

## ***Consortium for Sustainable Design: Novel Approach Fuels Economic Growth***

From flood-prone parking lots to poor indoor air quality, there is tremendous economic opportunity in developing environmentally friendly solutions, products and processes. But the scope of so-called "sustainable design" is so vast that it cannot effectively be tackled by any one entity.

"Sustainability is a very 'horizontal' topic," says Rob Fleming, associate professor of architecture at Philadelphia University and co-director of the Consortium for Sustainable Design and Research for Southeastern Pennsylvania. "Sustainable design ranges from the molecular level to the regional planning level and must take into account economic, social and ecological issues."

The consortium, seeded with \$1 million from the Pennsylvania Department of Community and Economic Development, is a joint effort among BFTP, Philadelphia University, Temple University and Villanova University. The project promotes and advances sustainability initiatives, such as environmentally benign waste treatment technologies, use of recycled materials and alternative energy technologies.

"Sustainable design is the most profound market share opportunity for the construction industry today," Fleming notes. "Everything involved in the design, building, use and demolition of buildings impacts the environment. Companies that are ahead of that curve are going to be able to grow their businesses in a very effective way."

Fleming realized early on that addressing sustainability issues required a broad perspective. "Temple's engineering program is doing a lot of great work in brownfield remediation at the molecular level," he says. "At the same time, Villanova is doing some tremendous work on waste product recycling from a chemical perspective. When you couple their expertise with our expertise in design and architecture, you start to see how these become complementary efforts when applied to sustainability issues."

The consortium is currently turning its attention to the Ft. Washington Office Park—an area that constantly gets flooded. "Simply put, there is too much impervious asphalt and too many buildings that accelerate runoff," Fleming says. "We will be creating an integrated design with engineers, planners, building architects and landscape architects. If we can fix all the problems, the office park could live up to its potential and have 100% occupancy."

Fleming calls BFTP "the glue that binds the consortium together." Dr. Rominder Suri, a professor of civil and environmental engineering, director of the Center for the Environment at Villanova and an active member of the consortium, agrees. "BFTP brought the three universities together, pooling their different strengths. In addition, through the Technology Commercialization Network and their efforts at identifying and securing federal research funds, they continue to fuel our efforts."

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***—ROB FLEMING, CO-DIRECTOR, CONSORTIUM FOR SUSTAINABLE DESIGN AND RESEARCH FOR SOUTHEASTERN PENNSYLVANIA***

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The Consortium for Sustainable Design has already assisted a dozen small companies in the southeast region develop sustainable business strategies and solve commercialization challenges, creating 34 new jobs and contributing to sales growth and cost savings in its client companies, including: