



## FREQUENTLY ASKED QUESTIONS

**Q What is *By-Product Synergy*?**

**A** The concept of *By-Product Synergy* (BPS) is turning one company's waste, or by-product, into a valuable resource for another company, creating a synergy. The BPS project brings together 15 to 20 companies and organizations to look for profitable synergies.

**Q How is BPS different from a waste exchange?**

**A** BPS is active, while a waste exchange is passive. Additionally, BPS is a process, whereas materials exchanges tend to be static tools. With a waste exchange, the participants need to know exactly what material they are looking for at the outset. Also, in a waste exchange participants have to take what they can get. The material available may not meet the specs required for a given process, the material may not be available in the quantity needed, or the future supply of a material may be uncertain.

In BPS, all these barriers are overcome using by-products as inputs. For one, synergies may be discovered that would never have been thought of outside of the program. The BPS project may also identify process changes that will allow certain synergies to occur that otherwise would not be feasible. Also, all synergies that are implemented in the BPS project are implemented as business agreements between the interested parties, and therefore incorporate quality and supply issues, mitigating those risks. Experience has shown that it is not usually sufficient to simply identify opportunities in an impersonal format; there are usually barriers to be overcome before results can be achieved. BPS provides the process for communication and the resources to overcome some of these barriers.

**Q How can an organization benefit from BPS if it is already very efficient?**

**A** Many of the companies that have benefited from the other BPS projects were already leaders in efficiency, and often have benefited to a greater extent than less efficient companies. The efficiency gains possible within one organization may have been exhausted; however, BPS can open access to new markets in which to find profitable homes for by-products or less expensive raw materials. BPS also expands the search for synergies beyond materials to include items like transportation, space, logistics, and other resources. Investigating synergy opportunities with other industries can provide a new way to improve a facility's efficiency. Some of the most profitable synergies have been discovered between very diverse industries. In today's corporate environment, downsizing trends tend to preclude interaction among diverse industries unless they are in the supply chain. BPS creates and fosters this link to diverse industries.

**Q What if an organization has already tried something like this and it didn't work? What is different about this program?**

**A** There are three keys to this program's success, and why it can provide new opportunities. The first is diversity. The companies brought together in these projects



represent a wide variety of industries, broadening the markets in which participants find business opportunities. The second is communication. The project provides a forum in which participants are comfortable sharing ideas that stimulate creative thinking. It encourages participants to look beyond their company fence-line for opportunities. The third is partnerships. The BPS process leverages relationships with technical consultants, regulatory agencies, research organizations, and funding sources to assist participants in overcoming barriers to implementing the synergies they identify. Participating in the project also exposes an organization to opportunities for synergies with companies in other BPS projects around the country.

**Q How are trade secrets protected during collaboration with other industries?**

**A** All participants in the BPS project sign a participation agreement, which includes a confidentiality clause. All data collected in the material synergy database is treated as confidential, and participants choose what data they wish to report. In addition, participants have complete control of what they discuss about their company's products and processes in the working meetings.

**Q How much time will be required to participate?**

**A** A representative will need to attend the project working meetings, which occur every six to eight weeks during the first stage of the project. This person will need to coordinate the data collection effort for their company, but the bulk of that work can be delegated to a junior-level engineer. In addition, a company representative may wish to be a part of task groups that evolve around researching particular synergies.

**Q Can multiple facilities within the same company be included in the process?**

**A** Organizations with multiple facilities may include as many of their facilities as they choose, all for the same subscription fee. However, the facilitators will only visit one facility per organization, and one representative of the entire organization should be designated as the main participant in the working meetings. It is important to weigh the monetary investment of having each facility join separately versus the investment in staff time to coordinate data collection and participation of multiple area facilities under one subscription fee.

**Q Will joining the project guarantee that a company will find a synergy?**

**A** There is no guarantee that a company will find a synergy. However, between the material synergy database and the facilitated brainstorming sessions with all the participants, the group attempts to identify all the possible synergies that can be created. The BPS group can leverage all of the technical, regulatory, and financial partner relationships to maximize the potential for identified synergies to be implemented.

Many of the past participants have stated that monetary benefits from implemented synergies were not the only reasons they joined the BPS project. For many, the opportunity to network with sustainability-oriented business leaders, the introduction to new markets in which they may find business opportunities and being provided a tool for implementing sustainable development within their organization were just as valuable benefits as financial gains.