

SUMMIT PROGRAM



FMA

FUTURE OF MANUFACTURING SUMMIT
AUGUST 5TH - 7TH 2007
HYATT REGENCY - MONTREAL



*The Future of Manufacturing Summit
August 5th Kickoff*

FMA

Welcome to the Future of Manufacturing Summit 2007.

On behalf of FMA, we are pleased to have your participation. Throughout the Summit, attendees will have the opportunity to learn from their peers about technological developments and winning strategies. The event will be available on web cast shortly after the event, to facilitate training and implementation initiatives.

Enjoy the Event!

Janice Blake

FMA Summit Ambassador

FMA is pleased to have Janice participate with our Summit. She and our hostesses are here to assist with your needs.

Ms. Blake has worked in the technology sector for over twenty years in capacities as diverse as network engineering, information management and technology. Ms. Blake was the founding President of 3Vista Corporation, a manufacturer of advanced 3D rendering software. Ms Blake has held several senior positions in sales and business development, project management as well as operations. Ms Blake currently provides consulting services to both the private and public sector in IM/IT business and solution analysis, program and project management.



Sunday August 5th - 6:00 PM
Greater Phoenix Economic Council Kick Off Cocktail
Terrasse Jeanne-Mance



Sunday August 5th - 7:00 PM
Fellon McCord Opening Barbeque

*The Future of Manufacturing Summit
August 7th 8:30 - 9:00 AM Salon B*

U.S. Department of Energy
Douglas Kaempf
Program Manager
Industrial Technologies Program

The Industrial Technologies Program (ITP), part of the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy, leads national efforts to improve industrial energy efficiency and environmental performance. ITP's mission is to improve the energy intensity of U.S. industry through a coordinated program of high-risk, high-value R&D; validation; technology and best practices deployment; and strategic industry partnerships.

Douglas Kaempf is the Program Manager of the Industrial Technologies Program (ITP) within the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy. He leads ITP efforts to improve industrial energy efficiency through a coordinated program of research and development, technology deployment, best practices, and industry partnership. He has managed multi-million dollar R&D portfolios for the biomass, forest products, agriculture, chemicals, petroleum refining, glass, and metals industries. He also has more than 21 years of process industry experience, including twelve years in the electric power industry. Mr. Kaempf earned a Master of Science degree in Technology Management from the University of Maryland and a Bachelor of Science degree in Electrical Engineering from the Pennsylvania State University.





United States Environmental Protection Agency

Tom Murray

Chief of Prevention Analysis, EPA

The Green Suppliers Network

Tom Murray is a senior biologist with the United States Environmental Protection Agency. Tom has over 36 years in government service. Tom and his staff created the Green Suppliers Network. The Lean and Clean Advantage offered through this program targets and eliminates the root causes of waste resulting in improved environmental performance and a stronger bottom line.

The Green Suppliers Network

Manufacturers of all sizes are turning to lean manufacturing techniques to reduce waste and save money. In fact, you may already be practicing lean at your facility. But did you know you can save even more by expanding your efforts to be Lean and Clean?

The Green Suppliers Network works with large manufacturers to engage their suppliers in low-cost technical reviews to identify strategies for improving process lines and using materials more efficiently. The Lean and Clean Advantage targets and eliminates the root causes of waste. The result — a stronger bottom line.

The Pollution Prevention Division is located within the EPA's Office of Pollution Prevention and Toxics and is the Agency's voice for pollution prevention programs and approaches. Pollution prevention (P2) is reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream.



*The Future of Manufacturing Summit
August 6th 9:00 - 9:25AM Salon B*

Boeing

Gary S. Toyama

Vice President, Southern California Region

Space and Intelligence Systems

Network and Space Systems

“Workforce of the Future” takes a look at the “baby boomer” phenomenon that is impacting virtually every company today. As this group exits the workforce, voids in technical workers as well as management and executives could have dramatic impacts to the long term success of companies. Gary Toyama from The Boeing Company will discuss how one company is addressing this pervasive issue

Boeing is the world’s leading aerospace company and the largest manufacturer of commercial jetliners and military aircraft combined. Gary Toyama, Vice President of the Southern California Region for Boeing Integrated Defense Systems, oversees the infrastructure and efficiency efforts across a region of 28,000 employees.





