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ENERGIZING

PENNSYLVANIA'S ENTREPRENEURS

"There is no question that the Ben Franklin Technology Partners has set the gold standard for economic development across the country. Today, nearly every other state in the union has a similar type of program. It's not often that a state program can last more than 25 years through a variety of political administrations. The Ben Franklin Technology Partners has helped reshape the image and the reality of Pennsylvania's economic base. We are now at the leading edge of new technologies, new businesses, and more job-creating opportunities."

-Former Pennsylvania Governor Dick Thornburgh

BEN FRANKLIN TECHNOLOGY PARTNERS OF NORTHEASTERN PENNSYLVANIA

MESSAGE FROM THE CEO

"Entrepreneur" is not merely a synonym for the founder of a start-up company. Entrepreneurship is a state of mind, an attitude, sometimes an innate drive. Entrepreneurship is the capacity to identify and actively seek unmet needs in

the market; the expertise and passion to create the products or services that respond to those needs; the willingness to tolerate and embrace risk; and the personal motivation and stamina to work tremendously long and hard to bring the dream to fruition.



Being entrepreneurial is not limited to entrepreneurs. The most successful companies now and in the future will encourage and even demand an entrepreneurial spirit among their staff. Innovation will drive a company's success throughout its lifecycle. Ben Franklin Technology Partners is uniquely suited to catalyze and support innovation and entrepreneurship in early-

stage companies and in established manufacturers.

Recognized and modeled internationally as one of the best technology-based economic development organizations in the world, Ben Franklin Technology Partners is immensely successful by every measure. A long-range independent study by the Pennsylvania Economy League released in 2009 showed that Ben Franklin statewide boosted the Gross State Product by \$9.3 billion from 2002 through 2006 and provided more than \$517 million in additional tax revenues as a direct result of its work. In 1989 through 2008, Ben Franklin created or retained more than 50,000 highly paid, sustainable Pennsylvania jobs, as well as developed hundreds of new companies and new technology-based products and processes. Ben Franklin delivers \$3.50 of incremental tax revenue to Pennsylvania for every dollar of state investment in our program. I know of no other government-funded program that provides such a return.



Despite an unparalleled history of producing economic benefit for the Commonwealth, Ben Franklin's funding was cut 42% in fiscal year 2009-10. The combination of funding cuts and inflation erosion has seriously compromised our ability to continue delivering the stellar results we have produced in the past and negatively impacts future economic growth prospects for Pennsylvania. Reducing Ben Franklin's funding was a tragedy.

Ben Franklin Technology Partners dramatically increases the success rate of the highest-potential early-stage technology companies. We provide start-ups with access to seed capital, business and technical expertise, and a robust network of expert resources. We also help develop and implement

productivity improvement strategies for established manufacturers through technological innovation and process improvement. bring their products to market. Further, a restoration of Ben Franklin funding will support the expansion of regional technology collaboration that links companies, colleges and universities, economic development partners, entrepreneurs, corporations, and service providers.

support needs that young enterprises face as they seek to

Entrepreneurship and technological innovation will drive the economic recovery and sustain long-term economic growth on a nationwide level. History has demonstrated that innovation and business growth often hit new strides during times of economic transition. Ben Franklin Technology Partners is a proven engine of job creation and retention that generates tremendous return on investment.

BEN FRANKLIN - A PROVEN NATIONAL MODEL FOR TECH-BASED ECONOMIC DEVELOPMENT



In recognition of the remarkable success of this program, many other states have modeled their programs after the Ben Franklin Technology Partners. In 2008, the U.S. Economic Development Administration, an arm of the U.S. Department of Commerce, named Ben Franklin "the most effective regional economic development organization in the nation."

The Ben Franklin state appropriation should be restored to its original level and then increased incrementally in subsequent years. This will enable an expansion of seed financing for technology-driven enterprises at their earliest stage and help to fulfill business and technical

Pennsylvania should continue to reap the rewards of its foresight 28 years ago in creating, developing, and funding a program that has evolved to be the envy of the world. The Commonwealth should restore and increase funding to the Ben Franklin Technology Partners to the great benefit of Pennsylvania. Our success will serve as a model for the nation.

R. Chadwick Paul, Jr., President and Chief Executive Officer Ben Franklin Technology Partners of Northeastern Pennsylvania

PROGRAM OVERVIEW 3 RESULTS - 5 YEAR'S HIGHLIGHTS Client News Alternative Energy Development Program Ben Franklin TechVentures² Groundbreaking 10 Ben Franklin Incubator Network 1.1 Ben Franklin Venture Idol 75 Ben Franklin i xchange 13 STATEWIDE ACTIVITIES 1.7 INVESTMENTS 18 FINANCIAL INFORMATION

BOARDS AND STAFF 77

A MESSAGE FROM THE CEO]

BEN FRANKLIN TECHNOLOGY PARTNERS PROGRAM OVERVIEW

The Ben Franklin Technology Partners of Northeastern Pennsylvania (BFTP/NEP) is a nonprofit corporation that is part of a four-center, state-funded economic development initiative. The northeastern center is headquartered on the campus of Lehigh University in Bethlehem. Ben Franklin also operates Ben Franklin TechVentures®, a technology incubator/post-incubator facility on Lehigh's Mountaintop Campus, and the Bloomsburg Regional Technology Center.



Since 1983, BFTP/NEP has helped this region's technology companies prosper. Our mission is to promote, sustain, and invest in the transformation of northeastern Pennsylvania's economy through innovation and partnering. Our strategy encompasses three key areas:

- 1. Developing early-stage, technology-oriented companies
- Helping established manufacturers creatively apply new technology and business practices to achieve industry leadership
- 3. Promoting innovative community-wide initiatives that foster a supportive business environment for high-growth companies

As hundreds of companies have experienced, Ben Franklin delivers hands-on support, guidance, connections to critical resources, and investment funds at companies' most vulnerable times. Ben Franklin Technology Partners helps clients to achieve and sustain market success and competitive advantage. We are evaluated on the basis of the commercial accomplishments of our clients that are achieved as a result of our assistance.

CAPITAL – Ben Franklin makes investments that typically range from \$30,000 to \$150,000 per year for up to three years. We take calculated risks investing in young, unproven companies that often cannot secure seed funding through conventional means. We assist early-stage firms as they prepare to raise additional capital and provide an important initial endorsement for a new company. With our help, many successful early-stage clients grow into the technology-based established manufacturing firms of the future.

We also support established companies by providing investments in innovation and access to our network of university and industry experts and facilities. Work is usually technology development or application-driven and is accomplished with a college or university partner.

BUSINESS AND TECHNICAL EXPERTISE – Each company in the Ben Franklin portfolio benefits from the collective experience of seasoned professionals who focus on turning high-potential ideas into high-growth businesses. In-house expertise is complemented by the Ben Franklin Solutions Network of advisors, service providers, and investors, creating a powerful and comprehensive support program for clients.



"Ben Franklin Technology Partners is giving
a much-needed boost to Pennsylvania
entrepreneurs. This is part of the firm foundation
upon which America can build."

The Honorable Joe Biden, Vice President of the United States of America, at the groundbreaking of Ben Franklin TechVentures², April 15, 2010

college and university resources – We tap into the strength of Pennsylvania's colleges and universities, whose faculty and students work directly with many of our clients. Ben Franklin provides a crucial link between client companies and the wealth of knowledge, facilities, and human resources in the Commonwealth's higher education institutions.

Ben Franklin works with the most promising technology ventures on an enterprise-wide basis to enhance their entire way of doing business. We seek to diversify the region by investing in a broad range of companies and technologies. High-potential technology sectors in northeastern Pennsylvania include:

- _ Alternative and Clean Energy
- Information Technology
- Life Sciences

- Nanotechnology and Advanced Materials
- Optoelectronics, Photonics, and Microelectronics

To qualify for an investment from the Ben Franklin Technology Partners of Northeastern Pennsylvania, companies must be located in or relocate to our 21-county service area, specifically the counties of Berks, Bradford, Carbon, Columbia, Lackawanna, Lehigh, Luzerne, Lycoming, Monroe, Montour, Northampton, Northumberland, Pike, Schuylkill, Snyder, Sullivan, Susquehanna, Tioga, Union, Wayne, and Wyoming. Companies must also offer significant potential for job creation and retention in the region and future growth through the development of an innovative technology or an innovative application of technology.

