

Lab Manager[®]

MAGAZINE

Run Your Lab Like a Business

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Stormy Weather

What Does the Economic Downturn Mean to Your Lab?



**Efficiency Matters
Now More Than Ever**

GREENUP!

Improving the Science of Science
with an Eye Toward Sustainability

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MAGAZINE

Run Your Lab Like a Business

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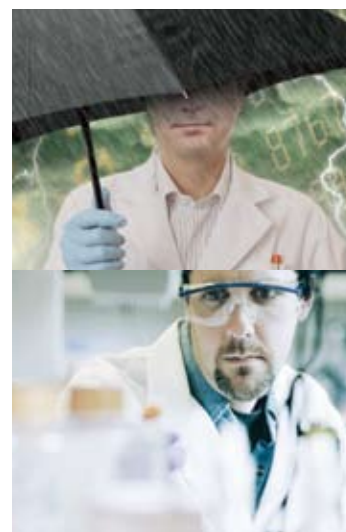
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Through the measurement of specific key performance metrics (KPMs) on your assets, manufacturers and service providers, it is possible to turn knowledge into purchasing power.

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➔ Based on a recent *Lab Manager Magazine* survey, **35.8%** of our readers expect an increase in their 2009 research budgets for consumables; **34.1%** for staffing; **26.9%** for training; and **26.4%** for chemicals and life science research products. To find out how your budget compares with these, along with complete survey results, visit labmanager.com





