



Helping business compete since 1965

Over the last five years, PennTAP has provided more than 2,095 cases of technical assistance across the Commonwealth of Pennsylvania.

ANNUAL REPORT 2013



In 2013, PennTAP continued to engage and empower Pennsylvania organizations through technical assistance and Penn State expertise and resources.

The result of our services? More jobs. Healthier workers. A cleaner environment. Increased client revenue. New technologies launched. More competitive clients and an improved economy.

We are often asked, "What does PennTAP do?" We are currently accepting applicants for the following types of services that are offered at no cost to our clients by our nine-member Technical Specialist team:

Advanced IT – For all businesses and anchor institutions

- website assessments and search engine optimization (SEO)
- broadband/website access issues
- social media assistance
- radio frequency identification (RFID) and cloud assistance

Energy, environment, and worker health – For manufacturers

- energy efficiency and pollution prevention assessments
- economy-energy-environment (E3) assessments

Innovation – For manufacturers and inventors

- new product development and process improvement assistance and connections with Penn State resources that can help with prototyping, design, and troubleshooting

Additional information about each of these services is included in this report.

We are also accepting applicants for our new, cutting-edge ISO 50001 services, which are offered at a fee. Information about this new energy management standard is on the back of this report.

Finally, I want to thank each of you for your support in 2013. Thank you for the referrals, for allowing us to be part of your success, and for your commitment to success. Keep in touch.

Heather Fennessey, PE
Director, PennTAP
The Pennsylvania State University

PENNSTATE



2013 Results

273

Cases of technical assistance

\$3.7 million

Client investment in technology and innovation

Client sale increase

\$1 million

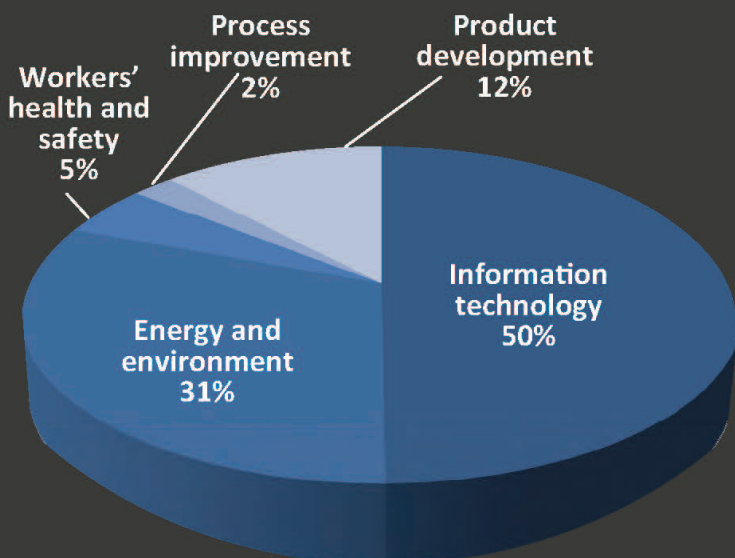
\$2.9 million

Client cost savings

100%

Customer satisfaction rating

Type of PennTAP assistance



Advanced IT Solutions



In 2013, the PennTAP Advanced IT technical specialists worked with for-profit businesses and anchor institutions across the Commonwealth and reached more than 700 people with sessions on social media, mobile websites, mobile credit card processing, and cloud computing. The IT services led to many successes in the Commonwealth. One example of a success is that PennTAP—in partnership with North Central Pennsylvania Regional Planning and Development Commission and the Middle Mile Project—helped bring broadband to Gateway Inn and Lodge, Black Bear Cabins, and the Department of Conservation and Natural Resources (DCNR) office in Cook Forest through signals over fire towers. Another example is that PennTAP helped Friendship House in Scranton receive funding to implement a new electronic health record system, which resulted in \$98 K in economic benefits.

The IT team also helped to place 22 College of Information Sciences and Technology (IST) interns at Pennsylvania companies and organizations, giving them a hands-on learning experience while providing the organizations with technical capacity.

"I would highly recommend considering a PennTAP referral for internship. Our intern was highly motivated and made significant contributions during his tenure here at the Manufacturers' Association of South Central PA. We enjoyed working with him; his dedication was tremendous, and his attitude was superior."

~ Dana Dehoff,

Manufacturers' Association of South Central PA



Energy, Environment, and Worker Health



During 2013, the PennTAP Energy, Environment, and Worker Health team provided pollution prevention/energy efficiency (P2/E2) site assessments, economy-energy-environment (E3) events, building retuning training, manufacturer ISO 50001, ISO 14001, and ISO 18001 implementation and Superior Energy Performance (SEP) certification, and worker safety training.

One example of a 2013 PennTAP client is Osram Sylvania in St. Marys. PennTAP performed an E3 event that resulted in annual savings of 2,250 MWh/yr with an estimated annual savings of \$230,000.