Visit www.nep.benfranklin.org for additional information.

KANSAS TECHNOLOGY ENTERPRISE CORPORATION

In 1982, Ben Franklin Technology Partners initiated the first programmatic approach to technology-

based economic development, providing a national model for other regions to replicate, which a large number would soon do. By 1988, 45 states were reporting more than 250 technology-based economic development organizations.





MINNESOTA SCIENCE AND TECHNOLOGY AUTHORITY

The Minnesota Science
and Technology
Authority, modeled
after programs
like the Ben
Franklin Technology
Partners in
Pennsylvania,
will oversee economic
development efforts,
including money to
retain local-grown
companies and attract
out-of-state ones.

BEN FRANKLIN TECHNOLOGY PARTNERS STATEWIDE RESULTS

The Pennsylvania Economy League, a nonpartisan research organization, conducted an independent, objective evaluation of the economic impact of the Ben Franklin program from 2002 through 2006. The results, released in 2009, demonstrated that the four Ben Franklin Technology Partners (BFTP) have created significant economic impact for the Commonwealth

Commonwealth's investment of \$140 million during the same period. The BFTP program boosted Pennsylvania's economy by \$9.3 billion (increase in gross state product) in that five-year period. Further, on average, BFTP clients employed five more people in each year following funding than they would have in the absence of the BFTP investment.

of Pennsylvania.

As a result

of Ben Franklin's work with client companies, Pennsyl-

vania received more than \$517 million in additional state tax revenues. That represents a $3^{1/2}$ -to-1 payback on the

For every \$1 of state investment in the Ben Franklin Technology Partners,
PA received \$3.50 in incremental tax revenue.

Jobs created by Ben Franklin's clients pay 33% more than the average salary in Pennsylvania.

BEN FRANKLIN TECHNOLOGY PARTNERS OF NORTHEASTERN PA RESULTS

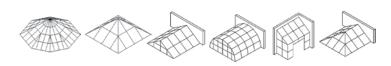
Each year, the Ben Franklin Technology Partners of Northeastern Pennsylvania surveys its client companies on the economic impacts that are accomplished as a direct result of its investments. These figures are used to evaluate Ben Franklin's effectiveness. BFTP/NEP has achieved the following results:

	2009	CUMULATIVE
New Jobs Created	370	14,301
Existing Jobs Retained	464	21,236
New Companies Started	10	408
New Products and Processes Developed	83	948

This year, Ben Franklin clients raised more than \$170 million in additional investment from angel investors, venture firms, and federal sources.

YEAR'S HIGHLIGHTS CLIENT NEWS

Following is a sampling of the many client accomplishments that Ben Franklin has helped to energize in 2010.





ACURLITE RECEIVED CRUCIAL CERTIFICATION

Acurlite Structural
Skylights, Inc., Berwick,
a manufacturer of commercial heavy-duty skylight
products for the building
construction industry, introduced its hurricane-rated
skylight system. The com-

pany successfully completed extreme product testing for large and small missile impact, meeting south Florida's stringent hurricane-resistant testing requirements. This rating is necessary for construction in the southeastern U.S. and all coastal and military applications. In addition, this certification provides opportunities for Acurlite to supply blast-resistant, anti-terrorism skylights for U.S. government buildings. Acurlite's sales have been growing 10% year after year, and the company now employs 21.

ALCON RESEARCH EXPANDED ITS SINKING SPRING FACILITY

A global company with more than 725 Pennsylvania employees, Alcon Research manufactures ophthalmic surgical products such as scalpels, sutures, and needles to exacting specifications. Ben Franklin invested in Alcon's Sinking Spring facility in four projects, beginning in 1989. The most recent work involved modifying the company's heat treatment system to enhance performance. Alcon embarked on another expansion in 2010, adding 30,000 square

feet to accommodate growth in current product lines and make room for new products.

DYNALENE RECEIVED DOE GRANT AND SALES RECOGNITION

Whitehall-based Dynalene, Inc. has been awarded \$1 million from the U.S. Department of Energy for large-scale testing, demonstration, and commercialization of its fuel cell coolant. The company is increasing its staff to complete this project. Dynalene was also ranked the 11th fastest-growing manufacturing company by *Inc.* magazine based on the company's 2009 sales results. Dynalene manufactures and distributes industrial heat transfer fluids and related products and services.

ECOTECH'S SALES AND EMPLOYMENT CONTINUED TO GROW

EcoTech Marine's VorTech™ pump line provides a unique solution for creating water flow in saltwater

reef aquariums. The patented pump design places the motor outside the aquarium wall and transmits torque using magnets to a propeller on the inside of the aquarium. This design reduces the pump's size in the aquarium and creates strong ocean-



like currents for fish and other coral inhabitants. The VorTech pump also eliminates the problem of heat generation that is associated with conventional pumps. This year, EcoTech Marine was named one of *Inc.* magazine's 500 fastest-growing companies, with 2009 revenue of almost \$4 million. Located in Bethlehem, EcoTech currently employs 17 and is seeking space for expansion.

continued

CLIENT NEWS

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FESSLER LAUNCHED NEW, "GREEN" BRAND

Apparel manufacturer Fessler USA, Orwigsburg, develops and markets materials for clothing designed to minimize ecological impact. Branded Toggery, these sustainable fabrics are composed of organic cotton or materials produced from recycled beechwood. The raw materials that compose them can be grown in many environments and quickly, without depleting the soil of nutrients.

HEALTHONEMED PARTNERED WITH DOYLE SECURITY

The Dispense-a-Pill (DAP), produced by HealthOneMed, Inc., Allentown, has been selected by Doyle Security for commercialization among Doyle's medical monitoring offerings. The DAP is a patented device that dispenses prescription and non-prescription pills according to a programmed schedule. The DAP combines the features of disparate medication devices including pill boxes, dispensers, and medication alert devices into an integrated intelligent medication management system. Features include audible notification to the individual that it is time to take pills, automatic pill dispensing, and telephone notification to family members and/or caregivers when pills are not taken.

PURITAN EXPANDED FACILITY TO SUPPORT GROWTH

Puritan Products completed an intense, 18-month process to achieve current Good Manufacturing



linked Puritan with a cGMP consultant partnered with Lehigh University's Enterprise Systems

Center to facilitate this growth-oriented project.

REST COMMERCIALIZED ENERGY-SAVING MOTORS AND REFRIGERATION SYSTEMS





Resource Energy Systems Technologies (REST), Allentown, manufactures proprietary products that

significantly reduce energy consumption in variable-load or lightly loaded motor conditions and in cooling and refrigeration systems. Energy savings range from 15% to 45% and can be obtained without replacing existing hardware. This year, the Bethlehem-based company delivered its first motor control units to the New York Metropolitan Transit Authority for all the escalators in New York City's Grand Central Terminal and the White Plains railroad station. Further, the company's PermaFrost™ technology was recently applied at one of the largest hotels in Bangkok, resulting in a 14% reduction in energy consumption in the hotel's chiller system.

SALADAX BIOMEDICAL SIGNED DEAL WITH BRISTOL-MYERS SQUIBB; ACHIEVED ISO CERTIFICATION

Saladax Biomedical, Inc. entered into a multi-year development and commercialization agreement with Bristol-Myers Squibb Company (NYSE: BMY) for the development of clinical diagnostic tests to be used in conjunction with certain therapeutic compounds in the Bristol-Myers Squibb pipeline. In addition, the company achieved ISO 13485:2003 certification for the design, manufacture, and distribution of in vitro diagnostic medical devices in the area of clinical chemistry. Saladax manufactures MyCareTM diagnostic tests

NEW YORK STATE FOUNDATION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Lawmakers installed the New York State Foundation for Science, Technology and Innovation, which oversees regional governing bodies modeled on the decentralized Ben Franklin Technology Partners sprinkled throughout Pennsylvania.

that help physicians objectively assess whether patients are receiving the optimal doses of their prescribed medications in order to increase efficacy and reduce toxicity.

focus is on oncology. The Bethlehem-based company increased employment from the two original founders to 26 people.

