Testimony of

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On

"The Obama Administration's Manufacturing Agenda"

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Chairman Brown, Ranking Member DeMint, and Members of the Subcommittee, thank you for the opportunity to appear before you today to discuss the efforts of the National Institute of Standards and Technology (NIST) Hollings Manufacturing Extension Partnership (MEP) to support manufacturers based in the United States (U.S.). Today I would like to highlight a few of the services that MEP offers to assist manufacturers with growth strategies and access to capital to support that growth. But first, I would like to give a brief overview of the program.

MEP Support of U.S. Manufacturers.

Since 1989, the MEP program has been working to improve the competitiveness of U.S. manufacturers. With a nationwide network of centers in nearly 400 locations, MEP serves as trusted advisors to our small and medium sized manufacturing clients, helping them to strategically implement business growth opportunities and to improve their competitive position in the market. We have helped clients obtain significant and measureable economic impacts. In FY 2009, MEP served nearly 33,000 manufacturing clients and recent results from a client survey indicate that MEP services resulted in more than $3.6 billion in new sales, $1.1 billion in cost savings and the creation or retention of more than 52,000 jobs.[1]

Today with manufacturing industry markets both contracting in some sectors and expanding in others and business success factors changing, manufacturers must establish competitive niches to capture new business opportunities and MEP is focused on addressing these new challenges and opportunities facing U.S. manufacturers. Through our next generation strategy, we are working with manufacturers to harness technology and innovation that results in new business opportunities. We have outlined a framework of five critical areas – supplier development, technology acceleration, sustainability, workforce and continuous improvement – in which MEP is working not only to help manufacturers' problem-solve to survive, but also to grow by developing new sales, new markets and new products.

To support this program, the President's FY2011 request for MEP builds upon the foundation that the America COMPETES Act (PL 110-69) established, and puts the program on a path grow to $180 million by FY 2015. The proposed budget of $129.7 million represents an increase of $5 million over FY 2010 enacted levels to support the Obama Administration's policy initiatives for reinventing domestic manufacturing. MEP will assist in creating jobs and responding to future challenges and opportunities in the manufacturing sector. Through the locally based Centers, MEP supports the adoption of technological innovations that spur economic growth and foster development of new products, expanded markets, and process improvements. MEP also facilitates the adoption of technological innovations by smaller U.S. manufacturers, especially clean technologies and processes that improve manufacturers' competitive position.

[1] The Manufacturing Extension Partnership: Partnering for Manufacturing Innovation and Growth - 2009

MEP is building upon efforts to implement and provide a number of new Growth Services to U.S. manufacturers in order to promote innovation and competitive practices, including:

- the acceleration of technology adoption and the development of new products and processes;
- green and sustainable manufacturing practices and products;
- market diversification to support development of new markets and supply chain opportunities; and
- an enabled manufacturing workforce that spans all levels of the organization.

Addressing Challenges Manufacturers Face in Accessing Capital.

As we all know, improving manufacturing processes, developing new products, or accessing new markets often requires capital. For most small and medium sized manufacturers, identifying and securing capital for sales and growth is often a complex and frustrating process. With capital becoming significantly scarcer in today's financial climate, that process has become more difficult for even historically successful companies. The scarcity of available capital and credit has particular impact on the manufacturing sector which is capital intensive and often requires the financing of inventories and receivables over longer periods of time.

This case is highlighted in the February 2010 report by the Manufacturing Extension Partnership Advisory Board (Advisory Board), the program's Federal Advisory Committee, which noted that with the contraction, restructuring, and impaired capital of the financial sector of the economy, there is currently a distinct gap in access to capital for most small manufacturers. The Advisory Board found that many small manufacturers, even those with orders that are relatively healthy, have been unable to finance growth or execute business and product diversification plans in the current environment due to factors that include: prevailing underwriting practices, devalued assets, and a risk aversion associated with transforming from legacy products and practices to investing in new products.[2]

In his remarks during the Federal Reserve forum, "Addressing the Needs of Small Business" on July 12, 2010 Chairman Bernanke noted that businesses in Michigan have cited the interconnectedness of the auto supply chain and the crucial role of stable financing for small businesses ranging from parts suppliers to independent automobile dealers as a major factor in the recovery of the auto industry as a whole.[3]

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[2] Innovation and Product Development in the 21st Century, Gary Yakimov and Lindsey Woolsey with Contributions from MEP Staff, Hollings Manufacturing Extension Partnership Advisory Board February 2010

[3] Restoring the Flow of Credit to Small Businesses, Remarks by Ben S. Bernanke, Chairman, Board of Governors of the Federal Reserve System, at the Federal Reserve Meeting Series: "Addressing the Financing Needs of Small Businesses" Washington, D.C. July 12, 2010

With regard to small companies and product diversification, the Advisory Board in its report noted the major challenge of offsetting the lenders perspective of perceived financial deficiencies of borrowers brought about by asset devaluation and what banks see as transitional risk to cash flows as companies diversify.

