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Sustainability in a New Era

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Sustainable development has become an increasingly visible issue facing business managers and consumers as they look at the marketplace. Sustainable development is often defined as using resources wisely so as to not compromise the capacity of future generations to meet their resource needs. These days there is much more discussion in the business world and by customers about sustainability. It is more than just a message about “doing the right thing” or being “green.” Despite today’s economic challenges, exploring opportunities and implementing sustainable practices can benefit a baker on many fronts.

The sustainability umbrella is very large. The breadth of issues can include the entire supply chain or be very focused on the inner workings and efficiencies being developed at a single company. Many consumers are considering a business’s sustainable practices as they make their purchasing decisions when walking down a store’s aisles. Sustainable development is also linked to climate change issues and reducing greenhouse gas emissions, which lead to a business determining its carbon footprints. There has been greater focus in Washington, DC, U.S.A., by both Congress and the Environmental Protection Agency (EPA) on climate-change-related issues. The 110th Congress discussed this issue briefly yet with little legislative progress. However, President Obama’s vision is for the United States to become a leader on climate change and develop a climate change program to curb greenhouse gas emissions 80% by 2050. What will this mean for bakers?

In 2009, federal and state regulators are already engaged in these topics and moving at a faster clip. In 2008, the EPA took public comment on its initial thoughts with regulating greenhouse gas emissions. In 2009, the EPA is expected to propose an economywide greenhouse gas emission reporting rule that may require a variety of businesses economywide to begin documenting their carbon footprints. Other federal agencies with interests in climate change include the Department of Energy, Department of Agriculture, Department of Interior, and the Federal Energy Regulatory Commission.

At the state level, the Midwestern governors and governors from California, Oregon, New Mexico, Arizona, Montana, Utah, and Washington, as well as representatives from parts of Canada, are establishing greenhouse gas reduction targets and developing multisector cap-and-trade approaches for reducing greenhouse gas emissions. In January, California issued draft guidelines for addressing greenhouse gas emissions as part of its efforts to meet the 2010 deadline for implementing the early actions required by the California Global Warming Solutions Act of 2006, AB 32. As part of these efforts, California will likely focus on developing a state cap-and-trade program for greenhouse gas emissions, seek approval of a Clean Air Act waiver, allowing the state to pursue more rigorous vehicle efficiency standards, and expand the state’s renewable energy infrastructure. These results may serve as a road map for other states interested in pursuing state climate change programs. The state regulatory developments and possible legislation by Congress may lead to requiring all industries, including bakers, to document improved efficiencies and in particular energy consumption.

As a supplier, there can be frustration that your market may not be directly expanding by implementing a sustainability program, yet your customers may be setting hurdles for you in order to meet their market demands. Additionally, with the impending change of administration in Washington, DC, these sustainable goals may ultimately lead to greater regulation and scrutiny of business practices. Bakers are being challenged by these issues on several fronts and that is why, in 2008, the American Bakers Association’s (ABA) Energy and Environmental Health Committee set out to develop tools to assist the association’s membership and the baking industry in better understanding sustainability.

Sustainability is a very far-reaching issue that can quickly become overwhelming to a smaller business. The ABA Energy and Environmental Health Committee began identifying those sustainable elements most familiar in the baking industry and that can bring the most value to a business. ABA’s Natural Resource Sustainability Program for Bakers focuses on improving energy efficiency, improving water efficiency, and improving recycling efforts.

This new program’s goal is to provide resources and information to bakers interested in further pursuing a sustainability program. Recognizing that continuous improvement of sustainable practices throughout the baking industry will require multifaceted strategies, and the integrated effort of various stakeholders is also important. A long-term goal for the ABA is to expand its Natural Resource Sustainability Program for Bakers to encompass other areas of sustainability, such as carbon footprinting—an effort slated for 2009. However, starting with the basics is a good first step. With that in mind, in June 2008, the ABA Board of Directors endorsed the Natural Resource Sustainability Principles for Bakers as a first step in this emerging program.