The company's initial



STRONG EXPANDED IN THE SPA MARKET

Strong Industries, Northumberland, is now the fifth largest supplier of spas in the world. Sales continue to grow at 50% per year, and the company currently employs 170 full-time workers and dozens of part-time employees. Strong received a patent for its energy-efficient Dura-Last cabinet system. The company manufactures a variety of pool and spa products that are distributed

directly through dealers and through major consumer outlets including Costco and Sam's, among others.

XIGO COMMERCIALIZED A NEW APPROACH TO PARTICLE SURFACE AREA MEASUREMENTS

Bethlehem-based Xigo completed the beta testing of its newly patented, shoe box-sized device called the Acorn AreaTM, which rapidly measures the surface area of nanoparticles. It has sold a number of units. Nanoparticles are minute; they typically have diameters that are 1/1,000th the diameter of a human hair. Measuring nanoparticle properties is significant in many industrial applications including energy, electronics, ceramics, and pharmaceuticals. Nanoparticle properties are key predictors of material performance, and there are no other efficient methods to measure nanoparticle surface area currently available.

"Ben Franklin has been with us **every step of**the way, and, as evidenced by what we've accomplished so far, it worked."

Mark Granahan, General Manager, Texas Instruments – Lehigh Valley (formerly start-up CICLON Semiconductor Device Corporation)

ALTERNATIVE ENERGY DEVELOPMENT PROGRAM

With an unstable oil supply, dwindling known reserves, and growing ecological concerns, energy is a pivotal world issue. Energy shortages and the environmental concerns related to the use of fossil fuels have resulted in an intensified search for:

- 1. Alternate sources of energy that are renewable and practical
- 2. Efficient, inexpensive methods to capture carbon dioxide and other pollutants emitted during the combustion of fossil fuels and render them benign
- Products and processes to reduce energy consumption for high-growth companies

In July 2008, Pennsylvania created an Alternative Energy Development Program (AEDP) that incents collaboration to save energy costs, reduce dependence on foreign fuels, expand clean energy production, and create energy-related jobs in the state. Under the AEDP, BFTP/NEP receives funding over five years to invest in the development and growth of energy-related companies in its 21-county area.

Northeastern Pennsylvania is rich in natural resources, including anthracite coal reserves, anthracite culm banks, and the vast Marcellus shale natural gas reserves. There is a diversity of industrial activity related to energy throughout northeastern Pennsylvania, including several Ben Franklin clients in sectors such as advanced energy storage, renewable energy, and alternative/clean fuels.

Northeastern Pennsylvania's colleges and universities also have a role in the AEDP. BFTP/NEP has 33 colleges and universities in its region and links companies with the facilities, faculties, and students of these institutions. The Emerging Applications Center at Northampton Community College, for example, has implemented an energy assessment/conservation program for its clients. Ben Franklin also has relationships with The Pennsylvania State University and Lehigh University, both of which hold deep energy expertise and have a range of energy programs.

In evaluating potential investments, BFTP/
NEP will focus on the two tiers identified under

Pennsylvania's Alternative Energy Portfolio Standard, enacted in 2004:

TIER 1 ALTERNATIVE ENERGY SOURCES -

ENERGY DERIVED FROM:

- Solar photovoltaic energy
- Wind power
- Low-impact hydropower
- Geothermal energy
- Biologically derived methane gas
- Fuel cells
- Biomass energy
- Coal mine methane

TIER 2 ALTERNATIVE ENERGY SOURCES -

ENERGY DERIVED FROM:

- Waste coal (e.g., the anthracite culm banks in northeastern Pennsylvania)
- _ Distributed generation systems
- _ Demand-side management of energy
- _ Large-scale hydropower
- _ Municipal solid waste
- Byproducts from the handling and manufacturing of wood
- Integrated combined coal gasification technology

The Tier 2 emphasis is on anthracite handling, waste coal (anthracite culm banks) recovery, processes related to the Marcellus shale formation, energy management, and municipal solid waste, all of which align with assets in the BFTP/NEP region. In addition, BFTP/NEP will continue to search for client opportunities in:

- Efficient, inexpensive methods for capturing carbon dioxide and other pollutants emitted during the combustion of fossil fuels.
- Identification of materials and processes to reduce energy consumption.

There is no single solution to this enormous issue. BFTP/NEP will seek to support a variety of alternatives with a focus on those benefiting northeastern Pennsylvania and investments that exhibit the greatest upside potential.

BEN FRANKLIN TECHVENTURES² GROUNDBREAKING

The Ben Franklin Business Incubator program provides resident companies with the support of an experienced incubator staff, the synergy of working in proximity to other early-stage companies, rental costs lower than market rates, flexible floor planning to accommodate specific needs, and access to the facilities, equipment, faculty, and student resources at Lehigh University. These factors combine to greatly enhance incubator resident companies' probability of success.

In 2007, Ben Franklin relocated the original Ben Franklin Business Incubator from Jordan Hall, across the street on Lehigh's Mountaintop campus to Ben Franklin Tech-

Ventures®. Prior to the renovation of Ben Franklin Tech-Ventures, Ben Franklin and its regional economic development colleagues had to turn away promising young companies due to a shortage of wet lab incu-



U.S. Commerce Secretary Gary Locke presented BFTP/NEP with a \$6 million grant to expand TechVentures. This support, combined with other federal and state grants, Ben Franklin funding, and private contributions, allowed BFTP/NEP to proceed with this essential expansion, despite crushing state budget cuts to Ben Franklin operations.

Vice President Joe Biden joined business and community leaders to celebrate the groundbreaking of Ben Franklin TechVentures² on April 15, 2010. Ben Franklin TechVentures² will be a 47,000-square-foot expansion to the original TechVentures facility. It will include wet labs, office/meeting space, and parking.



(L) Vice President Joe Biden at groundbreaking of TechVentures². (R) TechVentures² under construction.

bator space in northeastern Pennsylvania. Wet lab space is necessary for emerging companies in many technology-based sectors.

Ben Franklin TechVentures helped address the region's increasing incubator and wet lab space needs by more than doubling the available wet lab space and more than tripling the office and dry laboratory space available at the original

Ben Franklin Business Incubator. Staff projected that the 35,000 square feet of rentable space would meet the region's requirements for about five years. Just 18 months after the grand opening, however, TechVentures was filled to near capacity. This is indicative of the tremendous demand for incubator and wet lab space in the Lehigh Valley.

In September 2009, the U.S. Commerce Department's Economic Development Administration announced an American Recovery and Reinvestment Act grant that provided bricks-and-mortar funding for Ben Franklin TechVentures², an expansion TechVentures needed to meet market demand.

The addition will be a certified Leadership Energy and Environmental Design (LEED) building and will have a photovoltaic solar array on its rooftop and the latest energy-management and light-harvesting technologies from Coopersburg-based Lutron Electronics.

The new facility will allow Ben Franklin to accommodate start-up companies that create as many as 200 sustainable, highly paid technology jobs and retain 100 more jobs in the first three years. Twenty-three early-stage firms, employing 118 people, are currently located in Ben Franklin TechVentures. Since 1983, the Ben Franklin Business Incubator and TechVentures have graduated 46 successful companies, together grossing more than \$408 million in annual revenue and creating more than 4,500 jobs.

"A cornerstone of the American economic recovery will be the creation and retention of high-value, sustainable jobs in technology sectors," said Chad Paul, Ben Franklin's President and CEO. "Like its predecessors, Ben Franklin TechVentures² will be a job creation factory that will accelerate our region's economic growth."



PROGRAMS
IN OHIO,
INDIANA,
AND
CONNECTICUT

In 1982 in Pennsyl-

vania, the Ben Franklin
Technology Partners
was created in order
to help build a
technology-driven
economy. The
success of the program
led to the creation
of similar programs
in Ohio, Indiana, and
Connecticut.

BEN FRANKLIN INCUBATOR NETWORK

The concept of business incubators in Pennsylvania originated with the Ben Franklin incubator program in Bethlehem. The Ben Franklin Business Incubator was established just months after the Ben Franklin program began in 1983 and was named Incubator of the Year by the National Business Incubation Association (NBIA) in 2001.