**Fellon-McCord & Associates, Inc and
Constellation NewEnergy - Gas Division**

Andrew R. (Drew) Fellon

Senior Vice President and Chief Executive Officer

Workshop

Drew Fellon joined Constellation Energy in 2003 as Senior Vice President and Chief Executive Officer of its subsidiaries Fellon-McCord & Associates and Constellation NewEnergy - Gas Division, concurrent with Constellation Energy's acquisition of Fellon-McCord and Alliance Energy Services.



Prior to forming Fellon-McCord and Alliance, Mr. Fellon was senior vice president - National Accounts, Natural Gas Division at Centran Corporation, where he helped create the company's natural gas spot and futures market trading and Appalachian natural gas procurement and trading functions. He holds a B.S. in Industrial and Management Systems Engineering from Pennsylvania State University.

In the constantly evolving energy industry, liquefied natural gas (LNG) is fast emerging as a key component of North America's natural gas supply outlook. Drew Fellon will provide Fellon-McCord's insights into the current LNG market and expectations for the future. Fellon-McCord is a subsidiary of Constellation Energy, a Fortune 200 integrated energy company providing products and services globally to some of the world's largest energy users.

Constellation Energy, a Fortune 200 integrated energy company, is North America's largest retail electricity supplier and a leading natural gas supplier. Its subsidiaries include a gas and electric utility, the largest wholesale electric power group in the U.S., a fuel-diversified mix of power plants, and Fellon-McCord & Associates, which manages energy procurement and risk mitigation for some of the country's largest industrial companies. Fellon-McCord serves more than 4,000 client facilities in North America and abroad.

*The Future of Manufacturing Summit
August 6th 10:30 - 11:10 AM Salon B*

Supply Chain Consulting

John D. Nadvornik

Director of Product Strategy

Mitigating Supply Chain Risk with Visibility



John D. Nadvornik is responsible for the development and execution of the US marketing strategy, which includes positioning, branding, demand creation, product marketing, and strategic partnerships. John also focuses on developing the company's strategic product road map to continually ensure product functionality meets the market demand.

We will provide a series of cases demonstrating how companies have minimized supply chain risk with the use of a supply chain visibility system. Primarily we will be focusing on the inbound fulfillment process. We will explore three different companies with fairly fragmented supply chains, and determine the use of visibility as a leverage to insure proper fluidity within each one's supply chain.

Our first company is a build-to-order office furniture company that recently started using suppliers in China to improve margins. We will review their struggles with managing a new inbound flow with new suppliers, maintaining their strict commitment date to their customer, yet without flooding their distribution centers with product.

Our second company is an automobile manufacturer that modified their parts network to improve their fill rates. We will examine how this company used visibility to track supplier performance and improved their fill rates while reducing overall procurement costs.

Our final customer is a high-tech manufacturer that looked at restructuring their inbound logistics program to deal quickly with supply distributions. We will review the challenges they faced as they built a "Virtual DC" to manage all in-transit activities and inventory.

Supply Chain Consulting is a technology and services company specializing in supply chain visibility and extended process control. In late 2006 they acquired Viewlocity, a global supply chain visibility software vendor. The Viewlocity business unit provides supply chain monitoring and optimization applications that drive many of the world's leading companies.

Supply Chain



DTE Energy Services

Karl R. Wittbold

Vice President, Business Development

Michael P. Larson

Manager, Business Development

Energy Utility Infrastructure Outsourcing

Karl R. Wittbold has more than 25 years of energy industry experience in project development and management. As Vice President of Business Development, Mr. Wittbold directs all aspects of industrial project development. These include implementation of new industrial development strategy, project identification, and execution and coordination of related activities. Mr. Wittbold earned a bachelor of arts in finance from Central Michigan University.

DTE Energy



DTE Energy Services

Michael P. Larson has 16 years' experience in project engineering, management, and development. As business developer, Mr. Larson focuses on new prospects, evaluates technical and economic feasibility, and leads the preparation of proposals to potential clients. Mr. Larson earned a Bachelor of Science in mechanical engineering from the University of Notre Dame.

DTE Energy Services is a non-regulated arm of DTE Energy, engaged in the provision of utility services to a variety of industrial customers across North America.

