



Compete.

Council on
Competitiveness

Making Impact

Annual Report 2012-2013

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From Our Leaders



The work we do at the Council on Competitiveness is at the heart of the most critical issues affecting all Americans, while framing the national and global conversation around the necessary conditions to create a more productive and competitive nation.

Our diverse membership—corporate CEOs, university presidents, labor leaders and directors of national laboratories—works to shape the nation's action agenda to grow the economy, and create a more prosperous future for our children and grandchildren.



As we look ahead, the Council is poised to lead the debate on a number of game-changing issues vital for the United States to maintain its competitive edge in the global economy. Building off our inaugural National Competitiveness Forum (NCF) in 2012—that brought together top American public and private sector leaders to assess the state of the nation's competitiveness—we have entered 2013 with fresh ideas, and some exciting, new directions for our existing work and projects.

The Council has been deeply committed and involved for the past decade in U.S. efforts to optimize the national energy portfolio and manufacturing capacity for long-term productivity. And our commitment is intensifying. The Council has entered into a path-breaking, multi-year initiative—the **American Energy & Manufacturing Competitiveness (AEMC) Partnership**—with the U.S. Department of Energy Office of Energy Efficiency and Renewable Energy (EERE).

The AEMC Partnership works to bring together national leaders to articulate and prioritize the actions the United States must take today, seizing on this distinctive time in U.S. energy history and improving the trajectory for the U.S. economy, the growth of American jobs and the nation's standard of living.

2013 also marks the beginning of a nationwide conversation about engineering leadership and the role this important profession plays in America's long-term growth and competitiveness.

A strong engineering base is critical in order to lead America into a secure and prosperous future, and the **National Engineering Forum (NEF)** is a path in the right direction. The NEF, a partnership between the Council and the Lockheed Martin Corporation, is creating a national movement through regional dialogues that brings together important stakeholders to discuss and develop key solutions facing the engineering challenges in America. The regional dialogues in 2013 will culminate in a cornerstone, national event next year.

Throughout 2013, the Council will continue our work on other issues critical to U.S. competitiveness, building on the power and ideas generated from our highly successful Technology Leadership and Strategy Initiative (TLSI) and High Performance Computing (HPC) initiative.

We will also continue to expand our work globally, working with competitiveness councils from around the world to share best practices on competitiveness policy, while building on important benchmarking practices to form the Global Federation of Competitiveness Councils (GFCC) Metrics Scorecard. Also this year, the Council will co-host the 3rd U.S.–Brazil Innovation Summit, bringing together top leaders from the Western Hemisphere's two largest economies to strengthen relationships and create global projects to advance innovation-based competitiveness in key sectors like health care, information technologies, energy, food and water.

The Council remains the pre-eminent source for America's competitiveness agenda. We are excited about the year ahead and the opportunities to work with members of the new Congress, as well as President Barack Obama and his administration throughout his second term. And at the state level, we look forward to further engaging with U.S. governors and mayors.

There is no doubt the drivers of competitiveness will change throughout the years—but the Council is committed to addressing the nation's current competitiveness challenges and capitalizing on its unique strengths. In doing so, we establish ways for the American economy to realize its potential and raise the standard of living for every citizen.



Samuel R. Allen
Chairman
Council on Competitiveness
Chairman and CEO
Deere & Company



Deborah L. Wince-Smith
President & CEO
Council on Competitiveness

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The Inaugural National Competitiveness Forum

The Council on Competitiveness hosted its *inaugural* National Competitiveness Forum (NCF) on November 16, 2012, at the George Washington University in Washington, D.C.

The NCF assembled top American leaders from industry, government, labor, national laboratories, academia and media to assess the state of American competitiveness, explore emerging priorities and release an agenda to grow the U.S. economy.

Panels were moderated by top Washington journalists from Bloomberg and the *Washington Post*, and included dialogue topics ranging from “Leveraging America’s Energy Revolution” to “Solving Grand Challenges” and “Seizing Opportunity for Growth.”

The 2012 NCF was held at a critical time given the start of a second term for the current administration and a new Congress, as well as the essential need for the United States to better support its workforce, fill the skills gap for manufacturing jobs and enact a long-term fiscal framework to reduce the national debt.

SAVE THE DATE

2013



National
Competitiveness
Forum

October 29-30
Washington, D.C.



The NCF was guided by the Council's *Clarion Call for Competitiveness*, an urgent call to action, which provides a strong and clear roadmap for policy makers to enhance America's competitiveness and drive domestic investment and job creation. This flagship report identifies key economic challenges, and offers solutions to position America to leverage its strengths and address shortcomings hampering our global competitiveness performance.





OPPOSITE PAGE

Steven Knapp, President, The George Washington University.

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Top: Luis Proenza, President, University of Akron; Nicholas T. Pinchuk, Chairman and CEO, Snap-on Incorporated; Mayo Shattuck III, Executive Chairman, Exelon Corporation; James M. Phillips, Chairman and CEO, NanoMech, Inc.; the Honorable Shirley Ann Jackson, President, Rensselaer Polytechnic Institute; the Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness; Samuel R. Allen, Chairman and CEO, Deere & Company, and Chairman, Council on Competitiveness; James S. Hagedorn, Chairman and CEO, The Scotts Miracle-Gro Company; Larry Weber, Chairman, W2 Group, Inc.; William Bohnett, President, Whitecap Investments, LLC; Robert Zimmer, President, University of Chicago; and Professor Michael E. Porter, Bishop William Lawrence University Professor, Harvard Business School.

Center left: The Honorable Robert Hormats, Under Secretary of State for Economic Growth, Energy, and the Environment, U.S. Department of State.

Center right: The Honorable Robert Portman, U.S. Senator, (OH).

At right: Samuel R. Allen, Chairman and CEO, Deere & Company, and Chairman, Council on Competitiveness.





Top: The Honorable Francis S. Collins, Director, National Institutes of Health; Dr. Ray O. Johnson, Senior Vice President and Chief Technology Officer, Lockheed Martin Corporation; the Honorable Zachary J. Lemnios, former Assistant Secretary of Defense for Research & Engineering, U.S. Department of Defense; Luis M. Proenza, President, the University of Akron; Robert J. Zimmer, President, the University of Chicago; and Robert E. Litan, Director of Research, Bloomberg Government.

Center left: Professor Michael E. Porter, Bishop William Lawrence University Professor, Harvard Business School

Center right: The Honorable David Danielson, Assistant Secretary for Energy Efficiency and Renewable Energy, U.S. Department of Energy; Eric D. Issacs, Director, Argonne National Laboratory; Sean McGarvey, President, Building and Construction Trades Department, AFL-CIO; the Honorable Shirley Ann Jackson, President, Rensselaer Polytechnic Institute; Mayo A. Shattuck III, Executive Chairman, Exelon Corporation; and Mary C. Jordan, Editor, The Washington Post Live.

At left: The Honorable Shirley Ann Jackson, President, Rensselaer Polytechnic Institute; and Samuel R. Allen, Chairman and CEO, Deere & Company, and Chairman, Council on Competitiveness.

*“By following the important recommendations found in the **Clarion Call**, we have the potential for a new era of innovation, a resurgence of manufacturing, and the potential to keep and grow high-skilled jobs for this and the next generation.”*

The Honorable Deborah L. Wince-Smith
President & CEO
Council on Competitiveness



Dennis Hong, Associate Professor and Director of Robotic and Mechanisms Laboratory, Virginia Polytechnic Institute and State University, with CHARLI-2.

As part of the 2012 NCF, the Council honored two veteran United States Senators. Sen. Richard Lugar departed the Senate in 2012 after a distinguished career serving the people of Indiana for more than 35 years. His legacy of leadership in foreign policy, agriculture and nuclear threat reduction will long be remembered and appreciated by his colleagues, the American public and the world. Sen. Jeff Bingaman of New Mexico has been a champion of science and technology policy for nearly three decades in the U.S. Senate. He was responsible for crafting much of the nation's energy policy, from clean energy standards to the creation of the ARPA-E. The Council chose to honor these two Senators because both men epitomize a culture of collegiality, compromise and bipartisanship needed in these challenging economic times.



Top: The Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness; the Honorable Richard M. Lugar, former U.S. Senator (Ind.); and Samuel R. Allen, Chairman & CEO, Deere & Company, and Chairman, Council on Competitiveness.

Bottom: The Honorable Jeff Bingaman, former U.S. Senator (NM); Mrs. Anne Bingaman; and Samuel R. Allen, Chairman & CEO, Deere & Company, and Chairman, Council on Competitiveness.



The Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness; Alice P. Gast, President, Lehigh University; and John E. McGlade, Chairman, President and CEO, Air Products.

Compete: Manufacturing

U.S. Manufacturing Competitiveness Initiative

The U.S. Manufacturing Competitiveness Initiative (USMCI), branching out from the National Manufacturing Summit in December of 2011 that convened hundreds of business, university, labor and government leaders, viewed 2012 as a year to amplify the message and rally around the fundamental premise that a robust manufacturing sector is necessary for the United States to compete.

Building off of the success of the Council's seminal national strategy, *Make: An American Manufacturing Movement*, the USMCI sought to address the critical challenges facing American manufacturers in an increasingly competitive global economy.

The Council applauds the administration for prioritizing manufacturing and embracing the recommendations in its *Make* report, including the creation and implementation of the Nation Network for Manufacturing Innovation (NNMI) hubs that will bring together businesses, government and academia to deploy the newest tools and facilities to create more jobs for Americans.



2012 in Review

The USMCI pursued an ambitious plan of action in 2012 to build on the success of the *Make* report, and disseminate its findings to policymakers at the federal, state and local levels.

The USMCI worked with leaders in both the public and private sectors to reignite an American manufacturing movement, and reached out to Presidential and Congressional campaigns throughout the pivotal election year to ensure the Council's voice and message was heard across the nation.