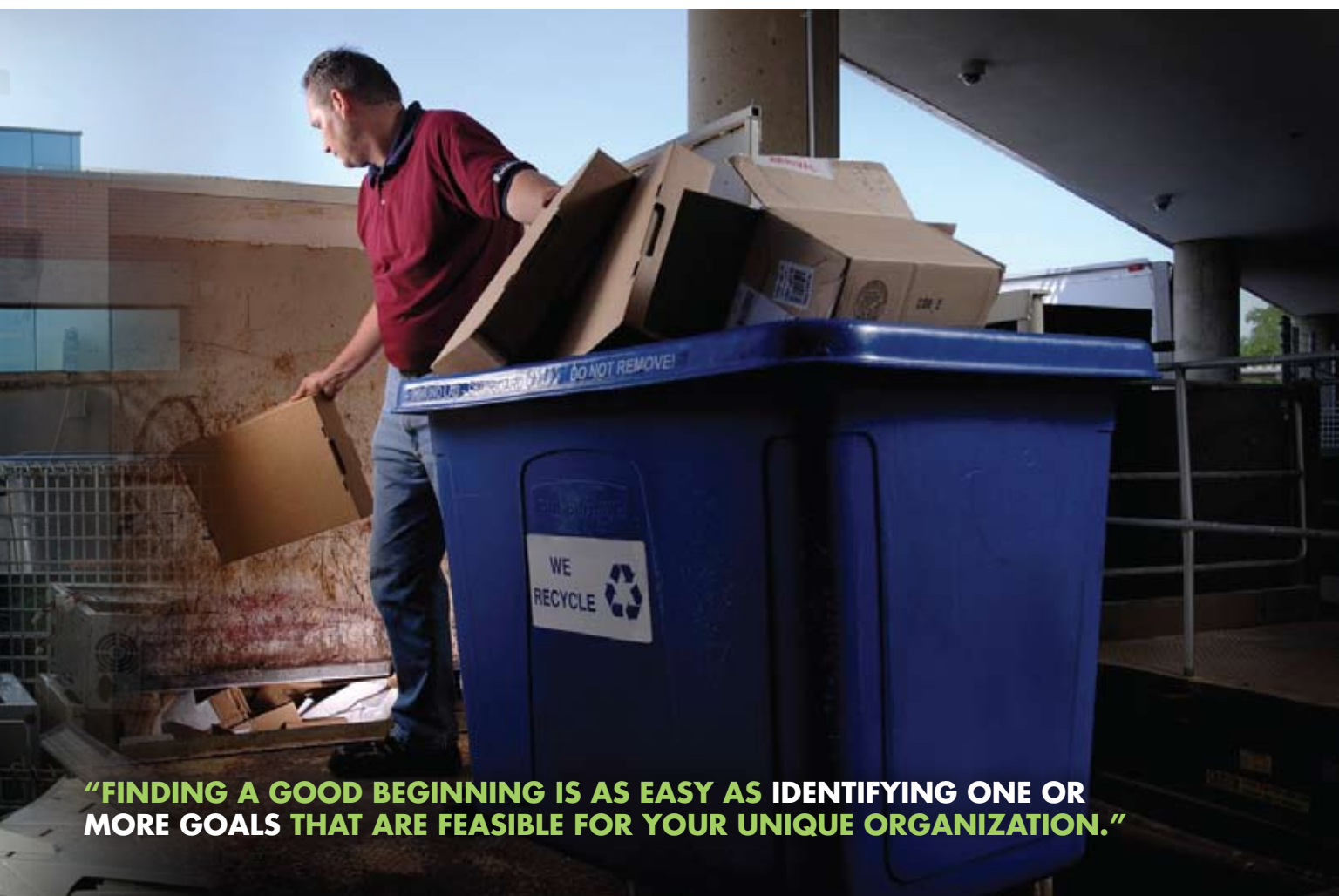
One Laboratory's Journey Toward Green

SUCCESS RELIES ON A VISION, LEADERSHIP SUPPORT, REALISTIC GOALS, EDUCATION AND A COMMITTED INFRASTRUCTURE *by David P. Jackson, MBA*

When ARUP Laboratories, a national medical reference laboratory in Salt Lake City, began its Corporate Responsibility Program five years ago, it did so in an effort to be more environmentally conscious. The company has been pleasantly surprised that among the rewards reaped for its efforts are tremendous improvements in recycling, reusing and reducing; increased employee involvement and enthusiasm; positive client feedback, and community support and recognition.

ARUP encourages other laboratories to also take steps toward becoming more environmentally friendly. With so many options, deciding where to start “going green” is a daunting task that requires careful planning. However, finding a good beginning is as easy as identifying one or more goals that are feasible for your unique organization.

ARUP initiated its Corporate Responsibility Program with a philosophy based on the three elements of the environmental triangle:



"FINDING A GOOD BEGINNING IS AS EASY AS IDENTIFYING ONE OR MORE GOALS THAT ARE FEASIBLE FOR YOUR UNIQUE ORGANIZATION."

Reduce consumption of unsafe products, energy and natural resources.

Reuse building materials and purchase reusable office and laboratory furniture.

Recycle by implementing a robust recycling program with support and education.

ARUP Laboratories began its journey by focusing on the following five steps and offers these as suggestions to other laboratories looking for ways to go green:

1. Have a vision of what is possible. Set a direction and vision for becoming environmentally friendly. Using the Environmental Protection Agency's "Reduce, Reuse, and Recycle" symbol as a model for organizing efforts can help you define simple, specific goals.

2. Obtain laboratory leadership support. Whether you operate a free-standing laboratory or are located inside a larger facility, leadership support is vital to success. Creativity is key to gaining this support, which may be conditional. For example, achieving greater efficiency in business practices doubles as an environmentally friendly goal. ARUP leadership readily committed to the concept of becoming more environmentally conscious because ARUP's culture is built on doing the right thing.

3. Be realistic about what is possible. The old adage "you can do anything you want, but you can't do everything you want" applies to green activities. Any progress is better than no progress.

ARUP developed a plan based on

financial and space considerations. A long-term commitment was necessary for some projects, such as a 10-year xeriscape plan. Other projects were quicker, such as recycling education and recycling container placement. Plans to reduce chemical usage were also implemented quickly. Still other projects were postponed. For example, a grinder/sterilizer for medical waste and a state-of-the-art recycling dock had to wait for space and funding.