The Advisory Board also observed that access to capital can be significantly improved through targeted initiatives that mitigate risk taking or loan losses by lenders, or by loan enhancement programs which directly reduce specific risks on a loan by loan basis. The Advisory Board has concluded that the solutions likely lie in the public and private sector working together in a creative and collaborative effort.[4]

Accordingly, MEP has been looking at what actions we can take to respond to these circumstances and I will discuss a few of those options below. MEP recognizes that each company must determine its own funding and finance strategy---one that matches the exact needs of the business at its particular stage of growth with the most appropriate financial strategy and sources of capital. In that sense, we see that many business growth decisions are also investment decisions for our manufacturers. To support our manufacturers in that decision process, MEP has been educating and facilitating partnerships, to provide companies with information on financial resources and strategies.

MEP Assistance to Manufacturers via Financial Services

MEP is tackling this issue from a number of angles. We are providing information to companies on Federal and State government resources, private sources of capital and finance, and strategies for use of financial services for smaller manufacturers. Today I would like to give an overview of MEP's ongoing work in this area.

Federal and State Government Sources of Funding.
We are working to improve the ability of the MEP system to more effectively access the myriad of government programs that can provide capital to finance smaller manufacturers' growth.

A 2007 study by RSM McGladrey indicated that federal and state government programs remain an underutilized source for company financing. Many smaller companies still often overlook some of the best financing options available, especially in the federal tax areas.[5]

MEP is working to capture and disseminate knowledge of federal and state programs that provide loans, grants, and tax incentives to smaller manufacturers through revolving loan funds, guaranteed loans, energy grants, or tax credits. We are promoting, throughout the MEP system and partner agencies, a systematic and integrated sharing of knowledge of these programs so that the information can be better utilized by the smaller manufacturers

[4] Innovation and Product Development in the 21st Century, Gary Yakimov and Lindsey Woolsey with Contributions from MEP Staff, Hollings Manufacturing Extension Partnership Advisory Board February 2010

[5] ***Forging New Partnerships****: How to Thrive in Today's Global Value Chain,* The Manufacturing Institute, the National Association of Manufacturers and RSM McGladrey, Inc., 2007, page 49.

to make sound financial decisions. MEP uses its participation in the Interagency Network of Enterprise Assistance Providers, an innovative network that includes representatives from federal financial assistance programs such as the Export Import Bank and the Small Business Administration, to facilitate the exchange and deployment of knowledge of federal programs that provide loans and financial assistance to manufacturers. MEP has also established a partnership with The Council of Community and Economic Research (C2ER), a national organization representing economic development research professionals at chambers of commerce, state agencies and economic development organizations, to provide MEP centers and client companies with access to the C2ER database on about 1700 state incentive and financial assistance programs available to US manufacturers.

MEP has developed-- a *Quick Reference Guide to Growth Financing* --to disseminate information on state and Federal Sources of funding. The reference guide was developed to assist MEP centers, field staff, interested partners and manufacturers to better understand some of the general financing options, programs, and techniques available to small and medium-sized enterprises (SMEs) in pursuing growth oriented strategies.

Private Sources of Capital and Finance.
MEP is also capturing and disseminating information on private sources of capital and finance. There are a number of private sources available to smaller manufacturers, and we are working to increase these opportunities for client companies. For example, MEP is reaching out to the equipment leasing community to provide manufacturers with information on leasing strategies as possible financing options for equipment acquisition. MEP has also engaged the Independent Community Bankers of America (ICBA), which represents nearly 5,000 community banks throughout the US, to explore ways to harness the expertise of the financial community to enhance manufacturers' understanding of what makes a manufacturer "lendable." The intent is to build the knowledge of what lenders or investors are looking for from manufacturers so we can help our companies' access capital to grow and expand. Through these engagements, MEP looks to enhance the financial institutions' understanding of how the MEP system can serve as a technical resource on manufacturing issues – thereby supporting manufacturers as a good investment by these institutions.

Greater Knowledge and Use of Financial Strategies.
MEP is working to educate smaller manufacturers on internal financial practices and strategies that can leverage company capacity and enhance chances for accessing outside capital. MEP Centers have been providing information to clients on how to utilize better cash management practices, tax incentives (such as the R&D tax credit) and supplier management strategies to leverage internal capacity to fund growth. We have been working with technical advisors and private lenders to understand how a company's values, cash management practices, and customer management philosophies impact "lendability" and "investment attractiveness."