The USMCI continued its Out-of-the-Blue manufacturing dialogue series in 2012 with strategic conversations on:

- **Next Generation Supply Networks and Logistics:** hosted by G. P. “Bud” Peterson, President, Georgia Institute of Technology, Atlanta February 28–29.
- **Materials Innovation Infrastructure:** co-hosted with The Minerals, Metals & Materials Society, Orlando, FL, March 14–15.
- **Accelerating and Innovating Workforce Development:** hosted by Nicholas T. Pinchuk, Chairman & CEO, Snap-on Incorporated, Kenosha, WI, September 25-26.
- **Leveraging the Talent Development Process to Drive Innovation:** co-hosted by John E. McGlade, Chairman, President and CEO, Air Products and Alice P. Gast, President, Lehigh University, Bethlehem, Pennsylvania, October 4-5.

- **Advanced Manufacturing Collaboration:** co-hosted by Dennis Berkey, President and CEO, Worcester Polytechnic Institute and Mark E. Russell, Vice President, Engineering, Technology and Mission Assurance, Raytheon Company, Tewksbury, Massachusetts, October 18-19.

Other Highlights

- Paul Hommert, Director, Sandia National Laboratories, and President, Sandia Corporation, joined the Leadership Council as the National Laboratory Lead.
- As the advancement of new sources of energy in the United States grow to be a national competitive advantage, the Council produced the 2012 Global New Energy Summit in Colorado Springs in April as a springboard for re-engaging its energy portfolio.



Above left: Helmuth Ludwig, CEO, Siemens Industry Sector, North America; G. P. “Bud” Peterson, President, Georgia Institute of Technology; Harvey M. Donaldson, Director, The Supply Chain & Logistics Institute (SCL), and Associate Chair of Industry and International Programs, IsyE, Georgia Institute of Technology; and Marilyn Brown, Director, Public Policy, Georgia Institute of Technology.

Above right: Debbie Davison, Vice President-Workforce Development, Gateway Technical College; Nicholas T. Pinchuk, Chairman and CEO, Snap-on Incorporated; and Roger Todajewski, Executive Director, NC3.

Left: Paul Hommert, Director, Sandia National Laboratories, and President, Sandia Corporation.

The USMCI will hold several Out-of-the-Blue manufacturing dialogue throughout 2013, with discussions planned on key issues:

- **Additive Manufacturing:** co-hosted by Thomas E. Mason, Director, Oak Ridge National Laboratory; Jeffrey J. Wilcox, Vice President-Engineering, Lockheed Martin Corporation; and Ed Morris, Director, National Additive Manufacturing Innovation Institute and Vice President, National Center for Defense Manufacturing and Machining, held in Oak Ridge, Tenn., April 18-19.
- **Cyber-Enabled Manufacturing:** hosted by Paul Hommert, Director, Sandia National Laboratories, and President, Sandia Corporation, held in Albuquerque, New Mexico, May 29-30.
- **Reinventing Supply Chain Management:** hosted by Harris Pastides, President, University of South Carolina to be held in Charleston, South Carolina, September 23-24.

2013 Outlook

In 2013, the USMCI will further highlight the importance of and path forward for the nation's manufacturing base. The elections and ensuing political debates of 2012 had a tremendous impact on America's economic trajectory and its position as a global manufacturing leader. In 2013, the Council looks forward to engaging with key stakeholders to further American manufacturing competitiveness.

“Our challenge is to not only get back to ‘made in America’ but also ‘invented in America.’ The same spirit of innovation and collaboration that once gave us preeminence in manufacturing, can help us regain our competitiveness, thereby creating jobs, increasing exports and serving as a catalyst for a healthy economy.”

G.P. “Bud” Peterson

President

Georgia Institute of Technology

2013 Global Manufacturing Competitiveness Index

Concurrent with the inaugural National Competitiveness Forum (NCF) in November 2012, and building upon the success of the 2010 *Global Manufacturing Competitiveness Index*, the Council and Deloitte teamed up again to release the 2013 *Global Manufacturing*



Competitiveness Index (GMCI), a survey of C-suite manufacturing executives worldwide on their opinions of manufacturing competitiveness today and the competitiveness landscape over the next five years.

The GMCI is a ground-breaking analysis of the decision-making process in the manufacturing sector—part of a multi-year analysis to better understand the trends creating a hyper-competitive global manufacturing environment.

The GMCI contains analytics based on the perceptions of more than 550 global CEOs. They reveal the global competitive landscape for manufacturing will continue to undergo seismic shifts that will redefine the drivers of economic growth, national security and a prosperous middle class.



Left: Samuel R. Allen, Chairman & CEO, Deere & Company, and Chairman, Council on Competitiveness; the Honorable Shirley Ann Jackson, President, Rensselaer Polytechnic Institute; Keith D. Nosbusch, Chairman and CEO, Rockwell Automation; and Punit Renjen, Chairman of the Board, Deloitte; and Peter Cook, Chief Washington Correspondent, Bloomberg Television, and Host, Bloomberg Government's Capitol Gains.

Right: Craig A. Giffi, Vice Chairman and U.S. Leader, Consumer & Industrial Products Industry, Deloitte.

The Global Manufacturing Competitiveness Index (GMCI) identifies 10 key drivers of manufacturing competitiveness:

1. Talent-driven innovation
2. Cost and availability of labor and materials
3. Energy cost and policies
4. Supplier network
5. Local market attractiveness
6. Economic, trade, financial and tax systems
7. Physical infrastructure
8. Government investments in manufacturing and innovation
9. Legal and regulatory system
10. Health care system

Properly understanding the role of these drivers and the breadth of manufacturing is essential to enacting policies to improve standards of living and sustain long-term competitiveness. Business, academic, national laboratory, labor and policy leaders must become even more sophisticated in their ability to react to these changes and leverage them to their advantage, and the Council looks forward to working with key stakeholders in these areas to ensure the United States remains a competitive and attractive destination for investment and growth.

Compete: Energy

Council Pioneers New Public-Private Partnerships to Boost Energy Competitiveness

The United States energy landscape and its impact on manufacturing have shifted dramatically during recent years.

The U.S. private and public sectors are positioned now more than ever to develop new business opportunities, programs and strategies to seize this moment, leverage off the shale boom, promote energy efficiency, build the bridges to renewable technologies, and deepen clean technology manufacturing. In doing so, the nation will dramatically improve its economy, grow jobs and secure the nation and its environment.

2012 in Review

The Council's deep commitment and involvement in the nation's efforts to optimize the U.S. energy portfolio and manufacturing capacity for long-term productivity and prosperity have underpinned significant, public-private efforts:

- The 2007-2009 **Energy Security, Innovation and Sustainability (ESIS) Initiative** to enhance U.S. competitiveness, energy security and sustainability by creating an energy action plan focused on identifying opportunities to inspire private sector demand for sustainable energy solutions, and support the creation of new industries, markets and jobs.
- The ongoing **U.S. Manufacturing Competitiveness Initiative (USMCI)** to create a private sector-driven agenda addressing five key challenges to optimize the nation's manufacturing competitiveness.

Building on these efforts, the Council has re-invigorated its energy competitiveness efforts—in particular, launching within this work stream a new **American Energy & Manufacturing Competitiveness (AEMC) Partnership** with the U.S. Department of Energy Office of Energy Efficiency and Renewable Energy (EERE).

The AEMC Partnership—the first phase of which kicked off at the Council's 2012 National Competitiveness Forum—brings together a cross-section of national leaders to address the rapidly shifting national and global energy landscape and uncover actions that can be taken to enable America to take advantage of this distinctive time in its energy history over the next five to ten years, and to bolster dramatically its energy, economic and manufacturing competitiveness over the next 20, 30, 40 years and beyond.

“Our budget last year (2012) was \$1.8 billion to invest in cutting-edge research, development and demonstration—but also to break down market barriers. A big part of why I am excited about forming a partnership with the Council is that I want every one of those pennies from American taxpayers to have a big impact on our competitiveness.”

The Honorable David Danielson

Assistant Secretary for Energy Efficiency and Renewable Energy, U.S. Department of Energy
Technology Leadership & Strategy Dialogue,
October 22, 2012



The Honorable David Danielson, Assistant Secretary for Energy Efficiency and Renewable Energy, U.S. Department of Energy, announces the first phase of the AEMC Partnership at the NCF 2012.



Above left: Thomas E. Mason, Director, Oak Ridge National Laboratory; Steven Ashby, Deputy Director for Science & Technology, Pacific Northwest National Laboratory; and William Goldstein, Deputy Director for Science & Technology, Lawrence Livermore National Laboratory.

Above right: Laurel Zelnio, Director, Environmental, Safety, Standards & Energy, Deere & Company; Robert ter Kuile, Senior Director of Environmental Sustainability, PepsiCo; Omkaram Nalamasu, Chief Technology Officer, Applied Materials, Inc.; the Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness; Lisa Ferris, Chief Operating Officer, Third Wave Systems; and Andrew Ginger, President, Industrial, Snap-On, Incorporated.

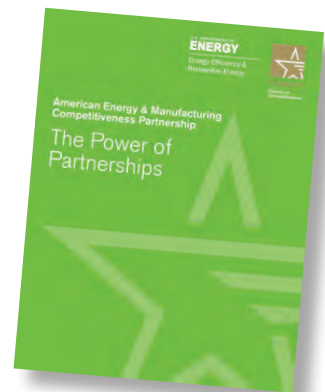


The Honorable David Danielson, Assistant Secretary for Energy Efficiency and Renewable Energy, U.S. Department of Energy; the Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness; Jason Miller, Special Assistant to the President for Manufacturing Policy, National Economic Council, The White House; Elizabeth Wayman, Director, Clean Energy Manufacturing Initiative, Energy Efficiency and Renewable Energy, U.S. Department of Energy; and Chad Evans, Executive Vice President, Council on Competitiveness.

The first phase of the AEMC Partnership involved creating a first-of-its-kind and extensive literature review and “mapping” of past and current research efforts across the United States and internationally, documenting the world’s most impactful energy and manufacturing policies. *The Power of Partnerships* and the accompanying infograph, *A Summary of Public-Private Partnerships*, offer a new lens to examine how regions and nations are building the industrial commons necessary to advance industrial efficiency and clean technology manufacturing.