4. Actively and continually educate staff. Since many laboratorians are generally environmentally conscious, this step is usually not difficult. Educational seminars, articles in newsletters, posters, reminder buttons, etc., are all things a laboratory can use to keep awareness high.

**“ACHIEVING GREATER EFFICIENCY IN BUSINESS PRACTICES
DOUBLES AS AN ENVIRONMENTALLY FRIENDLY GOAL.”**

5. Build an infrastructure. It is crucial to do more than spread the word. There must be an easy and convenient mechanism in order for employees to participate.

ARUP committed to an infrastructure that included:

Office and laboratory areas:

- Blue recycling wastebaskets
- Bins for electronic waste
- Locked bins for shredded documents

Laboratory areas:

- Convenient bins with lids for medical waste
- Bins for cardboard and brown glass

Company-wide areas:

- Locations for other recycling (fluorescent lights, flammable waste)
- Proper storage sites for chemicals and medical waste
- Recycling dock (containers for commingled waste, cardboard, metal and regular waste, and paper for shredding)
- Document storage with expiration dates
- Educational activities about the value of going green
- Policies for record retention and file destruction

The results

Using these five steps, the company developed a robust plan, initiated employee education and began implementing its ambitious vision. In a few short years, ARUP has realized amazing results. Among them:

Recycling:

- 288,000 lbs. per year of commingled waste (paper, plastic)
- 100,000 lbs. per year of cardboard
- 70,000 lbs. per year of metal
- 67,500 lbs. per year of expired documents
- 219,000 lbs. per year of shredded paper
- 24,000 lbs. per year of electronic waste

- 50,000 lbs. per year of flammable waste

Reusing:

- Reused 20,000 square feet of existing carpet
- 33,000 square feet of “renewed/reused” carpet made with 35 percent recycled content
- Almost 100 percent of office, cubicle and laboratory furniture is reusable
- New office furniture is built with 40-60 percent recycled material
- Building materials in construction and renovation are reused as much as possible; the rest are recycled

- Chemical waste disposal costs were five times smaller in 2006 than in 1996 (when ARUP was three times smaller)
- 2,000 lbs. per year reduction of dry chemical extinguishent by using water in fire safety training
- Significant energy savings with motion sensors, automatic temperature setbacks, variable speed motors and two-stage air conditioners
- Significant printing, paper and labor conservation by using electronic payroll deposits and benefits management
- Over 500 employees use some form of mass transit at least once a week



“THERE MUST BE AN EASY AND CONVENIENT MECHANISM IN ORDER FOR EMPLOYEES TO PARTICIPATE.”

Reducing:

- 80 percent of cleaning chemicals are “Green Seal”
- Over 100 gallons per year of wax and stripper chemicals have been saved
- 70 percent reduction of the landscape water when xeriscaping is completed in three years
- 15 percent decrease in the amount of bio-hazard waste over the past five years
- Over 87 percent of bio hazard waste (376,000 lbs.) processed on-site, avoiding incineration

ARUP president and COO Ronald L. Weiss, MD, MBA, believes the work has been worth the effort. “ARUP has taken steps to accept responsibility for the impact our activities have on our customers, employees and communities,” he says. “By voluntarily taking these steps, our employees have contributed to improving the quality of life, assisting our local communities and reducing environmental damage.”

The company presently recycles 30 to 35 percent of its total waste (up from near 0 percent six years ago), and its overall achievements were recognized by the Recycling Coalition of Utah in May 2008, when ARUP was presented with the Business Recycler of the Year award. ARUP was selected for its outstanding efforts in recycling and sustainability, and its continuing stewardship of the earth, achievements that can be realized by any laboratory that decides to take action.

David P. Jackson, MBA, Senior Vice President of Strategic Services, ARUP Laboratories, 800-242-2787.