Ben Franklin staff apply their more than 25 years of business incubation expertise in support of incubators in a network throughout northeastern Pennsylvania.

BFTP/NEP collaborated with other economic development

other economic development organizations to establish and support a 10-incubator network of facilities. This collaboration is among the largest incubator networks in the nation.

The reduced operating costs of starting a company in a business incubator are typically what initially draw early-stage companies to an incubator facility. But the business development assistance and sharing of best practices among tenants are also key benefits. Ben Franklin staff meet with incubator managers regularly to exchange ideas and information, work collaboratively, and provide guidelines and training that are in accordance with NBIA standards.

The East Stroudsburg University Center for Research and Economic Development completed construction of a new 51,500-square-foot technology facility that now houses the ESU Business Accelerator. With a Ben Franklin staff person serving on the Center's Board of Directors and financial support, Ben Franklin has been a guiding resource since the inception of the incubator program. BFTP/NEP continued its support throughout construction of the new facility, providing input on its design and financial planning. The incorporation of

Ben Franklin TechVentures welcomes EBL International, its 100th incubator client.

wet labs into the accelerator is particularly important, since these labs are requisite for biotechnology and chemistry-based early-stage firms and previously were a scarce resource in the region. This new facility officially opened on May 1, 2010, and currently hosts seven technology-based start-ups.

In June 2010, BFTP/NEP assumed the management of the Bloomsburg Regional Technology Center. This will allow companies in the Columbia County area to benefit even more directly from Ben Franklin's experience in business incubation.

BEN FRANKLIN VENTURE IDOL

It was similar to the popular television show

American Idol, except with entrepreneurs instead of
vocalists. Three early-stage technology company
entrepreneurs seeking funding presented short
pitches to investors and more than 200 audience
members at the daylong Ben Franklin Venture Idol
event. The votes were tallied, and on Nov. 16,
2010, CEWA Technologies was named the
winning Ben Franklin Venture Idol.

CEWA Technologies designs and manufactures point concentrator solar dishes. By using existing materials in new ways and a unique design, its dish can provide 30kW of thermal energy at prices that are less than existing technologies and are competitive with fossil fuels without relying on government subsidies. The solar dish is easy to install, operate, and maintain in a wide variety of applications and terrains and can be aligned much faster than competing dishes. The product can be used for space or process heating, HVAC, or electricity generation. It will be sold to industrial, institutional, and utility customers. CEWA is a resident company in Ben Franklin TechVentures.

Ben Franklin Venture Idol presenters were critiqued by three institutional investors: Loren D. Danzis, Chair of Screening Committee, Delaware Crossing Angel Group; Michael J. Gutch, Ph.D., Director, H.I.G. Ventures; and David Nevas, Business Development Associate, Edison Venture Fund.



Paul Eisenhuth, CEWA Technologies; Al Philpotts, Ben Franklin Technology Partners; and Richard Fox, Cross Atlantic Capital Partners

Paul Eisenhuth, CEO of CEWA, accepted the prize of a \$5,000 cash investment in his company. HealthOneMed and Aware Pro, Inc. also competed and received cash investments.

This event illustrates a significant way in which early-stage entrepreneurs seek and obtain seed capital. The day began with an invitation-only "venture speed dating" session. Twenty-four pre-selected companies delivered multiple rounds of two-minute "elevator pitches" to individual institutional venture capital and angel investors. These quick presentations provided just enough time for the company CEOs to pique the interest of investors.

Ben Franklin Venture Idol included opportunities for guests to network with exhibiting early-stage entrepreneurs, private investors, and representatives of venture capital firms. The event was led by emcee Richard Fox, Managing Director, Cross Atlantic Capital Partners, and hosted by Fred Beste, Managing Partner, Mid-Atlantic Venture Funds.



BEN FRANKLIN INCUBATOR NETWORK

1. BEN FRANKLIN TECHVENTURES

116 Research Drive Bethlehem, PA 18015 ph: 610.758.5421 www.nep.benfranklin.org

2. THE BLOOMSBURG REGIONAL TECHNOLOGY CENTER

240 Market Street Bloomsburg, PA 17815 ph: 610.849.9091 www.nep.benfranklin.org

3. BRIDGEWORKS ENTERPRISE CENTER

905 Harrison Street Allentown, PA 18103 ph: 610.770.1015 www.thebridgeworks.com

4- CARBONDALE TECHNOLOGY TRANSFER CENTER 10 Enterprise Drive Carbondale, PA 18407 ph: 570.282.1255 www.4cttc.org

5. EAST STROUDSBURG UNIVERSITY BUSINESS ACCELERATOR

ESU Center for Research and Economic Development 200 Prospect Street E. Stroudsburg, PA 18301-2999 ph: 570.422.7920 www.esu.edu/busaccelerator

L- THE ENTERPRISE CENTER 703 South Elmer Avenue Sayre, PA 18840-2400 ph: 570.882.9324 www.sayreenterprisecenter.com

7. THE GREATER HAZLETON BUSINESS INNOVATION CENTER 103 Rotary Drive West Hazleton, PA 18202

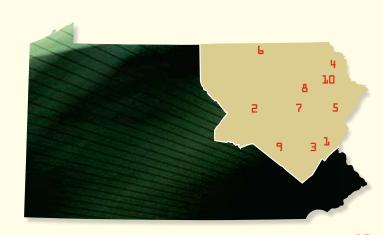
West Hazleton, PA 18202 ph: 570.455.1508 www.canbe.biz

- THE INNOVATION CENTER @ WILKES-BARRE 7-13 South Main Street Wilkes-Barre, PA 18701 ph: 570.270.grow www.icwb.biz

9- POTTSVILLE/SCHUYLKILL TECHNOLOGY INCUBATOR 1 South Second Street

1 South Second Street Pottsville, PA 17901 ph: 570.628.3355 www.incubator-tech.com

LO- THE SCRANTON ENTERPRISE CENTER 201 Lackawanna Avenue Scranton, PA 18503 ph: 570.342.7711 www.scrantonenterprisecenter.com



BEN FRANKLIN I XCHANGE

Economic recessions have led to key business innovations. Abundance often lulls business leaders into complacency, and conversely, scarcity drives creativity. By emphasizing how innovators are the lifeblood of economic recovery, Dr. Joseph Michelli shared that the current economy affords transformational opportunities for companies with entrepreneurial cultures and a passion for creating high-value customer solutions.



On Wednesday, May 12, 2010, the Ben Franklin Technology Partners of Northeastern Pennsylvania hosted its annual i xchange at Lehigh University's Zoellner Arts Center. More than 600 technology entrepreneurs, business people, venture capitalists, economic developers, political leaders, and regional influencers from Ben Franklin's 21-county service area attended.

The i xchange combined the presentation of Ben Franklin's 16th annual Innovation Awards and executive networking sessions with a keynote address by Dr. Joseph Michelli. An internationally sought-after speaker, author, and organizational consultant, Michelli, in his keynote presentation "Innovation Leads Transformation," explored the critical importance of creativity and innovation for delivering customer value and creating business opportunities.

The 2010 Ben Franklin Technology Partners of Northeastern Pennsylvania Innovation Awards winners are:

ENTREPRENEURIAL ACHIEVEMENT

An individual who best exemplifies the quintessential entrepreneurial spirit: a combination of ingenuity, hard work, and innovation that has resulted in the creation of a successful and growing business venture.

Mark E. Granahan, General Manager Texas Instruments – Lehigh Valley, Ben Franklin TechVentures, Bethlehem The power chip technology developed at Texas Instruments (TI) – Lehigh Valley increases efficiency in computer systems by up to 20%, reducing the heat emitted by power supplies and redirecting that energy to the device itself. If this technology was adopted in computer systems worldwide, the reduction of power use would equal the output of 12 to 13 coal-fired power plants. CICLON Semiconductor, TI – Lehigh Valley's predecessor, launched at the Ben Franklin Business Incubator, receiving a \$150,000 Ben Franklin investment and links to crucial Lehigh University facilities. Just two years later, CICLON graduated, becoming the anchor tenant in the postincubator space at Ben Franklin TechVentures. The company raised \$24 million in venture capital investments, and its products have been designed into devices offered by world leaders in electronics. After beginning with three employees in 2004, CICLON now employs more than 50. In February 2009, CICLON was acquired by Texas Instruments. All local jobs were retained, and the company continues to grow in Bethlehem.