Both publications are based on extensive analysis of more than 30 global public-private partnerships—as well as nearly 200 specific policy recommendations from around the world. They explore:

- The scope of research to date on the links between energy efficiency efforts, renewable energy and manufacturing competitiveness in the United States and internationally; research on barriers to manufacturing competitiveness as they relate to energy in the U.S. and internationally; and models for public private partnerships for fostering competitive industries in the United States and abroad.
- Links, barriers and public-private partnership models that have not been studied, or on which studies are out of date.



The focus of the Partnership will be to identify means to:

- *Increase U.S. competitiveness in the production of clean energy products:* Strategically invest in technologies that leverage American competitive advantages and overcome competitive disadvantages.
- *Increase U.S. manufacturing competitiveness across the board by increasing energy productivity:* Strategically invest in technologies and practices to enable U.S. manufacturers to increase their competitiveness through energy efficiency, combined heat and power, and taking advantage of low-cost domestic energy sources.

The overarching goals of the Partnership are to:

- State and define key barriers, challenges and problems in U.S. competitiveness in manufacturing of clean energy products, energy efficiency products and advanced manufacturing products.
- Dive deeply into these problems and generate possible policies, solutions and models—including tangible and implementable opportunities—where the U.S. public and private sectors can work together to prioritize and solve these problems.
- Evaluate and catalyze policy solutions—including at least three models for scalable, public-private partnership pilot projects/concepts generated by the Partnership—to leverage energy innovation capacity to increase competitive manufacturing of clean energy and energy efficiency products in the United States.
- Generate a detailed proposal of one public-private partnership based on the policies and models evaluated that can be carried out by EERE and/or the Council to increase the competitive production of clean energy products, energy efficiency products and advanced manufacturing products in the United States.

2013 Outlook

Building on phase one of the AEMC Partnership, the Council has begun phase two of a three-year effort with EERE.

The second phase of the AEMC launched April 11-12, 2013, with an inaugural dialogue in Washington, D.C., and involved more than 100 of the nation's top leaders from industry, academia, labor, the national labs and the non-profit community focused on the future of U.S. clean technology manufacturing.

The dialogue brought together the voices and views from important leaders across sectors on how the U.S. can lay the foundations for public-private partnerships within the clean energy and manufacturing sector.

Throughout 2013, the Council and EERE will convene three additional regional dialogues—beginning with a dialogue on June 20 at the University of Toledo, co-hosted by Council member and university President Lloyd Jacobs. That will be followed by a dialogue at the General Electric Global Research center in Niskayuna, NY, on August 13th, hosted by TLSI co-chair, Mark Little, Senior Vice President and Chief Technology Officer, GE. The first national energy and manufacturing summit will be held in December.



Above: The March 26th launch of the American Energy Manufacturing Competitiveness (AEMC) Partnership at Oak Ridge National Laboratory (ORNL). Pictured speaking, from left: the Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness; the Honorable Charles Joseph "Chuck" Fleischmann, U.S. Rep (Tenn.); the Honorable Bill Haslam, Governor (Tenn.); Thomas E. Mason, Laboratory Director, Oak Ridge National Laboratory; and the Honorable David Danielson, Assistant Secretary for Energy Efficiency and Renewable Energy, U.S. Department of Energy.

Center: At the Inaugural Dialogue, April 11th and 12th in Washington, D.C. Kenan E. Sahin, Founder & President, TIAX, LLC; Mark Peters, Deputy Laboratory Director for Programs, Argonne National Laboratory; Tomás Díaz de la Rubia, Director, Deloitte Consulting; Sean McGarvey, President, Building & Construction Trades Department, AFL-CIO; and Montgomery Alger, Senior Vice President, Research and Development, Myriant Corporation.

Left, bottom: Jason Miller, Special Assistant to the President for Manufacturing Policy, National Economic Council, The White House.

Compete: Leadership

National Engineering Forum—Addressing National Engineering Challenges



www.nationalengineeringforum.com
[@NatEngForum](https://twitter.com/NatEngForum)

The competitiveness of the United States depends on a skilled workforce of engineers and innovators who are equipped to design solutions to the nation's most critical needs. To that end, the United States must advance the quantity, quality and diversity of its engineering workforce to fuel the economy and advance U.S. leadership on the world stage.

America must ensure that engineers are equipped for 21st century challenges and skilled in emerging disciplines, such as cyber security and advanced manufacturing. That is why the Council is leading the National Engineering Forum (NEF).

2012 in Review

The National Engineering Forum (NEF) is a movement catalyzed by the Council; Dr. Ray O. Johnson, Senior Vice President and Chief Technology Officer, Lockheed Martin Corporation, and Jeff Wilcox, Vice President, Engineering, Lockheed Martin Corporation; and Charles M. Vest, President, National Academy of Engineering (NAE). The NEF's purpose is to:

- Find solutions to a core set of challenges facing the U.S. engineering enterprise: capacity, capability and competitiveness.
- Identify actions the U.S. engineering community can take to ensure continued security and prosperity.
- Raise awareness about the roles of engineers in the daily lives of Americans and chart the future of engineering in the United States.

Challenges Facing Engineering—the 3 C's

Capacity: America needs quantity, quality, and diversity in its engineering workforce, including homegrown talent to fill critical national security roles.

Capability: America needs engineers versed and skilled in multiple disciplines. Emerging, multi-disciplinary technology fields needed to solve grand challenges—in health, sustainability, climate change, etc.—are not often core competencies U.S. education and training institutions embed in the workforce.

Competitiveness: The engineering enterprise has underpinned America's productivity and prosperity. The engineering community must now work harder, more creatively and together—alongside political leaders and media—to make the case for the role engineering must play to fuel the U.S. economy, bolster national security and advance U.S. leadership.

“The competitiveness of the United States is reliant on a skilled workforce of engineers and innovators who have the education and experience to solve our nation’s greatest challenges. Throughout history, our nation has turned to superior engineering and technology to deliver pre-eminence and prosperity.”

Dr. Ray O. Johnson

Senior Vice President and Chief Technology Officer
Lockheed Martin Corporation

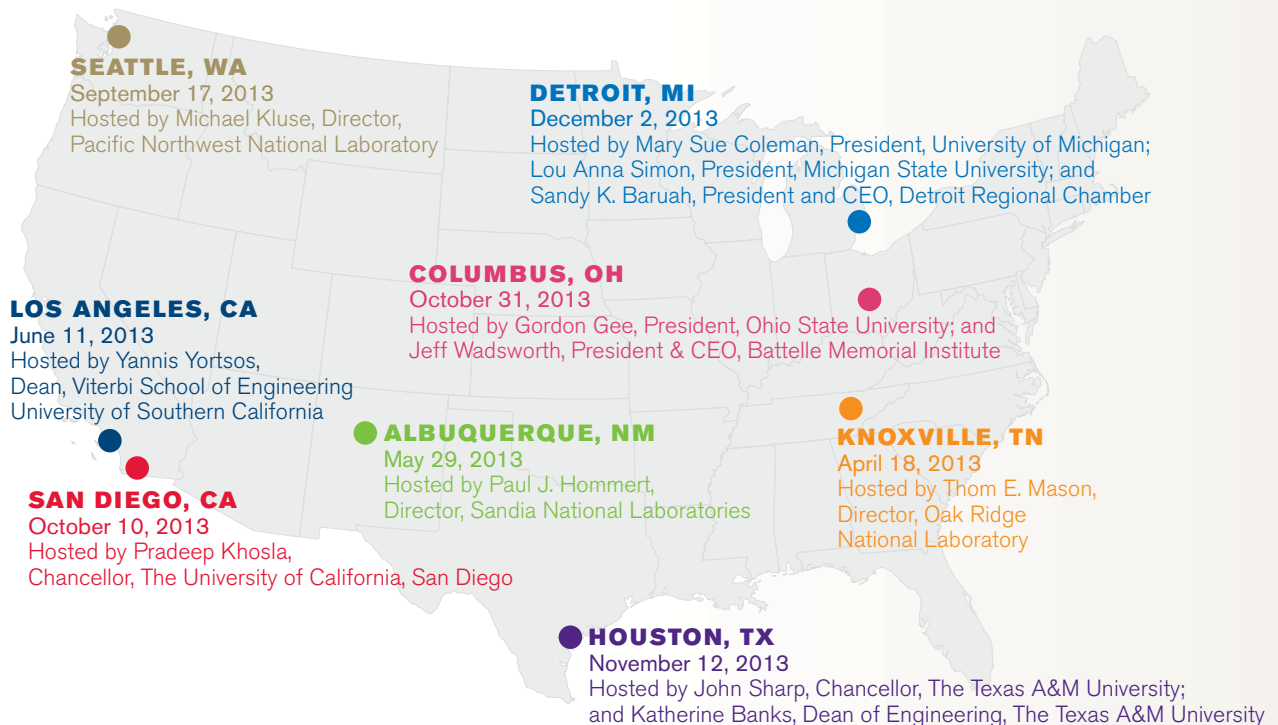
Momentum-building, regional dialogues across the United States—tapping the engagement and expertise of leaders from industry, academia and government—will be the platforms for solution generation and the creation of a community of action.

In September 2012, the Council, Lockheed Martin Corporation and the NAE piloted the NEF regional dialogue series with an event in New York that was co-hosted by Dinesh Verma, Dean and Professor, School of Systems and Enterprises, and Executive Director, Systems Engineering Research Center, The Stevens Institute of Technology.

2013 Outlook

Going forward in 2013, the Council and the Lockheed Martin Corporation will host additional regional dialogues to shape the NEF agenda and build a community of action, leading to a cornerstone, NEF national event in Washington, D.C., in 2014.

