

## Reduce - Reuse - Recycle



## Separation Technologies: Innovation and care for the environment

Reducing energy and raw materials used in industrial processes has a variety of positive impacts on the environment. One way to achieve this reduction is by recycling waste and by-products of industrial processes.

Separation Technologies (ST), a subsidiary of our U.S.-based operations, is an example of our commitment to this philosophy. A member of the TITAN group since 2002 and with facilities presently in Maryland, North Carolina, Florida, Pennsylvania and Mississippi in the U.S. (as well as in Canada and the United Kingdom), ST specializes in separating the fly ash produced as a by-product of power plants. Rather than allowing it to contribute to already over-crowded landfills, ST separates, processes and sells it to other industrial users for the production of construction materials such as concrete and for processing to be used as fuel, thus minimizing environmental impact. Today the company serves primarily two types of customers:

- To power plant owners and operators, it delivers a commercially proven, flexible, least-cost, least-risk technology for processing coal fly ash.
- To concrete industry users, ST and the ProAsh® brand deliver a consistent, high-quality fly ash that meets and exceeds customers' needs and expectations for cost-savings, dependability, product strength and durability, and customer desirability as an environmentally friendly, "green" product. ProAsh can also contribute to acquiring LEED points from the Leadership in Energy and Environmental Design (LEED) Green Building Rating System, a nationally accepted benchmark for the design, construction, and operation of high performance green buildings in the U.S.

In 2006 approximately 1,000,000 tons of fly ash were processed, of which about 70% was sold under the ProAsh<sup>®</sup> brand name.

*ST*'s activity is important because it demonstrates that environmental awareness and protection is not only compatible with corporate commitments to shareholders and other stakeholders, but can also create entirely new business-models and opportunities for revenue generation.

## **Ensuring a greener future**

Brunner Island, about 15 miles from Harrisburg, Pennsylvania on the Susquehanna River, has long been a popular destination for local fishing enthusiasts. It is also the site of a 1,485 MW PPL Generation thermal electric power station as well as the site of the newest *Separation Technologies* fly ash processing facility.

In the past, the 320,000 tons of fly ash produced annually on Brunner Island were used for the production of Stabil-Fil TM, a material used on golf courses and sport facilities. However, the number of such projects in the region has decreased, creating the need for landfilling of the fly ash produced by the local power station.

In 2006 *ST* signed an agreement providing for the design, construction and operation of a fly ash processing facility at the Brunner Island plant. The facility now processes fly ash and produces ProAsh<sup>®</sup> to be used by local concrete producers. The remaining carbon is redirected back to the power plant for use in electricity generation.