## Foreword

Greg Babe<sup>1</sup>

A century ago, Gifford Pinchot – one of the environmental movement's most important early champions – wrote:

The outgrowth of conservation, the inevitable result, is national efficiency. In the great commercial struggle between nations which is eventually to determine the welfare of all, national efficiency will be the deciding factor. So from every point of view conservation is a good thing for the American people.<sup>2</sup>

Pinchot's words were no doubt mystifying to his early 20th-century readers. How could conservation – an important component of what we today call sustainability – promote "efficiency" in the sense of how Frederick Winslow Taylor, the father of industrial efficiency, had popularized the term? Pinchot's ideas about conservation and wilderness preservation must have struck many as far removed, literally and figuratively, from the world of Taylor's time-motion studies on the factory floor.

Indeed, it has taken nearly a hundred years for us to reach the point where we can fully grasp Pinchot's vision of sustainability as part of a broader struggle for worldwide competitiveness in every sense of the word. Today, as businesses work to recover from the biggest recession since the Great Depression, those who look on sustainability, not merely as a management "fad du jour," but as the key to future prosperity, are rapidly gaining a powerful advantage over their domestic and international competition.

Today, the concept of sustainability has matured from the concept of conservation in the 20th century to the concept of stewardship in all its forms – social, economic, and environmental. True sustainability involves applying systems thinking to anticipate unintended consequences that can occur when the entire system is not taken into account.

In this book, Chris Laszlo and Nadya Zhexembayeva offer a practical guide to the power and necessity of weaving sustainability into the DNA of an organization. They show how, over the years, three once-distinct trends – declining natural resources, increasing transparency of business practices, and a rising tide of social and commercial expectations – have converged to make sustainability the most urgent issue of the contemporary business agenda. In this sense, they are heirs to the legacy of Pinchot and Taylor. But they bring to their cause, a century later, an even greater sense of urgency.

Professors Laszlo and Zhexembayeva well understand that embedding sustainability into the corporate culture – which is to say, into the hearts and minds of employees, customers, suppliers, shareholders, and other stakeholders – represents a long and difficult journey. And while our sustainability journey at Bayer in North America is far from over, we have already learned much along the way. Those lessons can be summarized in three words: awareness, involvement, and innovation.

Awareness. Companies must begin their change journey by recognizing that reputation is their biggest asset or their biggest potential liability. Companies who fail to adhere to sustainability thinking and principles – everywhere and always – can garner, practically overnight, negative media attention, lost stakeholder trust, and enormous unplanned costs. BP's disaster in the Gulf of Mexico is the most recent and costly example of this phenomenon, but it is far from the only one. As the authors argue, "Managing sustainability-related business risks is not so much about value creation as it is about avoiding its destruction" (page 61). It's an important point.

Bayer has launched an employee education program to advance sustainability throughout the corporation. It's called STEP – for Sustainability Thinking Education Program. Chris Laszlo was instrumental in designing STEP and preparing Bayer executives for the key leadership role they must play in making the program a success.

**Involvement**. Beyond awareness, embedding sustainability means mobilizing the active involvement, not just of employees, but of all stakeholders in the adoption of sustainable business practices. The authors cite the example of Australia's Yellow Tail wines, which "raised the retail store involvement relative to table wines" (page 85), creating in the process a product almost beyond category. As of this writing, Yellow Tail is the best selling wine in the United States, outselling all French producers combined. Sustainability is embedded in Yellow Tail's brand image, which includes recycling all irrigation water, cardboard, plastic, and glass. And the involvement of both employees and consumers in its sustainability efforts is one of the keys to the company's success.

Similarly, a patent-pending idea by a Bayer employee trained in process control led to a decrease in greenhouse gas emissions equivalent to 13,000 metric tons of carbon a year. That single change will save our company some \$2 million in operating costs annually.

Innovation. As we increase organizational awareness of sustainability and engage our stakeholders in our vision, we find that we also unlock the power of company-wide innovation. At Bayer MaterialScience, that has led, for example, to innovative products for retrofitting buildings to make them more energy-efficient and to combat one of the bigger sources of greenhouse gas emissions in North America. In our CropScience group, we have developed seed treatment technology to help growers produce more output per acre of land without extra steps. Producing more per acre equates to using fewer natural resources such as water and arable land to feed a growing population. Our HealthCare group has likewise developed such innovative products as the Contour USB meter for patients on insulin therapy. Helping them better manage their disease over a lifetime means not only a better quality of life for the individual but lower costs to society as a whole.

The journey to embedded sustainability isn't one that can be traversed over a matter of several quarters or even several years. But ideas that underlie it have evolved to the point where we can fully grasp and employ them to transform both business and society.

Likewise, the meaning of sustainability itself will continue to unfold over time. As Gifford Pinchot wrote:

> While at first conservation was supposed to apply only to forests, we see now that its sweep extends even beyond the natural resources . . . I recall very well indeed how, in the early days of forest fires, they were considered simply and solely as acts of God, against which any opposition was hopeless and any attempt to control them not merely hopeless but childish. It was assumed that they came in the natural order of things, as inevitably as the seasons or the rising and setting of the sun. Today we understand that forest fires are wholly within the control of men. So we are coming in like manner to understand that the prevention of waste in all other directions is a simple matter of good business. The first duty of the human race is to control the earth it lives upon.3

The time has come for business to understand that duty and, what is more important, to act on it.

> Greg Babe President and Chief Executive Officer Bayer Corporation and Bayer Material Science LLC