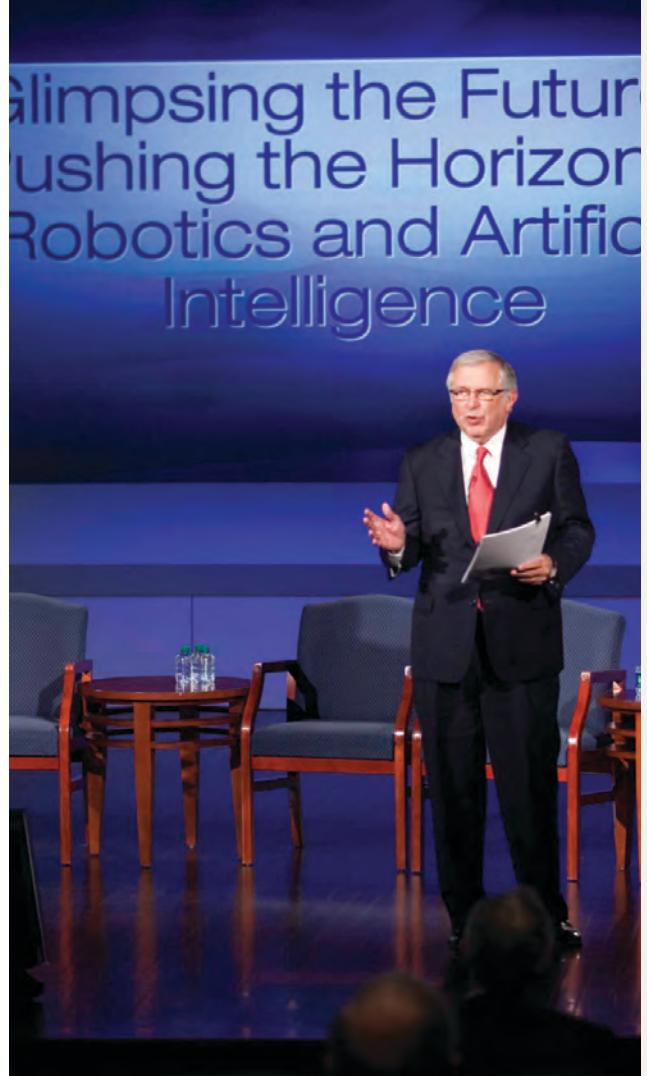
2013 NEF Regional Dialogues



In addition, dialogues have been confirmed or are in the process of being confirmed in key cities across the country, such as Chicago, Philadelphia, Raleigh-Durham, San Francisco and Washington, D.C.

A Network of American Leaders





OPPOSITE PAGE

Top left: William H. Bohnett, President, Whitecap Investments, LLC; the Honorable Bart Gordon, Partner, K & L Gates LLP, and Distinguished Fellow, Council on Competitiveness; and Allen L. Sessoms, former President, University of the District of Columbia, attend the 2012 Chairman's Dinner.

Top right: The Honorable Steny H. Hoyer, U.S. Rep. (Md.) and House Democratic Whip, speaks to attendees at the 2013 Chairman's Dinner.

Center: The Honorable Rebecca M. Blank, Acting Secretary, U.S. Department Commerce, speaks to Council members during the 2012 Executive Committee Meeting.

Bottom left: The Honorable Gene B. Sperling, Director of the National Economic Council and Assistant to the President for Economic Policy, speaks to Council members during the 2012 Executive Committee Meeting. Also pictured: Larry Weber, Chairman, W2 Group, Inc.

Bottom right: John E. McGlade, Chairman, President and CEO, Air Products, and Terrence "Terry" Urbanek, International Representative, United Association of Plumbers and Pipefitters, attend the 2012 Executive Committee Meeting.

THIS PAGE

Top left: The Honorable Lindsey Graham, U.S. Senator (SC), gives a Capitol Hill perspective to the Council's Executive Committee during the 2013 annual meeting. Also pictured: Harris Pastides, President, University of South Carolina.

Top right: Charles W. Steger, President, Virginia Polytechnic University, at the 2012 National Competitiveness Forum (NCF).

Bottom right: Lou Anna K. Simon, President, Michigan State University, discusses energy and competitiveness at the 2012 Executive Committee Meeting. Also pictured: Mayo A. Shattuck III, Executive Chairman, Exelon Corporation; and Omkaram Nalamasu, Chief Technology Officer, Applied Materials, Inc.



Compete: Technology

Council Sets Agenda for Nation's Next-Generation Innovation Strategy

Technology Leadership & Strategy Initiative

Entering its fifth year, the Technology Leadership & Strategy Initiative (TLSI) continues to make the business case for strategic, prioritized investments in the research, talent and infrastructure necessary for tech-based innovation in an era of endless frontiers but limited resources. In 2012, the TLSI focused on reforming the American innovation system for a new century of leadership, and understanding and optimizing it for new collaboration dynamics at home and around the world.

The TLSI convenes nearly 50 chief technology officers from America's premier companies and their peers from top research universities and national laboratories. The initiative co-chairs are Klaus Hoehn, Vice President of Advanced Technology and Engineering, Deere & Company; Dr. Ray O. Johnson, Senior Vice President and Chief Technology Officer, Lockheed Martin Corporation; and Mark Little, Senior Vice President and Chief Technology Officer, General Electric Company.

The TLSI strives to enable more productive American research partnerships and to preserve the nation's technology leadership—which has been at the core of the nation's productivity revival during the past quarter century. An invigorated innovation enterprise creates new jobs and firms, drives economic growth, and is essential to solving some of America's greatest challenges in areas as diverse as health care, energy and security.

2012 in Review

TLSI Dialogue 7, "Adapt: Reforming the American Innovation System for a New Century of Leadership," took place in June 2012, building on the TLSI's accomplishments over the preceding three years leading to:

- Patent, immigration and export control reform;
- New initiatives to solve technology grand challenges; and
- New commercialization mechanism for the national laboratories, enacted by the U.S. Department of Energy.

The Dialogue featured contributions from key administration officials—the Honorable Zachary J. Lemnios, former Assistant Secretary of Defense for Research and Engineering, U.S. Department of Defense, and Nish Acharya, Director, Office of Innovation & Entrepreneurship and Senior Advisor to the Secretary of Commerce, U.S. Department of Commerce—as well as leading innovator and energy thought leader Amory B. Lovins, Co-Founder, Chairman and Chief Scientist, Rocky Mountain Institute (RMI).

Lovins opened his remarks by explaining the basis for Reinventing Fire—a RMI study focused on three strategic technology platforms to drive disruptive innovation and revolutionary change in the U.S. energy system leading to an economy 2.6 times larger and energy expenditures five trillion dollars less than today: (1) the integrative design of buildings, (2) ultra-lighting vehicles and "everything that moves" and (3) replacing the present electricity system with an inter-grid that integrates local microgrids with the larger grid.



Chad Evans, Executive Vice President, Council on Competitiveness; Mark Little, Senior Vice President and Chief Technology Officer, General Electric Company; Dr. Ray O. Johnson, Senior Vice President and Chief Technology Officer, Lockheed Martin Corporation; the Honorable Zachary J. Lemnios, former Assistant Secretary of Defense for Research & Engineering, U.S. Department of Defense; the Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness; and Klaus Hoehn, Vice President, Advanced Technology and Engineering, Deere & Company.

Following Lovins, Nish Acharya centered his remarks on thoughts about how America's innovation stakeholders in the private sector might most fruitfully interact with the federal government. "We have a vast country with different types of institutions that work with the federal government, and they are all in different places on the continuum, in terms of their innovation and entrepreneurship work and we need to develop policies that reflect that," he said.

Lemnios rounded out the Dialogue with a discussion on how best to spur early stage innovation—"when and where do you sustain it, when do you declare it dead, how do you transition it to a product, and what does that value chain look like?"

Lemnios also emphasized:

- Innovation includes not only technology, but also a technology's application and "how it actually provides value to a customer that never knew they could use this technology—something the Department of Defense has been doing for many years."
- A major interest of the Department of Defense is "coupling DoD's lab talent and enterprise with the talent and enterprise I see in the private sector and academia."

Defense Research & Engineering Priorities

Source: Department of Defense

- Defense Strategic Guidance
- Autonomy
- Counter Weapons of Mass Destruction
- Cyber Sciences
- Data-to-Decisions
- Electronic Warfare
- Engineered Resilient Systems
- Human Systems

He reviewed three strategies the DoD pursuing to achieve this goal:

- **Focusing more basic research and early-stage innovation on defense priorities.**
- **Leveraging the Department of Defense's patent portfolio.** Lemnios observed that the Defense laboratory enterprise generates around 800 patent disclosures a year—almost two patent awards per day.
- **Publishing priorities on the Web.** DoD's portal (www.defenseinnovationmarketplace.mil) also allows the Department to hear from industry about their long-term priorities and projects.

In closing, Lemnios reinforced a major theme that has emerged within the TLSI over the past three years—that over the next five to ten years the global innovation environment will change significantly (with the emergence of innovation centers such as Skolkovo in Russia and others in China), and that U.S. federal laboratories, too, will transform over the next five to ten years. "It is really about driving connections between ideas that do not necessarily evolve in one physical center. Industry has that to some degree and our labs are moving in that direction."



At left: Michael McQuade, Senior Vice President, Science and Technology, United Technologies Corporation; Steven Ashby, Deputy Director for Science and Technology, Pacific Northwest National Laboratory; and Andrew Garman, Managing Partner, NewVenture Partners, LLC.

At right: Dr. Ray O. Johnson, Senior Vice President and Chief Technology Officer, Lockheed Martin Corporation; the Honorable David Danielson, Assistant Secretary for Energy Efficiency and Renewable Energy, U.S. Department of Energy; the Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness; Mark Little, Senior Vice President and Chief Technology Officer, General Electric Company; and Chad Evans, Executive Vice President, Council on Competitiveness.

TLSI Dialogue 8, “Integrate: New Collaboration Dynamics at Home and Abroad,”

took place in October 2012 at the new Virginia Tech Research Center in Arlington, VA, hosted by Dr. Donald Leo, Vice President and Executive Director, National Capital Region Operations, Virginia Polytechnic Institute and State University.

The Dialogue highlighted a range of topics illustrating the growing importance of collaboration, partnership and co-creation in the 21st century innovation model. Key contributors included: the Honorable David Danielson, Assistant Secretary for Energy Efficiency and Renewable Energy, U.S. Department of Energy; Erik Straser, General Partner, Mohr Davidow Ventures; and Dr. Reginald Brothers, Deputy Assistant Secretary of Defense for Research, U.S. Department of Defense.