ACADEMIC PARTNER

An organization associated with an institution of higher learning that has contributed its time and expertise to supporting the Ben Franklin program. This organization's contribution has clearly surpassed "normal" expectations for involvement with and support of the Ben Franklin Technology Partners.

National Training Center for Microelectronics Northampton Community College, Bethlehem

Northampton Community College's National Center for Microelectronics (NTCµ) transfers and deploys applied technology to the factory floor by imparting

knowledge and skills to the workforces at electronics manufacturing companies. This allows engineers and workers to perform more efficiently by understanding successful manufacturing techniques that reduce waste and increase first-pass yields. Employees whose technology skills are up to date and engaged increase bottom-line company profits. NTCµ offers certification and technology-based courses that enable companies to more effectively compete in the world marketplace. Ben Franklin provided three years of seed funding to NTCµ in the late 1980s and the Center soon became self-sufficient. Recognized worldwide, the Center currently conducts training programs in the United States and foreign countries such as China, India, France, and Singapore. In addition to the hundreds of students who attend the Center's public course offerings, NTCµ serves an average of 30 companies annually. The growing client roster includes Honda America, Motorola, Siemens, Lockheed Sanders, Schlumberger, and JDS Uniphase.

INCUBATOR GRADUATE

The company that has best demonstrated successful Ben Franklin business incubation. The business has been operated skillfully and confidently, meeting all challenges from the development of the product concept, execution of the business and technical plan, successful start-up and operation, to graduation from the incubator.

Particle Sciences, Inc., Bethlehem

Particle Sciences is a full-service nanotechnology and fine particle contract research organization primarily serving life sciences companies. Particle Sciences provides clients with the services of industry-

specific analytic and bioanalytic labs in addition to well-equipped formulation, characterization, and clean-room facilities. Clients range from start-ups to large publicly traded pharmaceutical and biotechnology firms. Ben Franklin invested \$315,000 over three years in the company for

the development of a clear, encapsulated, organic sunscreen product that allowed sunscreen to be incorporated into cosmetics in a new way. This product was successfully commercialized. Particle Sciences currently occupies 15,000 square feet in Bethlehem and expanded locally in 2010. Over the last three years, despite the economy, company revenue has grown 15% to 20% year after year, and the staff of four that graduated from the Ben Franklin Business Incubator has now grown to more than 40.

PRODUCT INNOVATION

The company that best demonstrates the commercialization of a unique, innovative product that creatively and effectively meets a market need.

Discovery Machine, Inc., Williamsport

Discovery Machine provides systems that enable companies to capture, manage, automate, optimize, embed, and network the knowledge found in the experience and intellect of their key employees.

The company developed a suite of novel, patented

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software tools. The Discovery Machine methodology and supporting technology capture, automate, amplify, and leverage the productivity of staff experts. Companies' needs to retain the expertise of staff will grow as the "baby boomer" generation continues to move into retirement, taking their knowledge and experience with them. In addition, Discovery Machine's technology helps protect a company's institutional knowledge in the event it experiences a merger or acquisition and/or staff recruiting by competition. Ben Franklin invested \$335,000 in Discovery Machine between 2007 and 2008, and employment more than doubled last year. The company's customer roster includes well-known and influential technology leaders including Lockheed Martin, Northrop Grumman, Boeing, Textron, Bechtel, DARPA, NASA, NAVAIR, and the Office of Naval Research.

INNOVATIVE APPLICATION OF TECHNOLOGY

The company that best demonstrates a "break the mold" approach to integrating new or existing technology into a manufacturing environment.

American Polarizers, Inc., Reading

American Polarizers is known worldwide as a manufacturer of optical products including lenses, displays, windows, filters, polarizers, and 3-D lenses. These applications are used in the aircraft, electronics, photographic, animated display, consumer, and general scientific industries. The company's products are sold under the trade names 3DLUXTM, Eclipse®, Glare BarTM, and PolarmotionTM. Ongoing innovation is required to create increasingly strong bonds for the lamination of multiple layers of material or film as composite layered structures. Ben Franklin linked the company with the Emerging Technology Applications Center at Northampton Community College and provided funding to facilitate lamination technology, lamination process improvements, and product development in elevated-temperature applications. The company currently employs 21 in the building it owns in the City of Reading.

MANUFACTURING ACHIEVEMENT

The company that best exemplifies achievement in the manufacturing arena, showing a proven track record of success and an unbending commitment to achieving and maintaining excellence in manufacturing.

Clark Technology Systems, Inc., Milton

Clark Technology Systems specializes in engineering services and the fabrication of an extensive range of fluid- and airhandling systems for industries worldwide. Since its founding in 1987, the company has designed, engineered, fabricated, and delivered processing systems for industrial manufacturers, power plants, petroleum refineries, paper mills, liquid natural gas producers, and air separation plants. Clark has grown its market share by becoming a strategic partner with customers, producing systems that are better and faster and with lower costs of ownership than the competition. Ben Franklin invested a total of \$120,000 in Clark in 1995, 2008. and 2009. As a result of its truly customized approach to customer service and Ben Franklin support, Clark is expanding. The company has added 28,000 square feet of manufacturing space, increased employment to 33, and improved sales, with substantial additional growth anticipated.

ENTREPRENEURIAL ADVOCATE

An individual from the community who has contributed his leadership, time, and expertise to helping entrepreneurs and the Ben Franklin Technology Partners accomplish their goals. He demonstrates a sincere and selfless desire to see the region thrive and backs up that commitment with appropriate action.

John T. Hoback, President

Z&H Enterprise Solutions, Ltd., East Stroudsburg

John Hoback's consulting company, Z&H Enterprise Solutions, offers an array of accounting, managerial, and executive services designed to help high-potential, technology-based businesses grow and prosper. As a member of Ben Franklin's Solutions Network, Hoback has completed more than 20 business reviews and technical project reviews on a pro bono basis, bringing a rare blend of business savvy and technical expertise to the task. He has worked with numerous Ben Franklin clients and prospects, developing their business plans, preparing them for trade shows and other marketing opportunities, and helping

them to better understand target markets. Hoback's deep expertise, patience, and understanding of the challenges of entrepreneurship allow him to effectively coach young companies. His ability to communicate with both technical and business investment communities renders him an extremely valuable resource to Ben Franklin's early-stage clients.

SPECIAL ACHIEVEMENT

An individual whose strong vision, dedication, and commitment to the program have helped to bring about a better business environment for Ben Franklin clients.

Dr. Michael A. MacDowell. President

Misericordia University, Dallas

As Misericordia's president, Dr. Michael MacDowell has encouraged the faculty and its 2,735 students to participate in projects that lead to technology commercialization and support regional job growth. MacDowell is the chairman of the board of the Northeastern Pennsylvania Technology Institute (NPTI), an organization that serves the 14 colleges located in Lackawanna, Luzerne, and Monroe counties. He also previously served as the chairman of the Council of Presidents, a collaboration among Luzerne County's five colleges and universities, and as president of the Northeastern Pennsylvania Association of Colleges and Universities. A number of initiatives are the result of his work. NPTI set the foundation for the creation and management of two Keystone Innovation

Zones, bringing more than \$5 million to the community in economic development funding. NPTI established a

State and NPTI member schools, allowing them to protect and accelerate the commercialization of viable intellectual property. In addition, MacDowell was instrumental in supporting the sustainability plan and transition of the Wall Street West initiative from Ben Franklin to NPTI, with plans to create a National Center for Organizational Continuity.

technology transfer agreement between Penn

In these ways and many more, MacDowell has significantly improved the technology economy of northeastern Pennsylvania.

STATEWIDE ACTIVITIES

The Ben Franklin Technology Partners of Northeastern Pennsylvania is part of a four-center statewide network with regional headquarters positioned strategically throughout the Commonwealth in the Lehigh Valley, Philadelphia, Pittsburgh, and State College. The Ben Franklin centers collectively support and execute Pennsylvania's technology agenda, build on regional strengths, capitalize on new opportunities, and address the specific needs of diverse communities.

