



By-Product Synergy Central Gulf Coast

In May 2009, Partners for Environmental Progress (PEP) launched its By-Product Synergy Central Gulf Coast (BPS CGC) project to achieve significant economic benefits for participating companies while simultaneously advancing environmental protections for the Alabama Gulf Coast. Using a process developed by the U.S. Business Council for Sustainable Development, PEP formed a diverse network of companies to actively seek opportunities to turn one company's waste or by-product into raw materials for another. This has resulted in "win-win" projects that will enhance the region's triple bottom line, by providing economic, environmental and social benefits.

By-product synergy (BPS) is the practice of matching under-valued waste or by-product streams with potential users, helping to create new revenues or savings for the organizations involved while simultaneously addressing social and environmental impacts. Synergies are not limited to material flows but can include energy, transportation services and best practices.

During the past year, the 12 participants met in a series of workshops to review and analyze product streams. An experienced technical team, headed by Dr. John Steadman, Dean of the College of Engineering, University of South Alabama, categorized, analyzed and helped identify priority potential synergies that would be commercially viable and environmentally significant. Action plans were developed to address technical, regulatory or other barriers.

Results:

At a recent PEP meeting, Jack Kimmitt, Director of Engineering at BASF and Dr. Steadman described the projects' very successful first year as a result of the leadership of PEP, the participation of a variety of local industry partners and the creativity of the engineers, operators and managers who came together seeking innovative solutions.

The cumulative impact of the BPS project is illustrated by the following results:

- \$1,600,000 of savings for participating companies – right to bottom line!
- An additional \$3,200,000 has been injected into the local economy.
- The economic savings are the equivalent of 50 jobs saved or created.
- The BPS projects have diverted more than 8,200 tons of materials from landfills, wastewater treatment plants and other disposal sites.
- 5,300 tons of hydrochloric, hydrofluoric and nitric acids are no longer going into waste treatment plants or deep injection wells.
- More than 8,800 tons of CO2 emissions were avoided.

Next Steps:

While continuing to implement identified synergies, the network is also recruiting additional companies. A larger and more diverse network, including small manufacturers and businesses will expand the synergy opportunities and result in greater benefits to the companies and to the community through jobs, revenue and a cleaner environment.

Current Participants

Alabama Power Company
Arkema
BASF
E.I. DuPont
Evonik Degussa
ExxonMobil

Huntsman Advanced Materials
Mitsubishi Polysilicon
Oil Recovery
Southern Ionics
University of South Alabama
Veolia Environmental Services

Steering Committee

Jim Backes, Hargrove E+C

Beth Basham, E. I. DuPont

Gary Criscione,
Evonik Degussa

Tom Damson, Long's
Human Resource Services

Bernard A. Fogarty,
Alabama Power

Al Heffernan,
Heffernan and Associates

Jack Kimmitt, BASF

Steve Russell, Mobile Area
Chamber of Commerce

John Steadman,
Dean, College of
Engineering
University of South Alabama

Founding Companies

Alabama Power
BASF
E. I. DuPont
Evonik Degussa

Project Partners

US Business Council for
Sustainable Development

The FORUM

Mobile Area Chamber of
Commerce

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