Danielson shared some of EERE’s new and emerging priorities to seize the clean energy manufacturing opportunity in three key sectors: (1) transportation, including vehicle and fuel technologies; (2) renewable power on the grid, including solar, wind, geothermal, water and wave; and (3) end-use energy efficiency, including residential, commercial and industrial buildings.

Danielson described the Council as “a perfect platform to engage the private sector, the labs, the universities, and nonprofits.”

He also previewed elements of EERE’s Clean Energy Manufacturing Initiative—the clean energy and energy efficiency component of the President’s Advanced Manufacturing Partnership. The initiative will focus on both the development of next generation products and systems like solar modules and batteries, and on improving the energy efficiency of all industries to “lower their energy cost and make them more competitive.”

He concluded by posing a few questions to the TLSI participants. “What are the really high-impact things that DOE should consider to help bolster U.S. competitiveness in clean energy manufacturing and advanced manufacturing generally? What are the gaps and opportunities? How can we create a competitive environment where it is a rational decision to put a factory in the United States?”

TLSI members engaged in a productive conversation with the Assistant Secretary. Erik Straser, reflecting a general consensus, responded to Danielson by identifying two fundamental issues. “One is getting over ‘the valley of death,’ which is



Left: Dr. Ray O. Johnson, Senior Vice President and Chief Technology Officer, Lockheed Martin Corporation, and the Honorable Zachary J. Lemnios, former Assistant Secretary of Defense for Research & Engineering, U.S. Department of Defense.

Right: Tilak Agerwala, Vice President, Systems, IBM Research; the Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness; and Dona Crawford, Associate Director for Computation, Lawrence Livermore National Laboratory.

how we build the first commercial viable production facility. What are the mechanics and financial instruments that make that happen?"

Straser ended by noting a second issue—the “plant No. 2 problem.” Straser expanded on this issue by sharing that investors often want to locate the first manufacturing facility very close to where research and development is carried out, “because it makes sense from a learning cycle perspective because the first plant is really a very large pilot line where the firm and its investors are still learning its own technology and processes.” But as manufacturers in the United States approach a decision to build a second plant, the decision facing a board must be seen through a market and labor lens: where is the best place to put this plant from a market and labor perspective? In this calculation over the past couple of decades, the United States has not fared well.

Several members of TLSI suggested that a set of commercial strategies oriented around young manufacturers is needed to figure out how to keep plant number two in the United States. Policies and incentives that would tip decisions towards the United States would be helpful.

Additional strategies suggested to reduce the capital expenditures required for small or start-up producers in the United States include creating: (1) a national inventory of manufacturing assets that could be used on a tolling basis; and (2) some form of public-private partnership to identify dormant, idle or underutilized manufacturing assets within large companies that could be made available for new vendors or emergent manufacturers on terms beneficial to both parties.

2013 Outlook

The Council will host TLSI Dialogues 9 and 10 on June 1st and October 4th, continuing the distinctive, progressive, evolving CTO conversation it launched in 2009. Particular attention this year will focus on understanding more deeply the globalization of innovation capacity—with Dialogue 9 including, for the first time, a parallel peer group of chief technology officers from Brazil.

High Performance Computing

2012 in Review

The High Performance Computing Advisory Committee (HPCAC) made significant progress in 2012 under the leadership of Academic Co-Chair Robert Buhrman, Senior Vice Provost for Research, Cornell University; National Laboratory Co-Chair Dona Crawford, Associate Director for Computation, Lawrence Livermore National Laboratory; and Industry Co-Chair J. Michael McQuade, Senior Vice President of Science and Technology, United Technologies Corporation.

The Council, under the direction of its Chief Technologist in Residence, Walt Kirchner, hosted a full Committee meeting in Washington, D.C., on June 27th, with robust discussion on strategies to further U.S. progress towards Exascale; global HPC developments; expanding access to leading-edge HPC systems; applications modeling and simulation, and removing obstacles to full exploitation of available HPC resources; and catalyzing and enhancing HPC-centric public-private partnerships, consortia, and collaborations.

In early December, a working group met at Argonne National Laboratory to further refine the Committee's vision and mission as a framework for HPCAC activity going forward. Four core areas of focus were identified for HPCAC mission-related activity: talent, software, HPC ecosystem engagement, and workflow paradigms.

2013 Outlook

2013 is proving to be a productive and exciting year for the HPCAC. On March 14, HPCAC member Bradford Spiers, Senior Vice President of Technology Infrastructure, Bank of America, hosted a full committee meeting at the company's New York offices. The meeting worked to refine the Committee's goals and corresponding action agendas within the four previously identified focus areas, as well as to define and implement growth strategies for HPCAC membership in sectors of vital importance to the Committee's overarching goals.

Another item on the agenda for 2013, is the first year of implementation for a three-year, \$914K U.S. Department of Energy grant awarded to the Council in November 2012, to study the projected impact

HPCAC Vision

Increased national competitiveness through transformational use of Advanced Computing

HPCAC Mission

Elevating industry, academia, and government collaboration to accelerate manufacturing and commercial innovation through Advanced Computing ("HPC") by:

- Identifying opportunities and barriers, and proposing actions to enhance deployment of advanced computing throughout the delivery chain
- Communicating successes, threats, and opportunities
- Determining priorities and encouraging investment leverage in order to integrate HPC into the small and medium-sized manufacturing enterprise (SME) community and within a broader user community
- Advocating for sustained leadership in advanced computing



At left: Mark Little, Senior Vice President and Chief Technology Officer, General Electric Company; and Michael McQuade, Senior Vice President, Science and Technology, United Technologies Corporation. **Pictured in the background:** Elizabeth Wayman, Director, Clean Energy Manufacturing Initiative, Office of Energy Efficiency and Renewable Energy, Department of Energy.

At right: Donna Crawford, Associate Director for Computation Lawrence, Livermore National Laboratory.

and effects, and drivers and benefits of extreme computing, as it pertains to U.S. industrial and commercial competitiveness in the global economy.

The project will include the development of findings and recommendations on a broad range of HPC policy implementation issues. By tapping into the Council's convener of key players from industry, universities, labor, and the national laboratories, and through frequent and focused meetings of its HPCAC, the Council will seek to gain insights from its members and the broader community on how such capabilities can potentially transform industries and commerce to drive U.S. productivity, economic growth, and prosperity.

The Committee in 2013 will also begin to conduct a series of dialogues that target cross-cutting and technology specific applications of HPC to inform its efforts. The HPCAC and overarching HPC Initiative will seek to inform the Council's recommendations on future policies, practices, and public-private partnerships to fully capitalize and exploit U.S. leadership in high-end, extreme computing.

Congratulations are in order for Steven Koonin, Professor of Information, Operations and Management Sciences, New York University Stern School of Business and Director of the University's Center for Urban Science and Progress. Earlier this year, Koonin joined the HPCAC Committee as the new Academic Co-Chair.

National Digital Engineering and Manufacturing Consortium

2012 in Review

The National Digital Engineering and Manufacturing Consortium (NDEMC) has capitalized on the promise of the Midwest Pilot and has increased its diversified portfolio of small and medium-sized manufacturers (SMEs) to 25 project cases.

Over the past year, NDEMC—a public-private partnership—created to promote and facilitate the adoption of Modeling Simulation and Analysis (MS&A) and High Performance Computing (HPC) resources for Small Manufacturing Enterprises

In 2012 at the SC12 Supercomputing Conference in Salt Lake City, HPCwire, a reliable source for advanced computing news coverage, honored NDEMC for its role in facilitating HPC resources to small and medium-sized manufacturing enterprises (SMEs).



Front row: Dave Hudak, Program Director for Cyber Infrastructure and Software Development, Ohio Supercomputer Center; Thom Dunning, NCSA Director; Tom Tabor, CEO and Founder Tabor Communications; Cynthia R. McIntyre, Senior Vice President, Council on Competitiveness; Aaron Malofsky, Program Manager, Council on Competitiveness; and Ashok K. Krishnamurthy, former Interim Co-Executive Director, Ohio Supercomputer Center.

Back row: Merle Giles, Director of NCSA Business and Economic Development; Tom Lange, Director of Modeling & Simulation Corporate R&D at Procter & Gamble; George B. Adams III, Director, ManufacturingHUB.org at Purdue University; Dennis Thompson Technical Project Manager for NDEMC and Senior Vice President for the SCRA; Dwayne Sattler, Associate Vice President for Policy, Ohio Supercomputer Center; David Martin, Special Project Manager, Argonne Leadership Computer Facility; Alan Chalker, Program Director, Ohio Supercomputer Center; and Darin Rosenboom, Rosenboom Machine & Tool.

(SMEs) and U.S. manufacturing supply chains; has improved its visibility and brand reputation in the advanced manufacturing sector for offering exclusive access to affordable HPC resources to emerging enterprises.

NDEMC's long-term vision is to rollout a national platform that provides small U.S. manufacturers advanced computing tools to become more competitive in the global economy; therefore, helping to retain and grow a strong manufacturing base throughout the country.

The program is a non-profit partner in the National Additive Manufacturing Innovation Institute (NAMII). NAMII is based in Youngstown, Ohio, as the pilot institute under the National Network

for Manufacturing Innovation (NNMI) centers. NDEMC is a staunch supporter of developing these new manufacturing centers to increase domestic competitiveness.

In the proposed National Defense Authorization Act for 2013, the Senate Armed Services Committee recognized NDEMC for its contributions to providing the private sector with modeling, simulation and analytics. This honor reinforces the message that HPC resources are critical to the national defense program.

NDEMC recognizes the accomplishments of specific SMEs that have demonstrated both business- and technology-related impact from integrating advanced computing resources into their product innovation process.

NDMEC's success stories reinforce the value proposition of offering the SME community unparalleled and seamless access to modeling, simulation and analytics to improve their business operations.

