

## **Book The Green Business Guide**

# A One Stop Resource for Businesses of All Shapes and Sizes to Implement Eco-Friendly Policies, Programs, and Practices

Glenn Bachman Career Press, 2009 Listen now

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#### Recommendation

The threats to the planet from greenhouse gas emissions and other forms of pollution and resource depletion are clear. The question is, what is your company doing about it? More and more, consumers look to businesses to take the lead in eco-friendly practices. If you're ready to make your company greener – because it is the right thing to do and because it is good for your bottom line and customer approval – *BooksInShort* recommends Glenn Bachman's detailed, hands-on, indispensable reference. He lays out the issues to consider, from packaging to water management to reusable waste to renewable energy. This is not light reading, but it thoroughly addresses the subject and will prepare you to implement your own eco-efficiency plans.

### Take-Aways

- Regulators and stockholders are demanding more corporate transparency on green issues.
- Most U.S. consumers hold businesses accountable for sound environmental policies.
- Green companies take responsibility for their products' environmental impact at every stage of the product life cycle.
- Define the scope of your eco-efficiency plan. Expect to fine-tune it continuously.
- Good eco-design calls for reducing raw resource inputs, recycling parts and reusing easily disassembled materials at the end of a product's life cycle.
- Audit all business processes, from energy and water usage to transportation policies, for environmental consequences.
- Look for the right-sized, energy-efficiency-rated equipment to get the job done.
- Commonsense measures can bring great savings: Replace old bulbs with compact fluorescents, install programmable thermostats and weatherize your building.
- Reduce diesel consumption. Consider shipping by rail.
- Encourage customers to trust your green claims by using credible ratings systems that evaluate your products' eco-friendliness.

## **Summary**

## Your Company's Place in the Big Green Picture

Consumers, stockholders and regulators hold companies accountable for the environmental impact of their business practices. The planet can no longer afford rampant resource use, unrestricted emissions and excessive waste. As people deplete natural resources, the cost of energy, water and materials will rise, as will the costs of doing business. Organizations will have to adapt to the consequences of environmental change and its additional demands on capital. Now is the time to tackle this adverse situation, which actually holds opportunities for positive action and even profit.

"Workers are exposed to a lot of change initiatives...Don't mislead people about the commitment of the organization to going green."

Green organizations recognize the risk of climate change and environmental degradation, so they plan and adopt environmentally sound business practices. These companies know how much energy and how many resources they use; they calculate their carbon footprint. They recycle when possible and take responsibility for their products' life cycles. Green enterprises provide leadership in their business sectors and serve as public examples of responsible stewardship. They try to reduce waste and recycle materials throughout their production cycles, thus saving money and controlling their environmental impact.

"It is important that the eco-design team extend their thinking beyond identifying 'good' and 'bad' impacts, and brainstorm benefits by creating new systems."

Going green puts you ahead of the curve of inevitable regulation, just as government agencies, customers and stockholders are demanding more transparency about environmental issues. Eco-friendly policies will also motivate your employees and attract new talent, thus contributing to a stronger bottom line. Conversely, corporations that produce substantial greenhouse gas emissions and use harmful environmental practices expose themselves to future financial risk.

#### **Planning the Green Transition**

Address these elements in your enterprise's green transition:

- Define what being a green organization means and outline your intentions.
- Decide who will participate in developing the plan. Identify the relevant stakeholders.
- Set a time frame for planning and implementing changes.
- Determine how you will measure your progress and what tools you will use.
- Discuss how implementing a green program will affect your other initiatives.
- Identify potential risks. For instance, do you use volatile raw materials?
- Analyze the cost versus the benefits of an environmental program.
- Make recommendations about what areas to upgrade, and what parts of the transition to pursue in each stage. Establish how you will proceed with scheduling, logistics and budgeting.

"Engaging stakeholders involves more than scheduling a conversation or delivering a report."

Any enterprise-wide transition needs fully committed leadership. Corporate executives must express their commitment repeatedly in formal statements. They should also demonstrate it by designating an environmental oversight executive, providing adequate support and establishing periodic evaluations aligned with stated goals. From the planning stages forward, crucial stakeholders include owners, executives, employees, vendors and customers, as well as governmental, civic and environmental organizations.

"Workers look to leadership to walk the talk: If transportation energy efficiency is an enterprise policy, then there shouldn't be any gas-guzzlers in the corporate vehicle fleet."