It is important to note that MEP works in tandem with the Small Business Administration (SBA) on financial services to facilitate the delivery of SBA loans and guarantees to MEP client companies. MEP does this by educating its client companies and the manufacturing community on what SBA products are available and helps them be better prepared to gain access to the SBA loans and guarantees.

MEP - Helping Companies Export

MEP works with companies to enhance their strategies; helping them identify opportunities for business growth and it is tied to financial services by developing financial approaches necessary to implement these strategies. One of our newer service offerings is focused on providing smaller manufacturers with the tools and knowledge they need to move into global markets.

In today's economy, more companies are considering expansion into international markets. In fact, exporting is rapidly becoming the fastest growing segment of the market. In collaboration with International Trade Administration's U.S. Export Assistance Centers, MEP has developed the ExporTech program to assist companies with developing an international growth plan. The ExporTech program provides experts who review and comment on the company's export plans, and connects the company with organizations and resources, including financial resources, that can move them quickly beyond planning to actual export sales.

ExporTech is customized to the specific learning needs of the participants; each workshop is limited to six to eight companies to provide sufficient time and attention to each company's specific requirements. The companies meet for three one-day sessions over a three-month period, and, between sessions, participants work on developing their export plans.

The program's small workshop size and customized format focuses on merging strategy with results. Throughout the program, local experts knowledgeable in all aspects of exporting are brought in to provide information and guidance and enable companies to accelerate their growth plan and speed to market. The program's customized agenda and small group discussion format ensure that companies walk away with information and guidance that specifically applies to their business. In the final work session, a panel of experienced international businesspeople reviews and provides feedback on each participating company's export growth plan.

To date MEP has completed sessions in the following 18 states: Arizona, Colorado, Idaho, Louisiana, Maryland, Minnesota, Missouri, Nevada, New Hampshire New Jersey, New York, North Carolina, North Dakota, Oklahoma, Pennsylvania, South Carolina, South Dakota, and Washington. MEP is continuing to provide this service for smaller manufacturers across the country. A few examples of the results of the work MEP has done with clients under ExporTech are:

- A fourth-generation family owned company in Bronx, NY has been in business since 1902. A provider and assembler of hollowware for the hotel and banquet industry, this company credits ExporTech with revitalizing the company's international efforts. They more-than-doubled their international sales by exploring new opportunities to utilize their existing infrastructure and sales force in new ways.

- A manufacturer of fabricated and machined equipment, products and tools in the energy industry looked to expand their customer base internationally. The company enrolled ExporTech to help develop and guide their exporting program. With the logistical knowledge and information of the world market provided by ExporTech the companies exports went from 8 percent to over fifty percent of their total revenue.
- A Certified Small Disadvantaged Business in the defense industry was looking to expand its 100% domestic customer base and develop new markets internationally. ExporTech helped provide the resources needed to initiate the move into the international market and most importantly helped to accelerate the process of obtaining an export license. The company grew from no exports to over $250,000 in export sales in one year though the support and knowledge of the ExporTech program which helped them find international opportunities

Increasing Competitiveness Via Energy Efficiency

As an emphasis is placed on renewable energy in our economy, MEP is delivering technologies and processes that help its clients become more competitive and energy efficient. MEP is finding for its clients that 'Green' has proven to be complementary to traditional "Lean" concepts – already delivered by our Centers - and provides important production cost savings. The benefits of Lean manufacturing include reduced cycle time, reduced inventory, reduced work-in-process costs, increased capacity, improved lead time, increased productivity, improved quality, and increased profits.

Uniting Lean with Green process concepts opens up additional opportunities to help improve the balance sheet. Companies that embrace Lean and Green production processes are seeking to reduce their environmental impact while simultaneously increasing their efficiency, productivity, and profitability. Typically this is being done through reduction of total energy use -- waste sent to landfills, greenhouse gas emissions, and water consumption, among other negative environmental impacts. This approach aligns with Lean concepts to reduce work-in-process costs, increase productivity and quality, and increase profits.

While some manufacturers remain skeptical of the words "sustainability" and "green," there is a clear indication that efforts to become more energy efficient and better environmental stewards have reached a tipping point amongst manufacturers.
While many manufacturers understand what needs to be done, many do not and require assistance in the identification and navigation of the path forward.[6]

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[6] Innovation and Product Development in the 21st Century, Gary Yakimov and Lindsey Woolsey with Contributions from MEP Staff, Hollings Manufacturing Extension Partnership Advisory Board February 2010