Success Stories

Indiana's **Jeco Plastic Products, LLC*** re-designed its plastic pallet to service a large foreign client's needs. Having implemented the advanced computing resources from both the Ohio Supercomputer Center (OSC) and Purdue's expert staff, the Indiana-based company improved its pallet design, earned more lucrative client contracts, improved its sales revenue and created 15 additional jobs and a capital investment of more than \$500,000.

Rosenboom Machine & Tool, an Iowa-based manufacturer of hydraulic cylinders, utilized the MS&A analytics from Deere & Company and training from the National Center for Supercomputing Applications (NCSA) to help with the various physical and flow simulation tests to its product line. From an industrial impact perspective, the design process timeline was reduced drastically for Rosenboom cylinders. By employing advanced MS&A tools, the team can now create online virtual product designs; therefore, greatly reducing its cylinder product's time-to-market.

Ohio-based **AltaSim Technologies, LLC**, is a B2B company that provides business services to help its customers develop innovative and cost effective solutions to improve their products and process capabilities. By utilizing OSC's HPC facilities, AltaSim leveraged advanced HPC resources to evaluate the thermal behavior of new designs of printed circuit boards for usage in the process control industry. Taking advantage of these advanced compute resources, the SME decreased its simulation time, which allowed the company to evaluate different designs and make recommendations for the improvement of product performance for its industrial-based clientele.

2013 Outlook

Based on the success of the Midwest Pilot, NDMEC is hoping to scale its program nationally-potentially including the Southeast portion of the country. After significant preliminary research, the

Council Senior Vice President, Dr. Cynthia R. McIntyre, was honored with the *HPCwire* People to Watch 2013 Award. *HPCwire's* prestigious annual list honors the best and brightest minds in HPC, and recognized McIntyre for her visionary leadership with the NDEMC program.



program is looking into expanding its SME portfolio of projects to include industries such as aerospace and commercial manufacturing.

The PPP also recognizes the burgeoning influence of cloud-based computing to facilitate HPC resources to the SME community. NDEMC has a keen interest in this space and will be actively exploring various cloud-based computing opportunities in the foreseeable future.

NDEMC remains committed to improving its program's services by leveraging its solution partners, university labs, prestigious OEMs and other collaborators to offer unparalleled access to advanced computing resources to SMEs.



Walt Kirchner, Chief Technologist in Residence, Council on Competitiveness.

* The full Jeco case study is available at ndemc.org/index.php/2012/05/jeco-plastics-project-with-ndemc/.

Energy, Food and Water

2012 in Review

The Council continues to expand its portfolio related to global grand challenges. Global population and economic growth are boosting demand for an increasingly interdependent set of resources—energy, food and water—and are generating a series of new global challenges, as well as potential opportunities—from new products and services, to expanded industrial capacity and job creation.

Believing the United States is primed to address these challenges, the Council convened on October 28-30, 2012, at the University of California, Davis the **Energy-Food-Water Dialogue: Competitiveness Challenges and Opportunities**.

The dialogue—co-chaired by Linda Katehi, Chancellor, University of California, Davis; Harold Schmitz, Chief Science Officer, Mars, Inc., and Executive Director, Mars Center for Cocoa Health Science; and the Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness—featured keynote presentations by Karen Ross, Secretary, the California Department of Food and Agriculture; and Steve Wozniak, Co-Founder, Apple Inc.—brought together more than 50 senior leaders from industry, academia and labor.

The focus of the dialogue was to lay the groundwork for a potential new Council initiative and roadmap to position the U.S. to transform resource

“In the food and agriculture sector, innovation often is thought to equal research and development and that is disastrous. Innovation actually can, of course, only happen when all the players and all the sectors are sitting around the table. As we go forward in this effort, all of the different disciplines and sectors need to sit around the table, so that innovation can happen.”

Harold Schmitz

Chief Science Office, Mars Inc., and Executive Director, Mars Center for Cocoa Health Science

scarcity into abundance by adopting strategies that consider how resources shape profitability, growth opportunities and technological discontinuities.

The dialogue centered on four major conversations. The first—led by Frank Loge, Associate Director, Energy Efficiency Center, Director, Center of Water-Energy Efficiency, and Professor, Civil and Environmental Engineering, University of California, Davis; Tomás Díaz de la Rubia, Director, Deloitte Consulting; and Martha Krebs, Executive Director,



Energy Institute, University of California, Davis—focused on the challenges the energy-food-water nexus poses overall to U.S. competitiveness.

Participants emphasized the need to leverage national and strategic assets—such as the university system, industrial research complex, and national laboratories—to develop an actionable national strategy and pool resources around this issue.

The second roundtable conversation—led by Subhash Mahajan, Distinguished Professor of Chemical Engineering and Materials Sciences, and Special Advisor to the Chancellor, University of California, Davis; Ronnie Green, Vice President and Vice Chancellor of Agriculture and Natural Resources, University of Nebraska; and Dr. Cindy Stewart—Senior Director of Advanced Research, Corporation R&D, PepsiCo Inc.—centered directly on the innovation barriers and opportunities in this space, exploring Dialogue participants raised for discussion several promising examples of existing and developing innovation pathways/technologies—as well as examples of organizational models to advance and deploy most effectively.

The third roundtable discussion—led by dialogue co-chair Schmitz; Gary Dirks, Director, LightWorks, Arizona State University; and Anthony Eggert, Executive Director, Policy Institute for Energy, Environment and the Economy, University of California, Davis—emphasized the important need to create the right environment and “toolkit” to promote development of integrated policies and investment strategies in the energy-food-water nexus.

OPPOSITE PAGE

Chad Evans, Executive Vice President, Council on Competitiveness; Tomás Díaz de la Rubia, Director, Deloitte Consulting; the Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness; Thomas Johnson, Associate Vice President and Chief of Strategic Initiatives, Webster University; Karen Ross, Secretary, California Department of Food and Agriculture; Robert Hutchinson, Managing Director, Research & Collaboration, Rocky Mountain Institute; Cindy Stewart, Senior Director of Advanced Research, Corporate R&D, PepsiCo Inc.; Robin Graham, Deputy Associate Laboratory Director, Computing, Environment, and Life Sciences, Argonne National Laboratory; Douglas Rotman, Program Director for Energy and Environmental Security Program, Lawrence Livermore National Laboratory; Roger B. Boulton, Professor and Chemical Engineer and Stephen Sinclair Scott Endowed Chair in Enology Department of Viticulture and Enology Agricultural and Environmental Sciences, University of California, Davis; and Michael McCarthy, Professor and Chair, Food Science and Technology, University of California, Davis.

“The work here is important because it can lead to many policies that are appropriate today and in the future for the United States—not just for the State of California. There is also tremendous opportunity here in the United States to develop an agricultural-based economy that can make the nation very competitive at a time when food, energy and water are so critical.”

Linda Katehi

Chancellor

University of California, Davis

The dialogue’s final conversation—led by Paul Dodd, Associate Vice Chancellor for Interdisciplinary Research and Strategic Initiatives, University of California, Davis; Douglas Rotman, Program Director for Energy and Environmental Security Program, Lawrence Livermore National Laboratory; Robin Graham, Deputy Associate Laboratory Director, Computing, Environment and Life Sciences, Argonne National Laboratory; and Dr. Harris Lewin, Vice Chancellor for Research, University of California, Davis—addressed how best to build effective public-private partnerships to seize competitive advantage in this emerging area.

2013 Outlook

As a follow-on to the 2012 dialogue, the Council is releasing in a 2013 a report, *Energy-Food-Water Dialogue: Competitiveness Challenges & Opportunities*, to inform policymakers on this critical issue.

In addition, the report will underpin ongoing efforts at the Council in which the issues raised in the Dialogue are critical—including the American Energy & Manufacturing Competitiveness Partnership, the Technology Leadership & Strategy Initiative, the National Engineering Forum, the National Competitiveness Forum, and the 3rd U.S.-Brazil CEO Innovation Summit.

Compete: Global

3rd U.S.-Brazil Innovation Summit

2013 Outlook

The Council—in a partnership with the Brazilian Competitiveness Movement (MBC), the Brazilian Agency for Industrial Development (ABDI), the Brazilian National Economic Development Bank (BNDES), and the Brazilian National Confederation of Industry (CNI)—will host the 3rd U.S.-Brazil Innovation Summit in Rio de Janeiro, September 11-12, 2013.

The Summit—chaired by Samuel R. Allen, President and CEO of Deere & Company; the Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness; Luciano Coutinho, President of the Brazilian National Development Bank (BNDES); Mauro Borges Lemos, President of the Brazilian Agency for Industrial Development (ABDI); and Erik Camarano, CEO of the Brazilian Competitiveness Movement (MBC)—will bring together several hundred of the most senior leaders from industry, academia and the public sector from across the Western Hemisphere's two largest economies to strengthen and grow the U.S.-Brazil innovation partnership—a goal the Council has been pursuing since the 2007 1st and 2010 2nd U.S.-Brazil Innovation Summits.

This 3rd Innovation Summit will deepen the action agenda between the United States and Brazil—paving the path to the deployment of concrete, bi-national and global projects to advance innovation-based competitiveness.

Summit participants will engage in a series of leadership dialogues, keynotes and special presentations to create momentum and generate a renewed “Call to Action” for 2013 and beyond,



From left, seated third and fourth: Antônio Raupp, Minister of Science and Technology of Brazil; and the Honorable John Holdren, Science Advisor to the President of the United States of America, and Director of the Office of Science and Technology Policy.

focusing on a core set of innovation grand challenges and opportunities at the heart of long-term productivity and prosperity:

- The future of health innovation—from supporting cutting-edge biomedical research, to assuring delivery of world-class healthcare.
- The transformations in the global energy ecosystem—from developing existing and renewable energy sources, to leveraging these resources for future manufacturing competitiveness.
- The creative use of information and communications technologies to underpin future innovation across all sectors of member economies.
- The understanding and sustainable use of an increasingly interdependent set of resources—energy, food and water—to expand industrial capacity and create jobs.