During 2010, the statewide Ben Franklin network:

- Continued its statewide implementation of Pennsylvania's new Alternative Energy Development Program.
- Produced a proposal for the Department of Energy that resulted in funding for a statewide alternative/clean energyrelated translational research project.
- Developed policy papers to serve as the basis for federal innovation/ entrepreneurship policies to encourage the appropriation of federal funding for Pennsylvania's technology-based economic development infrastructure.
- Continued its broad-based communications efforts through the quarterly distribution of Ben Franklin's statewide e-newsletter, KEYnotes; the production of an annual report; the distribution of a brochure and statewide impact report; and the maintenance of the statewide Ben Franklin website.



- Initiated a long-term legislative communications strategy, including developing and producing a candidate briefing book on Ben Franklin Technology Partners.
- Continued leading and administering the Innovation Partnership program, which assists start-up companies in securing federal, state, and other grants.

Southeastern

OHIO THOMAS EDISON PROGRAM

The Ohio Thomas Edison Program includes eight Edison Technology Centers statewide and 13 Edison technology incubators. Ben Franklin Technology Partners, which dates to 1982, was a model for Ohio's program.

INVESTMENTS

In order to build the regional technology economy, the Ben Franklin Technology Partners of Northeastern Pennsylvania allocates a portion of its resources to project investments and business and technical assistance work through a challenge grant provided by Pennsylvania's Ben Franklin Technology Development Authority. This year, Ben Franklin also invested substantially in energybased companies through the Pennsylvania-funded Alternative Energy Development Program. All projects were competitively selected as having the greatest potential for creating or retaining quality jobs, introducing novel products or processes, and/or filling a promising market niche.

CHALLENGE GRANT INVESTMENTS

ADVANCED-TEC MATERIALS LLC

West Hazleton, Luzerne County

Finalize product formulation and production equipment requirements for a new insulation and fireproofing material. Advanced-Tec produces industrial materials based on proprietary formulations utilizing recycled coal-combustion fly-ash. These environmentally sound products achieve superior performance compared to competitive materials.

BFTP Investment: \$40,000 Total Project Budget: \$100,000

AMCOR PET PACKAGING

Allentown, Lehigh County University Partner: Lehigh University's Enterprise Systems Center

Improve manufacturing efficiencies and productivity at this manufacturer of blowmolded and injection-molded



containers for the personal care and liquor industries. Lehigh University's Enterprise Systems Center worked with Amcor to implement and document standard production procedures, prepare for additional production through new lines, and reduce cycle time and production costs.

BFTP Investment: \$19,800 Total Project Budget: \$236,766

BRIDGEWORKS ENTERPRISE CENTER

Allentown, Lehigh County

Support the business development services at the Bridgeworks Enterprise Center, a member of the Ben Franklin Incubator Network, in order to grow early-stage businesses and create new employment opportunities that diversify and strengthen the Lehigh Valley economy.

BFTP Investment: \$10,000 Total Project Budget: \$269,620

CARBONDALE TECHNOLOGY TRANSFER CENTER

Carbondale, Lackawanna County

Support the CTTC, a member of the Ben Franklin Incubator Network, to continue providing business assistance services to its incubator tenants and encourage additional technology start-ups in the Carbondale area.

BFTP Investment: \$10,000 Total Project Budget: \$242,308

CERNOSTICS PATHOLOGY INC.

Danville, Montour County

Establish a "shadow lab" at the Geisinger Hospital Medical Laboratories to test a new system that upgrades cancer-diagnostic pathology to a digital workflow. The objective analysis and electronic data will improve efficiency, reduce errors and costs, and improve treatment.

BFTP Investment: \$99,964 Total Project Budget: \$533,040



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INVESTMENTS

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CLARK TECHNOLOGY SYSTEMS, INC.

Milton, Northumberland County University Partner: Susquehanna University

Complete the implementation of the Suppliers
Excellence Alliance's Roadmap, which involves establishing a process management system for continuous improvement at this fabricator of lubrication equipment for chemical industries and refineries worldwide.

Also design a database structure for implementation company-wide. This will help Clark compete by producing systems better, faster, and cheaper.

BFTP Investment: \$50,000 Total Project Budget: \$244,529

CLYDETEC SYSTEMS, INC.

Orefield, Lehigh County

Complete a prototype of a semiconductor device for an optical coherence tomography system-on-a-chip for high-throughput 3-D biomedical imaging. This device will be used in the imaging of body tissues and in other biophotonic and biomedical applications. Also produce a new company business plan.

BFTP Investment: \$35,000 Total Project Budget: \$91,500

EAST STROUDSBURG UNIVERSITY

East Stroudsburg, Monroe County



Support East Stroudsburg University in its operation of the East Stroudsburg University Business Accelerator, a member of the Ben Franklin Incubator Network. This facility provides a focal point for entrepreneurial development in Monroe County.

BFTP Investment: \$10,000 Total Project Budget: \$375,158

EAST STROUDSBURG UNIVERSITY CENTER FOR RESEARCH & ECONOMIC DEVELOPMENT

East Stroudsburg, Monroe County

Continue financial support of the Pocono Mountains Keystone Innovation Zone. KIZs bring early-stage technology companies close to colleges and universities, supporting student internships, technology transfer, infrastructure development, and funding sources for new firms.

BFTP Investment: \$5,000 Total Project Budget: \$88,985

ELECTRIKUS INCORPORATED

Ben Franklin TechVentures
Bethlehem, Northampton County

company's initial product, the Illumaguard. The Illumaguard is a

Commercialize the



patent-pending, technologically innovative, and energy-smart battery back-up for residential lighting in the event of a power outage. The product is inconspicuous and intelligent in the way it discharges and recharges and will allow a household lamp to light automatically at the onset of a power outage. It operates for up to 10 hours on a full charge.

BFTP Investment: \$38,000 Total Project Budget: \$140,000

ELEMENT ID. INC.

Ben Franklin TechVentures
Bethlehem, Northampton County

Support the initial sales and ramp-up of a new type of radio frequency identification (RFID) tag reader for use in the materials handling environment. Unlike competitors' systems, Element ID's systems provide better read rates; seamless interaction with other automation equipment; intelligent, multi-reader systems designed to work over conveyors; and readers that are not sensitive to interference and can withstand harsh industrial environments.

BFTP Investment: \$50,000 Total Project Budget: \$181,000

EVENDOR CHECK

Hawley, Pike County

Further enhance the current software for the company's web-based reference checking system for procurement professionals. eVendor Check's clients reduce risks associated with vendor selection by using proprietary web-based tools and a supporting database, rather than the conventional, less-effective telephone-based method of vendor investigation. The software improvements will allow the company to roll out its services on a broad-scale, high-volume basis.

BFTP Investment: \$100,000 Total Project Budget: \$560,000

GLEASON CUSTOM KITCHENS

Moosic, Lackawanna County

Implement production and administrative efficiencies at this manufacturer of custom-built and standard cabinetry for residential and commercial applications. This will allow the company to respond to increased sales volume and expand its presence in additional markets.

BFTP Investment: \$55,000 Total Project Budget: \$220,000

GRANTADLER

Ben Franklin TechVentures
Bethlehem, Northampton County

Complete development of a new vascular access port and support an expanded sales and distribution effort. GrantAdler is developing and producing a new line of implantable products that allow easier, catheterized access to blood vessels for a variety of procedures. The company's initial focus is access for administering chemotherapy drugs and for conducting kidney dialysis. GrantAdler's first product, Rhapsody, which received FDA approval in 2007, has unique design features that make it competitive in the chemotherapy infusion port market.

BFTP Investment: \$100,000 Total Project Budget: \$439,000



GREATER HAZLETON BUSINESS INNOVATION CENTER - CAN BE

West Hazleton, Luzerne County

Support the operation of the CAN BE Incubator, a member of the Ben Franklin Incubator Network, serving the greater Hazleton area. This is part of a region-wide initiative by a team of economic development organizations.

BFTP Investment: \$10,000 Total Project Budget: \$233,780

GREATER SUSQUEHANNA KIZ

Bloomsburg, Columbia County

Continue financial support of the Greater Susquehanna Keystone Innovation Zone. KIZs bring early-stage technology companies close to colleges and universities, supporting student internships, technology transfer, infrastructure development, and funding sources for new firms.