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There are some basic elements that bakers should consider if moving toward a sustainability program. First, gaining commitment from all the levels of your organization is crucial. Commitment from executive management/owners and your employees will help set the program’s framework along with its vision and goals, thereby providing incentive for all those involved in taking your product to the marketplace. Second, understand the needs of your customers and how they view sustainability. Engage customers in conversations about what the baking industry is doing to better understand and implement its natural resource sustainability and how it plans to expand that goal in the future. Third, consider outreach and collaboration with others, including your suppliers, consumers, shareholders, academic and regulatory bodies, and your community, to improve your model and become more innovative in ways that allow your business to eliminate waste.

Creating benchmarks for a bakery’s water and energy use is a crucial part of developing a sustainability program for your bakery. It is important to begin measuring the quantity and usage of a bakery’s resources in order to begin the process. It is also important to select a baseline year for which a bakery will continue to measure its sustainability progress or score against. Every bakery will have its own needs and goals. Once these elements are defined and evaluated, an index is established. This index will help convey a clear goal about the bakery’s expectations and will allow for yearly comparisons. Training to ensure that employees are familiar with the baseline data and the initiatives in place will encourage everyone to aim for improving performance and striving for a lower bakery sustainability “score.”

Evaluating a bakery’s compressed air system can improve efficiency and performance while decreasing energy costs. According to the Department of Energy, compressed air systems account for $1.5 billion per year in energy costs and 0.5% of emissions. Optimization of compressed air systems can provide energy-efficiency improvements of 20–50% (1).

Over the past year, the ABA Energy and Environmental Health Committee has begun to develop a better understanding of this issue and the growing customer and consumer expectations associated with it. As the baking industry begins its work to determine what the carbon footprint is for a loaf of bread, we look to see what trends may exist as climate change and carbon footprints begin to receive greater scrutiny. These positive and productive efforts will continue as we move into a new year.

What’s next? The carbon footprint. In most basic terms, the carbon footprint is a measure that is being used to determine an entity’s impact on climate change. Specifically, it is intended to characterize the amount of greenhouse gas emissions produced by a business, in this case a bakery, through its energy use (i.e., burning of fossil fuels for electricity, heating, and transportation). These emissions are recorded in units of tons of carbon dioxide equivalent.

How to achieve the long-term climate change goals for the United States is still being considered and will evolve. However, last year Congress did direct the EPA to publish a mandatory greenhouse gas reporting rule for those emissions that are “above appropriate thresholds in all sectors of the economy” (H.R. 2764; Public Law 110–161). The EPA has yet to propose these thresholds, but it is expected that the focus will begin with the larger industrial manufacturing facilities and their upstream and downstream sources. The objective of the EPA’s program is to collect comprehensive data that can be used for future climate change policy decisions. Some suppliers are already identifying their climate change goals as part of a sustainability initiative and in turn asking for greener product supply chains.

To date, there is no universally accepted measure of the carbon footprint, but most calculations consider two elements to determine a business’s footprint—direct and indirect emissions. Direct emissions are calculated from energy use and transportation. These are often the easiest to impact and control. The direct emissions also link back to a sustainability program and improving energy efficiency.

The indirect emissions can include a host of other factors that may be more difficult to measure and control. For example, consider the entire life cycle of a product from raw material purchasing to manufacturing and finally to its disposal. Should a food manufacturer consider the type of farming used to produce its ingredients? Did the farmer use sustainable farming techniques? What about herbicides and pesticides? How many “food miles” did the ingredients travel before they were used? How many more “food miles” will be travelled before the product reaches the consumer? These questions become more difficult and, to date, businesses are looking at the elements of a carbon footprint in a slightly different manner based on their corporate programs and the markets they serve. These elements will continue to gain momentum as the climate change issues evolve.

Embarking on a sustainability program may initially require more financial and administrative resources, but in the long run, efforts to reach the goal help improve productivity and provide measurable results that ultimately increase your efficiency, impact your competitiveness, save money, and raise corporate perception to your customers and the public. These are key elements for continued success in these uncertain economic times.

Reference