Global Federation of Competitiveness Councils (GFCC)

2012 in Review

The Council on Competitiveness continues to leverage its strong presence in the international community by broadening its understanding of how key U.S. trading partners and markets address challenges to their own competitiveness. Through its role as the founding board member and secretariat of the Global Federation of Competitiveness Councils (GFCC), the Council maintains its clear connection to issues affecting national competitiveness in countries around the world, while deepening connections and forging new partnerships for its members.

In May 2012, the Council collaborated with its GFCC partners and led the GFCC Metrics Scorecard initiative. The GFCC members and their economists met in Dublin for a two-day meeting hosted by the National Competitiveness Council of Ireland to define the structure of the Scorecard. Since the meeting, the Council has been collaborating with its partners in an online forum to further enhance the visibility of this initiative.

On November 27-29, 2012, the GFCC co-hosted along with the 2012 Vice-Chair, the Emirates Competitiveness Council (ECC), the

Competitiveness Summit and 2012 Annual Meeting in Dubai. Also in 2012, the GFCC entered into formal partnerships with the United Nations Industrial Development Organization and the Science & Technology in Society Forum.

These events brought together competitiveness councils from around the globe, c-suite leaders from U.S. and global private sectors, senior government officials from member countries, and other stakeholders to discuss competitiveness and related issues as a pan-global imperative.

The event presented several Council members with unique business networking opportunities with public and private sector representatives from 20 countries. At the Competitiveness Forum, the GFCC released the 2012 Global Competitiveness Principles, which reflect the GFCC's united voice on recommendations every country should implement to enhance national competitiveness and increase the standard of living of all people.

The meeting also marked the release of *Innovation Capacity: Best Practices in Competitiveness Strategy*, the second in the series of compendium reports on successful initiatives and case studies that have provoked substantive changes through which member countries have sharpened their competitive edge and increased their innovation capacities.



Dr. Ray O. Johnson, Senior Vice President and Chief Technology Officer, Lockheed Martin Corporation; Seif Fahmy, Chairman Egyptian National Competitiveness Council, and Chairman, Almona; Erik Camarano, CEO, Movimento Brasil Competitivo; H.E. Ahmed Saeed Al-Calily, Director General, Abu Dhabi Technology Development Committee; H.R.H. Prince Saud K. Al Faisal, Deputy Governor for Investment Affairs, and President and Board Member, SAGIA-National Competitiveness Center; and Harris Pastides, President, University of South Carolina.



The broad GFCC membership network now includes competitiveness councils in 35 countries across the globe. The GFCC is composed of seven board members, 11 general members and a network of more than 20 national and regional organizations from countries whose markets are of strategic importance to Council members.

2013 Outlook

At the 2012 GFCC Annual Meeting, members set out an ambitious agenda for 2013, which includes specific initiatives and strategic partnerships to advance global competitiveness. During this year, the organization will:

- Commit to helping expand the GFCC footprint around the world by identifying and recruiting organizations within existing members' regions and networks.
- Further integrate the *Global Competitiveness Principles* into the national agendas of the GFCC members and global thought leadership.
- Build upon the tremendous work of the GFCC Metrics Scorecard initiative with a working meeting in Moscow, Russia in June 2013, hosted by OPORA Russia and the Eurasia Competitiveness Institute and potential deliverables to be presented at the 2013 Annual Meeting in November.

The 2013 Annual Meeting

The annual meeting of the GFCC is set to take place in Seoul, Korea, in November 2013. For more information about the GFCC, please visit www.thegfcc.org.





OPPOSITE PAGE

Top: H.E. Abdullah Naseer Lootah, Secretary General, Emirates Competitiveness Council; H.E. Sheikha Reem Al-Hasimy, Minister of State and Chairwoman of the Emirates Competitiveness Council; H.H. Sheik Mohammed bin Rashid Al Maktoum, Ruler of the Emirate of Dubai and Prime Minister of the UAE; Charles O. Holliday, Jr., Chairman, Bank of America, and Chairman, GFCC; and the Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness, and President, GFCC.

Center: Charles O. Holliday, Jr., Chairman, Bank of America, and Chairman, GFCC; the Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness, and President, GFCC; and Bill Bates, Executive Vice President, Council on Competitiveness, and Executive Director, GFCC.

Bottom: H.E. Ms. Noura Al Kaabi, CEO, twofour54, and UAE Parliamentarian; Dr. Behjat Al-Yousef, Executive Director, Zayed University; Ms. Caroline Daniels, Chairman, General Aviation Manufacturers Association; and the Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness, and President, GFCC.

THIS PAGE

Top left: The GFCC Board of Directors meets during the Competitiveness Forum and 2012 Annual Meeting in Dubai, November 27-29, 2012.

Top right: Jorge Puente, M.D., President, Asia Pacific Canada Region, Oncology Business Unit, Pfizer Inc.; the Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness, and President, GFCC; and Klaus G. Hoehn, Vice President, Advanced Technology & Engineering, Deere & Company.

Center left: H.E. Mohammed Omar Abdullah, Under Secretary, Abu Dhabi Department of Economic Development; H.E. Nasser Ahmed Alsowaidi, Chairman, Abu Dhabi Department of Economic Development; and Charles O. Holliday, Jr., Chairman, Bank of America, and Chairman, GFCC.

Center right: H.R.H. Prince Saud K. Al Faisal, Deputy Governor for Investment Affairs, Saudi Arabian General Investment Authority (SAGIA) and President and Board Member, SAGIA-National Competitiveness Center; H.E. Abdulla Nasser Lootah, Secretary General, Emirates Competitiveness Council; and H.E. Tae Shin Kwon, former Vice Chairman, Korea Presidential Council on National Competitiveness.

Compete: Benchmarking

The Council continues to innovate its flagship publication, “The Competitiveness Index”

Entering its third year, the Economic Advisory Committee (EAC) focuses on re-defining and re-shaping the Council’s overall analytical approach to understanding the key drivers of competitiveness in the 21st century—as well as providing insight and expertise, weighing in to support several Council initiatives.

The EAC is a forum of nearly 40 leading economists across industry, academia, labor, non-governmental organizations and think tanks and is chaired by Gene Huang, chief economist and vice president at FedEx Corporation.

“Ultimately, our goal here is to provide guidance to the country to revive and accelerate our growth potential.”

Gene Huang

Chief Economist and Vice President
FedEx Corporation

2012 in Review

The Economic Advisory Committee held its second Dialogue in Washington, D.C. in April 2012 focusing on the development and execution of the next *Competitiveness Index*—the Council’s flagship publication and calling card; exploring new competitiveness drivers—such as imagination and creativity; and the Council’s involvement in a new multilateral global competitiveness benchmarking effort.

Key contributors to the conversation included: Scott Noppe-Brandon, former Executive Director of the Lincoln Center Institute; Chad Evans, Executive Vice President of the Council on Competitiveness; Roberto Alvarez, International Affairs Manager of the Brazilian Agency for Industrial Development; and the Honorable Janice Eberly, Assistant Secretary for Economic Policy, United States Treasury Department.

In a discussion led by Huang and Evans, participants discussed a proposed, new framework for the next *Competitiveness Index* and the

selection of relevant, meaningful metrics—with a focus on determining what metrics most effectively capture drivers of economic growth and that could be used to guide behavior.

Noppe-Brandon presented the effort he is leading to benchmark and measure imagination capacity—and to chart the impacts imagination can have on long-term productivity and prosperity.

Alvarez and Evans shared a concept they have been developing—with key colleagues from over 30 nations—to create a new, multilateral, competitiveness “scorecard” for the Global Federation of Competitiveness Councils (GFCC). This scorecard would focus particular attention on understanding the different development and growth trajectories of GFCC members—as well as center on metrics indicating future competitiveness trajectories and performance.

Eberly presented an overview of the U.S. economy from the perspective of the Treasury Department—highlighting key metrics the Department uses to understand the state of the economy.

Eberly also discussed key, short-term, economic challenges and priorities for the administration—such as improvements in infrastructure, housing, and the promotion of exports through free trade agreements and other policies.

2013 Outlook

The EAC will continue refinement of the underpinnings for the next *Competitiveness Index*—as well as participate in the development of a new, multilateral competitiveness scorecard as advisors to the GFCC.



The Honorable Janice Eberly, Assistant Secretary for Economic Policy, U.S. Treasury Department; Chad Evans, Executive Vice President, Council on Competitiveness; and Gene Huang, Chief Economist and Vice President, FedEx Corporation.

Compete: Policy Impact

Government Affairs

The Council not only creates policy recommendations, but then works to communicate these recommendations to policymakers in the administration, Congress and governors. Beyond individual meetings with both Senators and Representatives, in 2012, various Council members and staff testified at hearings in front of the U.S. House of Representatives.

2012 in Review

- In March 2012, James M. Phillips, Chairman and CEO, Nanomech, Inc., testified before the U.S. House of Representatives Committee on Appropriations Subcommittee on Commerce, Justice, Science and Related Agencies chaired by U.S. Rep. Frank Wolf of Virginia with Ranking Member U.S. Rep. Chaka Fattah of Pennsylvania. The subject of the hearing was on maintaining and restoring U.S. competitiveness and economic strength with particular focus on manufacturing.
- In May 2012, the Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness, testified before the U.S. House of Representatives Committee on Energy and Commerce Subcommittee on Commerce,

Manufacturing and Trade, chaired by U.S. Rep. Mary Bono-Mack of California and Ranking Member U.S. Rep. G.K. Butterfield of North Carolina. The hearing covered a bill introduced by U.S. Rep. Dan Lipinski titled “American Manufacturing Competitiveness Act of 2012.”

- In August 2012, Dr. Ray O. Johnson, Senior Vice President and Chief Technology Officer, Lockheed Martin Corporation, testified before the U.S. House of Representatives Committee on Science, Space and Technology Subcommittee on Research and Science Education at a hearing titled: “The Relationship Between Business and Research Universities: Collaborations Fueling American Innovation and Job Creation.”

Critical to any engagement with Congress is working with and educating staff on key issues of the Council. Often these are done through briefings, of which the Council sponsored two in 2012. These briefings lead to follow-up meetings, policy discussions and direct engagement with Senators, Representatives, and committee staff.