E3 (Economy, Energy, and the Environment).
Often times, introducing “Green Lean” production processes is not done alone but in partnership with local, state, and federal government resources, and utilities. E3 is a model that combines the resources of five federal agencies, working with local government and utilities, to enhance sustainability and competitiveness in local and regional economies and to spur job growth and innovation. Federal and local resources are being combined to conduct in-depth front-end assessments and gap analyses of company manufacturing processes, the results of which are used to develop comprehensive improvement plans on behalf of and in collaboration with the participating communities. The federal agencies involved in this effort are:

- MEP (NIST)
- Pollution Prevention Program (Environmental Protection Agency)
- Industrial Technologies Program (Department of Energy)
- Employment and Training Administration (Department of Labor)
- Small Business Development Centers (Small Business Administration)

These agencies work with local partners, utilities, and manufacturers to sustain the manufacturing infrastructure of a region, make manufacturing plants more energy efficient and cost effective, reduce the environmental impact of participants, and improve the economy by creating and retaining jobs.

Green Suppliers Network (GSN).
Most manufacturers agree that greening the supply chain is the next evolution in achieving improved energy efficiency. From materials to components to design, finished product, and end use, many original equipment manufacturers (OEMs) are requesting that their suppliers adhere to standards of environmental quality and processes. These developments have seen the supply chain adapt from one of compliance to environmental mandates by OEMs to one of using Green Lean to create value or lower costs. Suppliers once viewed environmental quality as something thrust upon them, but are beginning to understand that by becoming Lean and Green they are more economically competitive and thus more likely to survive in a competitive supply chain where all suppliers are now adhering to environmental quality control. In the new value chain model of Green, socially responsible suppliers will be the most successful. A significant challenge over the next several years will be helping more and more companies make the transition to Green Lean and fostering growth within the growing green economy.

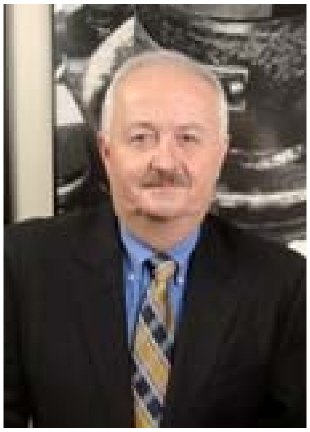
GSN is an innovative collaboration between the Environmental Protection Agency, MEP, state and local government, and industry that focuses on the dual challenge of reducing the negative environmental impact of small and mid-sized manufacturing suppliers while simultaneously increasing those companies’ efficiency, productivity, and profitability. GSN reviewers employ “Lean and Clean” technologies, which concentrate on the root causes of waste of one process line in a facility and provide a framework for achieving specific, measurable, environmental business objectives. Among other things companies learn to establish systems to use energy more efficiently and improve the use and selection of more environmentally friendly raw materials.

Conclusion.

As I have mentioned throughout my testimony, raising capital is one of the most basic of business activities, but for many smaller manufacturers it is often a complex and frustrating process. To help bridge this gap, MEP continues to look at ways to improve manufacturer's access to financing options.

Smaller manufacturers positioned to move to the next level of growth—whether it is through the development of new products, markets, or sales—need to have clear strategies for securing the necessary capital resources to achieve growth. Many smaller manufacturers do not discover until the implementation phase of their growth plan that they may be unable to proceed without additional capital. With our toolbox of services, MEP is uniquely positioned to provide smaller manufacturers with a better understanding of the range of financial options and resources that match their exact needs. The continued incorporation of this type of service in the MEP toolkit and the overall MEP Next Generation Strategy will give U.S. manufacturers the information they need to successfully implement their business growth strategies, resulting in new sales, expanded markets, technology adoption and sustainability.

Thank you for the opportunity to testify today on how the MEP program assists America's smaller manufacturers to increase their competitiveness. I am happy to answer any questions the Committee may have.



Roger Kilmer Bio

Roger Kilmer has been with the MEP program since 1993 and with NIST since 1974. Previously, Roger was the MEP Deputy Director, serving as the chief operating officer and chief financial officer responsible for internal operations, programmatic coordination, and policy review of all activities.

From 1990 to 1993, Roger was the Deputy Division Chief of Robot Systems in the NIST Manufacturing Engineering Laboratory. In this position, he was responsible for establishing and managing research programs involving real-time sensor-based control of intelligent machines. Roger was also Group Leader of Robot Systems Integration, managing research and development programs with manufacturing and military applications including robotic deburring, automated lay up of thermoplastic composites, robotic safety systems, robotic handling of munitions, and unmanned land vehicle operations.

Roger received the Department of Commerce Silver Medal Award for leadership as the NIST MEP liaison to the interagency Technology Reinvestment Project (TRP) initiative and the Bronze Medal for superior leadership of NIST's unmanned ground vehicle robotics program.

Roger holds a Master of Science and a Bachelor of Science in Mechanical Engineering from Pennsylvania State University.