, 2001).

books; engaging them on sustainability might well have similar results.

- It must *reach young people*. Many of us grew up when the “green movement” was just gathering credibility. As a result, we absorbed the messages as adults. By reaching young people, we build the cause of sustainability into their intellectual DNA. This, above all, will be the most significant contributor to creating a sustainable society in the long run.

Over time, I believe, intellectual awareness will become heartfelt commitment. Only that commitment will engender the sea change that the planet needs.

If these are the requirements, however, what is the curriculum? Fortunately, many key concepts—the triple bottom line, natural capitalism and the like—have already been well articulated. Surely, new ideas will develop as the sustainability movement expands. But the priority must now lie with communicating the ideas we have to a broad range of businesses, key leaders and others.

Ultimately, the challenge is to relinquish an attitude that humanity has held for thousands of years: that we are on earth to dominate. We must, in other words, learn to be guests—and stewards—of the earth. Changing a millennia-old mind-set is a very tall order. But if we take it one step at a time, it will happen. The cathedral builders understood this very well.

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