- In May 2012, the Council conducted a briefing in conjunction with the House Manufacturing Caucus co-chaired by U.S. Rep. Donald Manzullo of Illinois and U.S. Rep. Tim Ryan of Ohio. The Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness, moderated a panel with Pierre L. Gauthier, President and CEO, Alstom Canada Inc. and Alstom U.S. Inc.; Terrence “Terry” Urbanek, International Representative, United Association of Plumbers and Pipefitters; Charles W. Steger, President, Virginia Polytechnic and Institute and State University; and Thomas E. Mason, Director, Oak Ridge National Laboratory. The panel discussed the report MAKE: An American Manufacturing Movement.



- In June 2012, the Council collaborated with Deere & Company, GE Energy and Proctor & Gamble, in conjunction with the U.S. House of Representatives Research and Development Caucus, co-chaired by U.S. Rep. Judy Biggert of Illinois and U.S. Rep. Rush Holt of New Jersey, on a briefing titled: “The National Digital Engineering and Manufacturing Consortium (NDEMC): A Public-Private Partnership Supporting Small Manufacturers and Creating Jobs.” Dr. Cynthia McIntyre, Senior Vice President of the Council moderated a panel composed of Thomas Guevara, Deputy Assistant Secretary for Regional Affairs, U.S. Economic Development Administration; Alice Popescu-Gatlan, Director, John Deere Technology and Innovation Centers of North America, Deere & Company; Craig Carson, Chief Executive Officer, JECO Plastic Products; Paul Domagala, Manager, Scientific IT Services, Office of the CIO, Argonne National Laboratory; and Dr. Merle Giles, Associate Director, NCSA, University of Illinois at Urbana-Champaign.

2013 Outlook

Building on the relationships created or maintained in 2012, the Council will continue to engage with policy makers on the federal, state, and local level. With new Representatives and Senators settling into their new offices and positions, the Council will reach out to introduce the freshmen classes in both the House and Senate to the Council and its work.



Top: The Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness; Pierre L. Gauthier, President & CEO, Alstom Canada Inc. and Alstom US Inc.; Charles W. Steger, President, Virginia Polytechnic University; and Thomas E. Mason, Director, Oak Ridge National Laboratory.

Center: Dr. Ray O. Johnson, Senior Vice President and Chief Technology Officer, Lockheed Martin Corporation.

Similarly, the Council will continue outreach to new administration officials.

The Council will work with committee staff and caucuses in both the House and the Senate to host more staff briefings around Council programs. In addition, the Council stands ready to support the work of both the House and Senate committees with witness recommendations, policy ideas, and with paths forward to keep America competitive and Americans prosperous.

Courtesy of the U.S. House Committee on Science Space and Technology, 2012

The America Competes Awards



The Council hosted an America Competes Awards dinner in Chicago on March 19, 2013. The honorees were ITW, a global industrial manufacturer and supplier recognized for corporate leadership; and Jorge Ramirez, President of the Chicago Federation of Labor for public service. Frederick H. Waddell, Chairman and CEO of Northern Trust Corporation, chaired the dinner.

The Council established the America Competes Award for Corporate Leadership to recognize executives who look beyond the bottom line to ensure their firms are outstanding global citizens working to improve communities, the nation and the world. The Award for Public Service

recognizes a leader who works diligently to create a lasting impact on America's quality of life through public service and private sector outreach.

Dozens of sponsors make the America Competes Awards possible. Their generous support enables the Council to do the research, engage the experts, and bring its members together to develop and implement an agenda to set this country on a path of prosperity and economic growth.

The Council is planning two more Competes Awards dinners later this year in Atlanta and New York City.



OPPOSITE PAGE

William Lind Morrison, President and Chief Operating Officer, Northern Trust Corporation; the Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness; and Tim Gardner, Executive Vice President, Northern Trust Corporation.

THIS PAGE

Above: The Honorable Deborah L. Wince-Smith, President & CEO, Council on Competitiveness, with Mr. & Mrs. Jorge Ramirez and family.

At right: The Honorable Jesse White, Illinois Secretary of State; Susan Ralston, President, SBR Enterprises, LLC; and Bill Bates, Executive Vice President & Chief of Staff, Council on Competitiveness.



Spotlight on Council Staff

The Council is excited to announce some exciting changes going on within the staff. Bill Bates and Chad Evans, both long-time members of the Council's leadership team, have been elevated to executive vice presidents. As always, the Council continues to work across platforms and engage in numerous projects to drive U.S. Competitiveness—all of which would be impossible to achieve without a cohesive and hard working staff.

William (Bill) Bates

Executive Vice President



William Bates is Chief of Staff and Executive Vice President of the Council and Executive Director of the Global Federation of Competitiveness Councils (GFCC). As Chief of Staff and EVP, Bill provides policy analysis and strategic consultation to the President & CEO and serves as a member of the senior leadership team. He also coordinates special projects and provides direct supervision for the Council's outreach to government policymakers and the media.

As the Executive Director of the GFCC, a network of more than 30 competitiveness councils from around the world, he manages the U.S. Council's role as secretariat to the GFCC and serves as the principal point of contact to the member organizations.

Chad Evans

Executive Vice President



A recognized expert in global competitiveness and innovation, Chad Evans leads the Council's programs and policy initiatives. Among his accomplishments, he has built the Council's Technology Leadership & Strategy Initiative (TLSI), engaging more than 40 Fortune 500 CTOs to anticipate tech investment drivers essential to U.S. prosperity. He also conceived and launched the Council's American Energy & Manufacturing Competitiveness (AEMC) Partnership.

Chad has been a creator of the Council's Global Innovation Initiative. In 2005, Chad helped lead the first U.S.-EU and U.S.-Japan Innovation Summits, and in 2007 and 2010, he developed the 1st and 2nd U.S.-Brazil Innovation Summits. Building off of these summits, as well as pioneering more than

15 U.S.-Brazil Innovation Learning Labs in both countries, he is now planning the 2013 3rd U.S.-Brazil Innovation Summit.

Chad also developed the 2004 National Innovation Initiative Summit and *Innovate America*, the nation's first private-sector innovation agenda framing the landmark "America COMPETES Act." He has co-chaired the U.S.-Brazil Joint Commission on S&T Innovation Working Group and been a member of the World Economic Forum Advisory Board on Russian Competitiveness. He is a member of Lawrence Livermore National Laboratory's Industry Advisory Council and is treasurer of the Global Federation of Competitiveness Councils (GFCC).

Since 1996, Chad has been a key writer of the Council's flagship *Competitiveness Index*. His recent launch of the Economic Advisory Committee, composed of 40 Fortune 500 chief economists and chaired by FedEx chief economist, is designed to identify future productivity drivers.

Michael Bush



Michael Bush joined the Council in 2012 as a Policy Director. He develops content and thematic insights for several of the Council's initiatives including the CTO-level Technology Leadership and Strategy Initiative, the

Competitiveness Index—the Council's flagship benchmarking publication, and a major clean energy manufacturing initiative the Department of Energy. In addition to the Council, Michael is working towards a Masters degree in International Science and Technology Policy from the George Washington University. Before coming to the Council, Michael worked as a professional engineer consulting on and designing mission critical and traditional fire suppression systems. He has a Bachelor of Science in civil engineering from the University of Illinois at Urbana-Champaign and has studied international economics at Fudan University in Shanghai, China.

Aaron S. Malofsky



Aaron S. Malofsky is a Program Manager at the Council. He directs the marketing communications strategy for both the HPC and National Digital Engineering & Manufacturing Consortium (NDEMC) initiatives. He

has over 10 years of experience in journalism and digital marketing communications for various technology and healthcare-related companies. In his previous work, he served as both the copywriter and assignment editor for the CBS affiliate in Dallas. Aaron has earned a Bachelor of Arts in journalism/political science at American University as well as an MBA and a Master of Science in Market Research (MSMR) at the University of Texas at Arlington.

Lisa Hanna



Lisa Hanna joined the Council as Vice President, Communications, in the fall of 2012 and leads all marketing, media and public affairs outreach in support of each of the Council's core initiatives. Lisa joins the Council with 15 years

of journalism and communications experience. In her previous role, she was the director, media and public affairs for the Organization for International Investment (OFII) a Washington business association representing the unique interests of the U.S. operations of globally headquartered companies such as Nestle, Philips and Siemens. Lisa's experience in advocacy communications and public relations spans from her work in Washington public affairs agencies to Capitol Hill, where she worked as a director of communications in the House of Representatives. Before moving to Washington more than a decade ago, Lisa was a news reporter for CBS and ABC stations across Texas and spent many years covering some of Texas' most visible stories and political campaigns. She is a graduate of Baylor University and holds degrees in journalism and political science.

Clara Smith



Clara Smith is the Council's Senior Policy Director focusing on enhancing U.S. competitiveness through increased innovation and productivity in energy security and manufacturing. Smith brings together knowledge in energy, high

performance computing, public-private partnerships and public policy. She led the hpc4energy initiative at Lawrence Livermore National Laboratory in addition to providing expertise as an Energy Systems Analyst prior to joining the Council in 2013. Clara holds a doctoral degree in engineering from Dartmouth College and a bachelor's degree in chemical engineering from University of California, Los Angeles.

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About the Council on Competitiveness

WHO WE ARE

The Council's mission is to set an action agenda to drive U.S. competitiveness, productivity and leadership in world markets to raise the standard of living of all Americans.

The Council on Competitiveness is the only group of corporate CEOs, university presidents and labor leaders committed to ensuring the future prosperity of all Americans and enhanced U.S. competitiveness in the global economy through the creation of highvalue economic activity in the United States.

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HOW WE OPERATE

The key to U.S. prosperity in a global economy is to develop the most innovative workforce, educational system and businesses that will maintain the United States' position as the global economic leader.

The Council achieves its mission by:

- Identifying and understanding emerging challenges to competitiveness
- Generating new policy ideas and concepts to shape the competitiveness debate
- Forging public and private partnerships to drive consensus
- Galvanizing stakeholders to translate policy into action and change

Learn About Us

Read about Council leaders, mission and more at Compete.org.

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