Manage your Resources Efficiently

M. RAZEEM, Project Engineer, Sustainability, OCTAL Petrochemicals

The diverse forces driving our 21st century world of business have resulted in complexities far beyond those required for successfully operating a company during the 20th century. Stakeholder demands are more significant. Regulations have increased. The risks of failure are more profound.

The complexity is greater — but so are the opportunities.
In no area of business are such opportunities more acutely realized than with regard to the rising demand for resources, constrained supplies and conformance to changing social attitudes towards the environment and sustainability. The next decade will bring a dramatically increased focus on resource productivity and the emergence of companies with the capabilities to efficiently manage their resources. The public will insist that companies meet the needs of the present world without compromising the ability of the future generations to meet their own needs. The purpose of business is to create a better world. Corporations that find a successful way to manage their resources will be sustainable. By being sustainable, they will be successful.

Managing Core Resources Is Essential to Success

Put simply, what is good for the planet is also good for the long-term survival and profitability of businesses. A sustainable business reduces its own demands on the planet by developing products and services that use fewer resources. The process of consuming less, in itself, is a key trigger for increased profitability.

True sustainability, however, can only be created when sustainability is understood as fundamental to the future of the business and approached as a strategic

imperative. It must be integrated into the central ways a business does business. Specifically, management must start to integrate sustainable practices into every aspect of its business based on three core initiatives:

1. **Conserve Energy Through Innovative Technology: Help Attract New Business**

Manufacturing management should begin to look for new technologies available in the marketplace to help them conserve energy. Many equipment vendors in the past few years have introduced some unique solutions. For example, conventional PET manufacturing depends on as many as five reactors and requires separate processes for resin and sheet production. Therefore it is energy intensive.

When building our process, we were committed to reducing its overall energy use. We accomplished that by implementing the latest 2R reactor system from our equipment vendor to efficiently produce quality PET resin from only two reactors. In doing so, our manufacturing processes require substantially less energy in comparison to conventional processing. And because we use 67 percent less grid electricity per kg of sheet we have been able to achieve a lower carbon footprint according to the Green House Protocol.

2. **Reduce Source Material Through Consistent Quality: Your Customers Benefit**

Through proprietary software programs and process control technology, companies can produce products with less source material. For instance, we have been fortunate to find ways to reduce our source material. Our processing technology has helped us achieve a roll-to-roll uniformity in every batch of our product. This consistency allows our company to achieve a caliper variation of 1 percent. That is a significant achievement, given that industry standards vary around 5 percent (based on caliper control of 4 to 5 percent plus 8 percent flow of material).

The benefit of our consistency and quality can then be passed on to our customers. They have been able to reduce their costs by ordering thinner gauge sheet while knowing exactly how much packaging they can manufacture from the material they buy.

3. **Reduce Your Transportation Carbon Footprint: Choosing A Global Location Key**

According to the Green House Protocol and other essential industry sustainability standards, every company must find ways to reduce its transportation carbon footprint. When we scouted for a location of our plant, we took a true global view of transportation. We ended up positioned only a few hundred meters from the Port of Salalah, a world-class transshipment hub catering to the world’s leading shipping lanes.

The shipping lanes allow us to service to supply needs of manufacturing customers with plants all around the world. This is not only a competitive advantage with cost saving opportunities for customers — it is a streamlining of shipping requirements which contributes to a reduction of the carbon footprint via optimization of transportation.

Proven Results

By managing our resources, OCTAL was able to design and currently operates a “unique-to-the-world” manufacturing facility. Our products have succeeded in consistently providing the packaging industry with a material offering a lower carbon footprint compared to plastic alternatives. Our process is more energy efficient and has the lowest carbon footprint than any PET on the market. In doing so, we have been able to successfully grow our business during these challenging times.

Ongoing Stewardship

However, food packaging manufacturing managers should never feel satisfied with their sustainability efforts. They must continue to introduce environmentally friendly production methods and demonstrate responsible stewardship of natural resources. Reducing energy consumption and waste should be an integral component of products, not an afterthought or added benefit. We challenge all other companies to ask the question: What can we do to achieve sustainability? The correct answers may well be the foundation for future business success.

For more information, please visit www.octal.com *[1].*

Source URL (retrieved on *12/09/2013 - 9:03am*):
http://www.chem.info/articles/2011/08/manage-your-resources-efficiently

Links:
[1] http://www.octal.com/