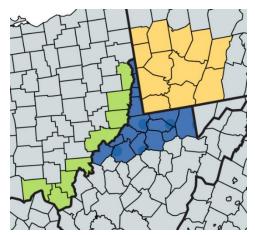
## SHALE POWER PROJECT

## Request for \$1,423,297 ARC POWER Grant to Support Appalachian Businesses Diversification into the Shale-Manufacturing Sectors



The Southwestern Pennsylvania Commission has partnered with Catalyst Connection, the West Virginia University's Manufacturing Extension Partnership, Ohio's Manufacturing Extension Partnership, and JARI to launch the Shale POWER project in Pennsylvania-Ohio-West Virginia. This Shale POWER initiative will establish an ongoing regional center to provide technical assistance and business support to small and medium manufacturers and enterprises seeking to expand business, production and jobs in the burgeoning shale gas and downstream manufacturing sectors in the coal-impacted, Tri-State Shale Coalition region.

The SHALE POWER<sup>2</sup> project will build on the successful "Manufacturing Value Stream for Shale" project conducted by West Virginia University with these same partners under a Round 1 ARC POWER grant, which worked with 80+ manufacturing and other businesses across this Tri-State region to boost opportunities for economic diversification. That previous POWER project identified a clear demand and need for technical and business support for small and medium manufacturers, suppliers and business service providers who are seeking to understand, penetrate, and expand business in the shale gas production, mid-stream processing, and downstream petrochemical manufacturing sectors.

The tristate area of Ohio, Pennsylvania and West Virginia is the geographic heart of a region ripe for resurgence after decades of coal decline and shrinking economic prospects. The abundance of natural gas from the Marcellus and Utica Shale in the region provides an opportunity to create a major new industrial ecosystem of clustered gas production, processing, transport, and downstream manufacturing. According to a 2017 study by the American Chemical Council: "After years of high, volatile natural gas prices, the economics of shale gas have created a decisive competitive advantage for U.S. chemical and plastics manufacturers, leading to greater investment, industry growth, and jobs." That study reports that more than \$200 billion is being invested in this sector, and that Appalachia can emerge as a major hub for petrochemicals and related downstream manufacturing activity, supporting tens of thousands of jobs within the region.

However, this burgeoning industry cluster is leaving many small- and medium-sized businesses behind, as they seek to adapt to a changing economy from coal and navigate in a new, different sector. There is not yet a robust network or architecture of outreach, engagement, support, job training and development, and technical assistance for these smaller entities to expand and thrive in this new economic paradigm.

The Shale POWER initiative will address this gap in the shale-manufacturing sector for the region's business, helping educate, identify and grow opportunities. The initiative will establish a technical assistance center, operating virtually across the region and anchored at the Carnegie-Mellon Mill 19 advanced manufacturing center in Pittsburgh, at West Virginia University's Industrial Extension Center, and at a designated Ohio center. Shale POWER will engage directly with the shale-manufacturing industry and provide technical assistance to small and medium manufacturing enterprises in key coalimpacted, Appalachian regions of these three states, designed to help connect them to the shale-manufacturing sectors, develop business strategies for expanding in these sectors, and support workforce and jobs development to meet this burgeoning economic sector.

Key project activities involve the following, including 60 events and trainings over the course of the project:

- 1.) **Establish the Shale POWER center with anchors at Carnegie-Mellon, WVU & Ohio** through planning and establishment of the framework, gameplan and implementation approach by the Southwest Pennsylvania Commission and its partners, together with expert consulting assistance.
- 2.) Establish a Shale POWER advisory council of shale-manufacturing industry experts, workforce development boards and training organizations, local/regional/state economic development organizations, MEPS and technical service providers to guide and participate in the design and implementation of the Shale POWER initiative.
- 3.) **Develop and deploy Training Modules** to provide sector overviews to manufacturers who seek to newly engage with the sector; to provide entrepreneurship planning and skills to these entities; and to provide in-depth education, engagement, and technical assistance to businesses with solid plans to expand into the sector. Annually, Shale POWER will provide 6-8 training events (for a total of 18-24 training events over the ARC project).
- 4.) Produce and disseminate an **asset map and regional guide to workforce development & job training** centers, resources, providers and programs in the region, with details on how to access and use their offerings, targeted to small and medium businesses in this shale-manufacturing sector who are desperate for skilled workers. This Workforce Guide will build upon Catalyst Connection's IMCP initiative <a href="www.MakingYourFuture.org">www.MakingYourFuture.org</a>, and the Tri-State Energy & Advanced Manufacturing (TEAM) Consortium's regional workforce development initiatives.
- 5.) **Conduct outreach and engagement with manufacturers** by disseminating information about the Shale POWER services and opportunities through MEP outreach, webpage outreach campaigns, development and distribution of collateral materials, and engagement with workforce and economic development organizations.
- 6.) **Conduct sector conferences & industry networking events** to bring together shale and manufacturing sector leaders and key trade collaborations with small and medium enterprises, both as stand-alone events and in coordination with other regional industry events by the Tri-State Shale Coalition and other partners. This will include one major, annual conference event (for a total of three).
- 7.) **Sector field tours & virtual tours** to go beyond the classroom and bring manufacturers seeking to enter and expand in this sector into direct contact with the gas production, midstream processing, and downstream manufacturing hubs of activity in the region, such as the Shell Appalachian Chemical Hub, the Gulf Coast petrochemical sector, R&D organizations, midstream chemical processors, and factories using the downstream products from the sector. This will include a planned five (5) field educational and engagement excursions annually (f15 total over the ARC project). Several of these field trips will be filmed, produced, and disseminated as "virtual tours / educational offerings" that can be offered on an ongoing forward basis to a broader audience of businesses and other stakeholders in the region.
- 8.) **Technical assistance & implementation strategies for the most engaged small and medium business enterprises** will be provided to entities seeking more robust and in-depth strategies using the center's tools and MEP-led approaches. These in-depth services for economic expansion and jobs development projects will be supported by a **Manufacturing Mini-Grant component** from the MEPs, targeting 65 grantees, based on successful Mini-Grant models now deployed in the region including with ARC POWER support.

This effort will be focused in 35 counties in Pennsylvania (12 counties), Ohio (8), and West Virginia (15) which are in the Appalachian Regional Commission region, impacted by contraction of coal sectors, within the Tri-State Shale Coalition's focus area, and connected to the established infrastructure of Manufacturing Extension Partnership centers in the region.

Shale POWER is projected to provide **major benefits and positive outcomes** for this targeted tristate region, serving 500+ small- and medium-sized business entities, fostering the creation of 50+ new businesses, helping create and retain 1000+ jobs, and leveraging tens of millions in private sector investment. The **budget** for the initial three-year establishment and deployment of the Shale POWER initiative will \$2,655,733 including an ARC POWER grant of \$1,423,497 and non-federal matches of cash and in-kind contributions of \$1,106,706.