BFTP Investment: \$5,000 Total Project Budget: \$60,000

GREATER WILKES-BARRE CHAMBER OF BUSINESS AND INDUSTRY

Wilkes-Barre, Luzerne County

Support the operation of the Innovation Center @ Wilkes-Barre, a member of the Ben Franklin Incubator Network, in downtown Wilkes-Barre. This is part of a region-wide initiative by a team of economic development organizations.

BFTP Investment: \$10,000 Total Project Budget: \$363,208

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hFIELD TECHNOLOGIES. INC.

Ben Franklin TechVentures
Bethlehem, Northampton County

Continue commercialization of the Wi-FireTM, an innovative, long-range wireless adapter for the mobile computer user, and fund new product line developments. hField's proprietary technology, with two issued patents and two patents pending, reduces deadspots and effectively triples Wi-Fi coverage, increasing productivity and eliminating the frustrations often associated with Wi-Fi. The Wi-Fire provides reliable and fast connections even where the typical adapter fails to connect.

BFTP Investment: \$70,000 Total Project Budget: \$541,850





ICON LEGACY CUSTOM MODULAR HOMES LLC

Selinsgrove, Snyder County

Improve production efficiencies, develop new products, and update customer service procedures for this manufacturer of custom-designed, high-end modular homes.

BFTP Investment: \$75,000 Total Project Budget: \$625,000

INFINITY ACCESS, LLC

Hazleton, Luzerne County

Complete final design and obtain UL approval of a proprietary new gate release device and new vehicle identification wireless access technology. Infinity Access manufactures innovative electronic controls, drive devices, and power supply systems for commercial and industrial doors, particularly fire doors, overhead doors, and gates. These next-generation products comply with newly mandated safety code requirements of the Department of Homeland Security.

BFTP Investment: \$75,000 Total Project Budget: \$375,000

LMC SOFTWARE SOLUTIONS

Borough of New Morgan, Berks County

Assist LMC Software Solutions in the launch of its new software platform that supports information technology staff dealing with problems within their



companies. 24/7 monitoring and log trails are built in, providing complete audit and compliance functions. Called Enterprise Technical Support Center, this platform improves productivity and service availability at a reduced cost.

BFTP Investment: \$50,000 Total Project Budget: \$365,000

LZ THERAPEUTICS, INC.

Ben Franklin TechVentures
Bethlehem, Northampton County

Conduct further pre-clinical testing for a new drug candidate for the treatment of Parkinson's disease. This is being completed in preparation for an Investigational New Drug filing. The company will also research the application of this medication to other traumatic or degenerative neurologic conditions.

BFTP Investment: \$30,000 Total Project Budget: \$156,000

MICHELMAN-CANCELLIERE IRONWORKS, INC.

Lehigh Valley, Northampton County University Partner: Lehigh University's Enterprise Systems Center

Analyze all manufacturing and support areas at this structural steel fabrication firm. Develop and implement plans to increase productivity, reduce costs, standardize production, and track operational costs during each job to keep jobs on or under budget. Michelman-Cancelliere Ironworks specializes in the fabrication and machining of structural components for bridges and commercial/industrial building superstructures.

BFTP Investment: \$19,900 Total Project Budget: \$129,025

NORTHEASTERN PENNSYLVANIA KEYSTONE INNOVATION ZONE

Lackawanna and Luzerne counties

Continue financial support of the Northeastern PA Keystone Innovation Zone. KIZs bring early-stage technology companies close to colleges and universities, supporting student internships, technology transfer, infrastructure development, and funding sources for new firms.

BFTP Investment: \$10,000 Total Project Budget: \$145,000

PENN TRUSS SYSTEMS, LLC

Middleburg, Snyder County

Evaluate new product design and manufacturing capabilities, expand marketing activities, and hire new employees to meet increasing production and operation demands for this manufacturer of roof and floor trusses. This will allow the company to introduce new products in the industry that will provide it with a competitive edge.

BFTP Investment: \$50,000 Total Project Budget: \$144,920

PENNSYLVANIA COLLEGE OF TECHNOLOGY

Williamsport, Lycoming County

Building on the success of two Plastics Centers of Excellence at the Pennsylvania College of Technology, develop a Thermoforming Center of Excellence. The Center is forming relationship networks among companies and academic institutions in the thermoforming industry and assessing educational needs in industry.

BFTP Investment: \$10,000 Total Project Budget: \$74,525



POTTSVILLE AREA DEVELOPMENT CORP.

Pottsville, Schuylkill County

Support the operation of the Pottsville/Schuylkill Technology Incubator, a member of the Ben Franklin Incubator Network, to continue providing business assistance services to its incubator tenants and encourage additional technology start-ups.

BFTP Investment: \$10,000 Total Project Budget: \$154,882

RANTNETWORK, INC.

Bloomsburg, Columbia County

Expand the marketing and development initiatives of RantNetwork's "Communilator" application for language translation in mobile phones. This tool provides both text-to-text and text-to-speech translation support for more than 72 different language pairs. It also offers image text translation, allowing a cell phone camera to capture an image and translate the image to text and/or speech. These applications provide real-time cell phone communication among people speaking different languages and expand users' abilities to immediately translate photos of text to any language, such as restaurant menus and road signs. Using the company's technology, for example, an American could have an e-mail interaction with a German, each in their own languages, with no delay for translation.

BFTP Investment: \$90,000 Total Project Budget: \$168,250

SEALSTRIP CORPORATION

Gilbertsville, Berks County

University Partner: Lehigh University

Increase the effectiveness of the engineering department and machine shop at this designer and manufacturer of easy-open and reseal systems for flexible packaging. Implement improved cost evaluation procedures to reduce engineering design and inventory costs.

BFTP Investment: \$30,000 Total Project Budget: \$220,026

continued

SNAKE CREEK LASERS

Hallstead, Susquehanna County

Increase the value proposition and decrease manufacturing costs for this developer and manufacturer of miniature solid-state lasers, OEM modules,



laser flashlights, and high-power room temperature and cryogenic solid-state lasers for both military and commercial applications. Assess the current production cost drivers, identify opportunities to increase performance of specific laser products, define market requirements, and produce new working prototypes. The company has a significant patent portfolio and is recognized as the manufacturer of the world's smallest and highest-power-density solid-state green laser products.

BFTP Investment: \$101.000 Total Project Budget: \$202.000

SOUTHSIDE BETHLEHEM KEYSTONE INNOVATION ZONE Bethlehem, Lehigh County

Continue financial support of the Southside Bethlehem Keystone Innovation Zone. KIZs bring early-stage technology companies close to colleges and universities, supporting student internships, technology transfer, infrastructure development, and funding sources for

BFTP Investment: \$5,000 Total Project Budget: \$95,375

STORE EYES, INC.

new firms.

Allentown, Lehigh County

Conduct a pilot program of the Store Eyes retail audit system with a major grocery retailer and packaged goods manufacturers. The company's patent-pending system cost-effectively captures digital images of product locations and displays in retail stores on a timely and regular basis, providing actionable data for the first time. The cost per observation is 1/100th of the cost of the manual processes currently in place. Successful pilot results will lead to program expansion.

BFTP Investment: \$100,000 Total Project Budget: \$375,000

STRONG INDUSTRIES, INC.

Northumberland, Northumberland County University Partner: Lehigh University

Perform a complete systems, processes, and data assessment of Strong's operation to enhance efficiencies at this manufacturer of molded pools and spas. Process improvements and enhancements will be implemented to address the company's rapid increase in demand for its products.

BFTP Investment: \$44,000 Total Project Budget: \$158,900

THE ENTERPRISE CENTER

Sayre, Bradford County

Support the operation of The Enterprise Center, a member of the Ben Franklin Incubator Network, in rural Bradford County. This is a team initiative of regional economic development organizations.

BFTP Investment: \$10,000 Total Project Budget: \$148,073

THE SCRANTON ENTERPRISE CENTER

Scranton, Lackawanna County

Support the Scranton Enterprise Center business incubator, a member of the Ben Franklin Incubator Network, which provides facilities for technology start-ups. This complements the Carbondale Technology Transfer Center, which supports light manufacturing.

