## **Economics spurring many plastics industry sectors to go green**

By <u>Rhoda Miel</u> | PLASTICS NEWS STAFF Posted November 5, 2010

INDIANAPOLIS (Nov. 5, 1:20 p.m. ET) -- Environmental issues may still have the old connotations of the "tree hugger" niche customer base, but they will become more and more of an economic driver for the plastics industry in the coming years, plastics companies say.

Blow molders already are seeing increased demand for recycled content and lighterweight plastic bottles, and companies such as consumer giant Procter & Gamble Co. are providing markets for the use of bio-based resins.

And molders investing in energy-control devices in their shops — often with help from government funds — are able to bring their costs down.

"One of the key issues for the 21st century will be managing our carbon streams," said Marcel Dartee, global marketing director for biomaterials at PolyOne Corp., during the Manufacturers Association of Plastics Processors Benchmarking and Best Practices Conference, held Oct. 21-22 in Indianapolis.

Regardless of whatever energy policy the federal government may create in the future, there are already trading markets for carbon emissions credits, he said. Ford Motor Co. began surveying 35 of its key suppliers to track their overall environmental impact.

"Probably a lot of your customers will want to look at being more green," Dartee said.

Companies like Cascade Engineering Inc. of Grand Rapids, Mich., have tracked environmental costs as part of a "triple bottom line" annual report. That report includes data such as a reduction in greenhouse gas emissions — from 57,400 metric tons in 2005 to 32,800 in 2009 — but also the savings from a reduction in landfill costs from \$96,000 in 2005 to \$8,000 in 2009.

The bio-resins business is still in its infancy, said Ed Holland, president and CEO of M. Holland Co. of Northbrook, Ill. The U.S., in general, is still lagging some parts of the world that have more quickly adapted to the new possibilities.

It does not help when there are mixed signals, such as the degradable film that Frito-Lay North America Inc. introduced for its SunChips brand, then pulled out of most of the market when consumer complained that the polylactic acid material was "too loud," said Howard Rappaport, global business director for plastics with Chemical Market Associates Inc. "Consumers are very fickle," he pointed out.

But there are benefits to environmental action beyond the consumer or the customer base, said Kent Royer, roboshot business unit manager for Milacron LLC of Batavia, Ohio.

"It's about answering the question how do we reduce the cost of manufacturing the part," he said.

Milacron has developed ways to draw energy from the press' own use by capturing regenerative braking during the shot cycle, similar to the way a hybrid car captures the energy use when its drivers slow down.

Investing in computerized systems to control the startup of idle machines allows companies to avoid the additional utility company charges for drawing too much power during a peak-use period. One company decreased the torque load by 40 percent on its machines by using a screw specifically designed for ABS, he said.

Heavier insulation on heaters can reduce heat loss, which saves the cost needed to bring resin up to melt temperatures, and also decreases air-conditioning costs.

Many local utilities and state and local governments have funds available for grants that will help companies pay for environmental improvements, Royer pointed out.

"Technology has not stood still," he said. "We're all trying to squeeze all the energy out of the machine as possible."