Additionally, working with an associate professor of energy and mineral engineering, 20 Penn State students had an opportunity to take their learning experience beyond the classroom. The primary objective was to expose Penn State students to supervised independent energy research at manufacturing facilities. This was a chance to give students an experiential learning opportunity, get students into real-world applications, apply the principles they learn in class, and put their theories into practice. This project prepared students to be tomorrow's sustainability leaders. Benefits to the PennTAP clients included reduced energy costs, improving profitability and competitiveness, and stimulating the local economy by creating or retaining jobs.

2013 Results

7,052
tons

Air emission reduction

2.4
MM gal

Wastewater reduction

47
MMBTU

Energy use reduction

\$1.8
MM

E2P2 savings

Innovation Services



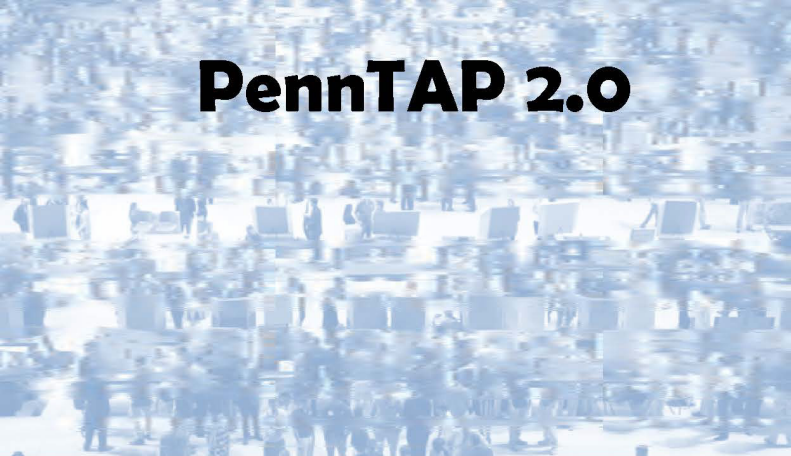
Many regions in the Commonwealth have manufacturing innovation gaps that continue to hold back growth in an increasingly competitive climate. In some instances, companies and entrepreneurs do not have the technical and financial resources to move forward on innovative product lines and processes. PennTAP helped those companies innovate and bring new products to market by providing technical assistance and by connecting business with Penn State and other economic development partners.

PennTAP's newly restructured Innovation Services provide a critical resource to these companies through a unified and coordinated entry point to facilitate company-driven, student/faculty-focused design, prototyping, and proof-of-concept interactions across multiple University departments and colleges. Projects are identified and vetted via a strong partnership network that includes the Industrial Resource Centers (IRC), the Ben Franklin Technology Partnership, and other Partnerships for Regional Economic Performance (PREP) partners.

In 2013, PennTAP's new Innovation Services provided assistance to 40 companies. As part of these projects, PennTAP's clients worked with Penn State students and faculty on design and prototyping projects through existing innovation programs such as Penn State College of Engineering's Learning Factory, the Penn State Material Research Institute, and the College of Engineering's Integrated Design Solutions program. Leveraging existing innovation assets and economic development networks to accelerate ideas to market will result in family-sustaining jobs.



PennTAP 2.0



As we prepare to mark our 50th anniversary in 2015, PennTAP has evaluated and refocused its services to meet the needs of companies and organizations in the Commonwealth, while balancing the learning needs of Penn State's more than 90,000 students. With the help of PennTAP's Action Council and other community partners, services have been focused to include those shown in this report:

- Advanced IT solutions
- Energy, environment, and worker health
- Innovation services

Most services will be provided at no cost when public funding is available to offset operational costs.

What sets us apart from other programs in Pennsylvania is our deep technical expertise—both engineering and IT—that we can provide to companies. When more in-depth, hands-on assistance is needed, PennTAP can be the bridge to Penn State's world-class faculty, students, and facilities to meet company needs.

In fact, almost 100 companies took advantage of this bridge to Penn State last year, resulting in 8,500 hours of assistance from students provided to Pennsylvania companies.

As companies focus more on innovation, we have also innovated to become PennTAP 2.0—focusing on what companies need the most and what we do best.



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ISO 50001



ISO 50001 is a new standard for implementing an energy management system based on the Plan-Do-Check-Act (PDCA) model of continual improvement also used for other better-known standards, such as ISO 9001 for quality management systems or ISO 14001 for environmental management systems. ISO 50001 provides organizations with a framework for efficiently managing and improving their energy performance. By managing energy with this systematic approach, companies are able to:

- reduce energy costs
- continually improve energy performance
- improve corporate image
- reduce greenhouse gas emissions
- align energy management with other business systems

PennTAP's experienced staff have trained and coached twelve manufacturers through their implementation of energy management systems. PennTAP staff certifications include:

- Certified Practitioner in Industrial Energy Management Systems (CPEnMS)
- Certified SEP Performance Verifier
- ISO 50001 Auditor

If you are interested in learning more about how ISO 50001 can improve your business, contact PennTAP at 814-865-0427 or penntap@psu.edu.