BFTP Investment: \$10,000 Total Project Budget: \$185,950



TRAY-PAK CORPORATION

Reading, Berks County
University Partner: Lehigh University's
Enterprise Systems Center

Develop a facility plan that supports the company's strategic growth plan to increase capacity. Assess manufacturing operations on an enterprise-wide level to optimize space and material resources. Tray-Pak manufactures custom thermoformed packaging for clients in the confectionary, baked goods, and fast food industries, among others.

BFTP Investment: \$11,000 Total Project Budget: \$152,040

VIDDLER INC.

Ben Franklin TechVentures
Bethlehem, Northampton County

Continue commercializing Viddler's online video distribution and sharing platform, which businesses and social



media professionals use to engage their clients and build their brand recognition through online video. Viddler offers the only platform that allows in-line text or video commenting, which has been proven to increase the amount and duration of a video's viewership. The product has been designed to appeal to businesses, resellers, and social media professionals.

BFTP Investment: \$75,000 Total Project Budget: \$310,000

WILLIAMSPORT/LYCOMING KIZ

Williamsport, Lycoming County

Continue financial support of the Williamsport/Lycoming Keystone Innovation Zone. KIZs bring early-stage technology companies close to colleges and universities, supporting student internships, technology transfer, infrastructure development, and funding sources for new firms.

BFTP Investment: \$5,000 Total Project Budget: \$65,725

XIGO NANOTOOLS

Ben Franklin TechVentures
Bethlehem, Northampton County

Complete beta testing of a newly patented, shoe box-sized device called the Acorn AreaTM that rapidly measures the surface area of nanoparticles. Also finish development of a bioanalytical version of the same



device. Nanoparticles are minute; they typically have diameters that are 1/1,000th the diameter of a human hair. Measuring nanoparticle properties is significant in many industrial applications including energy, electronics, ceramics, and pharmaceuticals. Nanoparticle properties are key predictors of material performance, and currently there are no efficient methods to measure nanoparticle surface area.

BFTP Investment: \$100,000 Total Project Budget: \$261,000

ALTERNATIVE ENERGY DEVELOPMENT INVESTMENTS

ASHLAND FOUNDRY & MACHINE WORKS, INC.

Ashland, Schuylkill County
College Partner: Northampton Community College's
Emerging Technology Applications Center

Assess Ashland's current energy consumption to identify ways to reduce usage and energy inefficiencies and thereby decrease operating costs. Ashland manufactures pump components from high alloy castings.

BFTP Investment: \$32,850 Total Project Budget: \$139,200

DYNALENE INC.

Whitehall, Lehigh County

University Partner: Lehigh University

Develop a new heat-transfer fluid, based on molten salt chemistry, for concentrated solar power plants. Fluids currently used in the solar industry are thermally unstable at temperatures above 390 degrees Centigrade, which reduces overall plant efficiency.

BFTP Investment: \$41,146 Total Project Budget: \$174,104

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HITACHI METALS AUTOMOTIVE COMPONENTS USA, LLC

Blossburg, Tioga County

University Partner: The Pennsylvania State University

Develop a collagen-based core binder system that can displace the phenolic urethane and resin binders now used at this ductile iron caster. This binder system will reduce emissions and energy consumption, allowing the foundry to increase production and profits.

BFTP Investment: \$36,250 Total Project Budget: \$218,852

WARD MANUFACTURING

Blossburg, Tioga County

University Partner: The Pennsylvania State University

Reduce energy costs and environmental impact at this manufacturer of cast iron pipe and fittings by replacing cupola coke with collagen-binded anthracite fines as fuel. Also reduce consumption of sand, clay, and coal by implementing a new reclamation system.

BFTP Investment: \$50,000 Total Project Budget: \$304,462

BUSINESS AND TECHNICAL ASSISTANCE

A. RIFKIN COMPANY

Wilkes-Barre, Luzerne County

Develop product improvements at this manufacturer of custom and stock security bags, money bags, and other bank supplies.

ANGIOTECH

Reading, Berks County

Develop a penetration test method at this manufacturer of medical sutures, surgical needles, and knives.

BLASCHAK COAL CORPORATION

Mahanoy City, Schuylkill County

Explore approaches to drying coal with electromagnetic energy at this company that mines, prepares, and markets anthracite coal for space heating, the steel industry, and specialty applications.

BUZZY, INC.

Kulpmont, Northumberland County

Develop new facility plans for this company that produces "Grow-Kits" for retail sale to grow herbs, vegetables, fruits, and flowers from seeds.

ELECTRIKUS INCORPORATED

Ben Franklin TechVentures

Bethlehem, Northampton County

Develop a financial plan for this manufacturer of battery back-up systems for residential use.

FASSTTECH, INC.

Center Valley, Lehigh County

Develop a business plan for this manufacturer of athletic training equipment.

HEALTHONEMED, INC.

Allentown, Lehigh County

Develop a business plan for this producer of a device that dispenses prescription and non-prescription pills.

PINPOINT STRATEGIES, LLC

Bloomsburg, Columbia County

Provide sales assistance and conduct a strategic marketing session for this developer of e-recruiting techniques, with an initial focus on the recruitment of physicians to a specific region.

QUADRANT EPP

Scranton, Lackawanna County

Develop new compression mold tooling for this manufacturer of engineered high-density polyethelene sheets.

SHINN SPRING WATER COMPANY, INC.

Birdsboro, Berks County

Conduct a productivity analysis for this producer and distributor of bottled water and coffee.

THIRD EYE DIAGNOSTICS INC.

Ben Franklin TechVentures
Bethlehem, Northampton County

Conduct an assessment of financial analysis and reporting needs for this manufacturer of a portable, non-invasive medical device for measuring intracranial pressure.

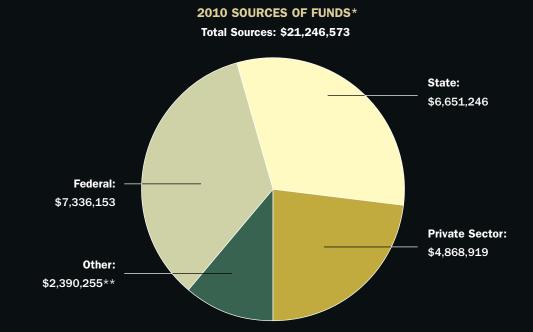
VIDDLER INC.

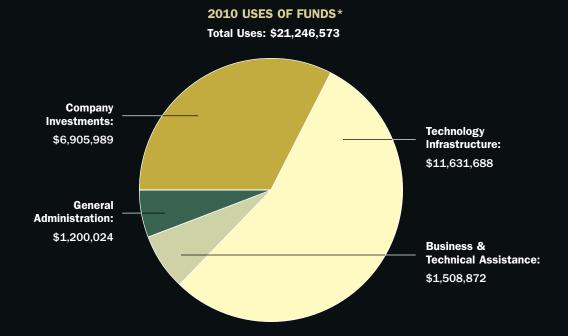
Ben Franklin TechVentures
Bethlehem, Northampton County

Develop a structure of corporate governance for this producer of software tools for enhancing and sharing digital video.

FINANCIAL INFORMATION

Since its inception in 1983, for every \$1 of state investment, the Ben Franklin Technology Partners of Northeastern Pennsylvania has generated an estimated \$3.20 in matching funds and an additional \$3.50 of state tax revenue.





1983-2010 FINANCIAL INFORMATION*

Investment of State Funds: \$171,061,295 | Private Sector Match: \$408,082,399

Other Match: \$130,296,046 | Total Investment: \$709,439,740

^{*} Financial data is audited through 2009; fiscal year 2010 is estimated.

^{**} Composed of university funds, nonprofit foundations, and other

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"The Ben Franklin Technology Partners Wraps Services around its funding of companies. Infrastructure and networking Support, alignment with colleges and universities, and ensuring that clients are connected with broader opportunities in the region - these make Ben Franklin investments Smart Capital. We are confident that Ben Franklin is Catalyzing entrepreneurship and innovation to help make national priorities happen."

The Honorable Aneesh Chopra, White House Chief Technology Officer, at announcement of \$6 million U.S. Department of Commerce Economic Development Administration grant for Ben Franklin TechVentures², Sept. 25, 2009



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