Calculate your company's environmental impact within the framework of your product's life cycle, from the extraction of raw supplies through manufacturing to consumer use and disposal. Use this evaluation to write an environmental profile of your product.

Devise your eco-strategy based on measurable goals. Use "simple payback" calculations and standard business analyses, such as "internal rate of return," to estimate the value of each ecological project. Re-evaluate your plans periodically. Determining the environmental impact of a business decision is not always straightforward. For example, using solid wood to build cabinets depletes forests, but making cabinets from veneer glued to particleboard creates air pollution.

"Many agencies will only conduct business with those vendors that demonstrate ecological responsibility."

An "eco-designer" can help you weigh your options, find ways to minimize harm and create "outputs" you can recycle, either by returning material to nature or reusing it industrially. Usually, eliminating waste up front is easier than treating it as a byproduct. Look for the least toxic ways to accomplish your goals, especially in chemical processes. Utilize renewable resources. Minimize unusable byproducts and design for benign decomposition. Closely monitor your processes, keeping safety in mind.

#### **Environmentally Sound Physical Plants**

To evaluate your physical plant, ask a few questions. Is it near your source of raw materials? Can you distribute your products efficiently? Are you conveniently located if your staff needs to travel? Try to anticipate any future expansions. The U.S. Green Building Council has developed "Leadership in Energy and Environmental Design" (LEED) standards for planning spaces that use positive environmental practices, like installing energy-efficient climate control, selecting materials with lower environmental costs and using natural light, among others. In terms of materials, a green design might include ecologically sound substitutes for wood and drywall. For example, bamboo is a more renewable flooring material than hard wood. Buy carpeting made with recycled fiber or install easy-to-replace carpet tiles. Avoid floor adhesives, if possible.

"Material reuse and recycling success is partly a function of locating an organization that has need for the material. Materials and waste exchanges link suppliers of waste materials with entities that can use the product."

Companies heat and cool their interior spaces to keep people comfortable, maintain healthy air quality and ensure that equipment functions well. Map your space and its occupancy levels. Note large equipment, and heating or cooling machines, all features of your heating, ventilating and air-conditioning (HVAC) system. Pay attention to the safe location of hazardous materials. Analyze the insulation throughout your facility. If you improve the efficiency of your climate control process, you'll save money and reduce your environmental impact. Commonsense modifications include programmable thermostats, proper weatherization of your building and compact fluorescent lightbulbs. For greater efficiency, use "power management" computer systems and turn off unused computers. Share printers via networking. Look for

Energy Star ratings on your equipment.

#### Your Energy Management Plan

The U.S. Environmental Protection Agency (EPA) provides tools like interactive PowerProfiler software and the eGRID database, which you can use to evaluate the amount of greenhouse gases your electrical system emits. Investigate whether you could use renewable energy sources, like solar, biomass and wind power (the U.S.'s fastest-growing alternative energy source). Determine if it makes sense for your business to generate its own electricity. Photovoltaic (PV) cells mounted on a tracking device that follows the sun can convert sunlight to electricity. Solar generation is price competitive in some markets and its cost is likely to drop as its popularity increases.

"With energy costs being a significant expenditure for industry, energy consumption reduction is an important activity."

When evaluating your energy consumption, establish the scope of your energy plan. Will you consider only the energy you use, or will you account for your suppliers', distributors' and products' energy use? You can roll out a step-by-step plan based on your own usage first, and then expand it, if practical. To put your efforts in context, projections say that by 2030, U.S. energy use will increase 18% as global requirements increase 50%. U.S. production of domestic oil reached its peak in the 1970s. And, nuclear and coal power have significant downsides, including undesirable byproducts. The U.S. has plenty of coal, but high carbon emissions and public opposition to mining methods have contributed to the cancellation or delay of 60 coal-fired facilities in the U.S. since 2006.

"A 2008 study of manufacturers indicated that 65% of survey respondents intended to invest in energy efficiency improvements during the next year."

Your operational energy demand will fluctuate predictably – more during peak periods and less on weekends, for instance. Identify your most energy-intensive procedures. You may find that calculating energy use per product per year is more useful than considering energy use per square foot. You can install control mechanisms to make many industrial processes more efficient, to minimize the loss of heat and to reuse excess heat. Find the right-sized equipment for the job and power down motors when the machinery is idle. Perform regular maintenance. Compare your data to industry averages. You may be eligible for loans and grants established to help companies finance eco-efficiency initiatives.

"Air quality in enclosed spaces can be compromised because of mold, bacteria, allergens and chemicals, such as radon, carbon monoxide and toxins routinely emitted from various products."

Perhaps you can embark on a "sequential" set of renovations, taking steps first that provide a faster return on investment to help pay for future upgrades. Break your plan down into actionable increments. Design a monitoring system to compare actual benchmarks against projections.

#### Your Transportation Management Plan

Think about transportation in terms of distributing raw and finished materials, and then consider your employees' commutes, business travel and whether customers travel to buy from you. Heavy trucks account for less than 2.2% of all vehicles, but use 18.2% of the petroleum on the road and emit greenhouse gases. Reduce the weight of your product as much as possible to compensate for poor truck performance. Try to buy more efficient trucks. And, see if you can use the train, since rail transportation is far more energy efficient and less polluting.

"It is crucial that worker and customer health is not compromised by exposure to potentially hazardous substances."

Begin with an audit of your current transportation uses and needs. Set goals to cut miles traversed and reduce environmental damage. Can you give employees subsidies for using public transportation? Could you set up compressed schedules, like letting some people work three 12-hour days or four 10-hour days weekly, or offering "flextime" to stagger arrivals and departures? Encourage telecommuting and teleconferencing. Become more bicycle friendly. If you have a fleet of cars, look into using alternatively powered vehicles, such as electric hybrids.

"Green power programs allow consumers to purchase some portion of their electricity from renewable sources. Some utilities and independent retailers are selling electricity that is completely generated from renewable resources."

The environmental impact of your packaging will vary based on the kinds and quantities of materials and how you dispose of them. Consider the sustainability and toxicity of the resources used in manufacturing your packaging, and the greenhouse gases or other pollutants emitted. The Sustainable Packaging Coalition offers guidelines for minimal-impact packaging.

#### Your Water, Air and Waste Management Plan

Water usage varies widely among enterprises. Water efficiency calls for conserving more of the water your business uses (minimizing spillage, for instance), reducing the volume used and recycling gray water. To minimize the water needed in your water heating system, install aerators, flow restrictors and other efficiency fixtures. Purchase appliances that use a minimum of water, lower the water temperature and use cold water instead of hot when possible. The American Solar Energy Society and Solar Energy Industries Association Web sites offer useful tools for evaluating solar water-heating systems.

"Frame ecological benefits in terms that resonate with the buyer's core values, attitudes and beliefs."

Replace older plumbing with more efficient fixtures. Install programmable heating and cooling controls. Watch for leaks. Recirculate water where possible. Use a "process map" to visualize the water flow your work requires. Outdoors, landscape using plants with the lowest water demand.

Evaluate air quality conditions by assessing heat-trapping gas emissions, heat radiation, production emissions and the overall quality of your building's interior air. Monitor indoor air for cleaning solutions and allergens, as well as radon and other potentially harmful chemicals that equipment can generate. Good ventilation helps remove potentially harmful gasses and controls humidity. Regular maintenance promotes efficiency. Consult the EPA's Indoor Air Quality Building Education and

Assessment Model (I-BEAM) for more guidelines.

"Fear tactics, pessimism and guilt are not effective ingredients of a green marketing menu."

Americans use 700 pounds of paper per person each year. The "average office employee uses 10,000 sheets of paper annually." Minimize the use of paper products. Print on both sides. Edit on the computer. Identify what you can recycle. More than 50% of U.S. waste ends up in landfills. Look for opportunities to reuse and recycle. Can some other businesses utilize your waste? Can you sell byproducts? Since electronic equipment waste can be toxic, check with the Basel Action Network for ethical ways to dispose of electronics. "Deconstruct" structures rather than demolishing them, because deconstruction can preserve building components for reuse.

Some 93% of those who responded to a 2007 Cone Consumer Survey believe that businesses are responsible for being eco-friendly. Know your company's environmental impact thoroughly so you can communicate the story about what your firm is accomplishing. Consider having a credible rating program certify your green efforts. Listen to your customers and stakeholders so you can respond specifically to their environmental concerns in your promotional materials.

## **About the Author**

Glenn Bachman, a management consultant with 30 years of experience, is president of Raven Business Group in Massachusetts.