DTE Energy Services will discuss its energy/utility infrastructure outsourcing model. We will describe our broad service offering which include: ownership, operation and management of boilers, chillers, air compressors, HVAC, wastewater treatment and electrical infrastructure. Several examples and case studies will be discussed as well as the benefits and pitfalls of utility service outsourcing.

DTE Energy is a diversified energy company with 2006 revenues in excess of \$9 billion and approximately \$24 billion in assets. We are the parent company of DTE Energy Services, which owns and/or operates on-site energy projects throughout the country with automakers, steel companies, large commercial and industrial businesses, and the pulp and paper industry. Our on-site energy management services include chilled water, compressed air, waste-water treatment, fuel supply, power generation and price risk management.

*The Future of Manufacturing Summit
August 6th 11:10 - 12:00 PM Salon B*

General Motors Corp.

Dr. David Gonsalvez

Director, Global Supply Chain Strategic Planning Center

Opportunities and Risks in Global Supply Chains

Dr. David Gonsalvez is currently Director, Global Supply Chain Strategic Planning Center, General Motors Corporation, and is responsible for supply chain innovation, planning, and security in GM's supply chains worldwide. In 20 years with GM he has worked in R&D, Product Planning, Sales, and Supply Chain functions. He has a B.Tech from IIT Madras and a Ph.D in Operations Research from The Ohio State University.



Opportunities and Risks in Global Supply Chains

As globalization creates increasingly complex supply chains companies must be innovative and efficient to ensure supply chain costs do not spiral out of control.

The focus of this session is on strategies to take advantage of the opportunities, illustrated with real world examples.

As a counterpoint the risks inherent in long global supply chains are clearly identified so that the true costs and benefits can be determined. Operational improvements in areas ranging from tariff management to consolidation centers are offered as examples of how rethinking the supply chain can yield big benefits.

Founded in 1908, GM today employs about 284,000 people globally. GM manufactures its cars and trucks in 33 countries. In 2006, 9.1 million GM vehicles were sold globally under the following brands: Buick, Cadillac, Chevrolet, GMC, GM Daewoo, Holden, HUMMER, Opel, Pontiac, Saab, Saturn and Vauxhall.

Panel — Energy Reducing

August 6th 11:10 - 12:00 PM Salon A



CHAIR

James Quinn
Technology Delivery Team Leader
United States Department of Energy



Dr. Gilles Jean
Director General
Natural Resources Canada



Dr. Mingsheng Liu
President and CEO
Bes-Tech



Jack Kramer
Principal
CEnergy Services

MAGNARAY®
INTERNATIONAL



Div. World Institute of Lighting
and Development Corp.



Lorence E. Leetzow
President
**World Institute of Lighting and
Development Corporation Magnaray®
International Division**

The Future of Manufacturing Summit

James Quinn is the Team Leader for Technology Deployment in the Industrial Technologies Program (ITP), part of the Office of Energy Efficiency & Renewable Energy in the U.S. Department of Energy. Mr. Quinn leads DOE's Save Energy Now program, which is working with the largest industrial plants in the U.S. to conduct energy savings assessments, and is partnering with industry, states, and utilities to encourage the use of the latest technologies to save energy and reduce CO₂. He also heads ITP's international activities, which include work with the Asia Pacific Partnership for Clean Development and Climate, the U.S./China Strategic Economic Dialogue initiative to assist China in conducting energy savings assessments on its 1000 largest plants, and the International Energy Agency Industrial and Energy Related Systems Technology Committee.

Dr. Gilles Jean is the Director General of the CANMET Energy Technology Centre–Varennes, an innovation centre of Natural Resources Canada. He holds a Ph.D. from the University of Western Ontario and an M.B.A. from the University of Ottawa.

Dr. Jean's career has been devoted to the development of sustainable energy technologies but also on the development and dissemination of the knowledge required by people to make better decisions on energy options and use. Dr. Jean's organisation is renowned around the world for key achievements such as RETScreen, a software to do pre-feasibility studies, integrated refrigeration systems eliminating the need for synthetic refrigerants and the development of unique process integration methodologies.

Dr. Mingsheng Liu is a Professor of Architectural Engineering at the University of Nebraska at Lincoln as well as being the President and CEO of Bes-Tech. Dr. Liu has published 20 journal papers, 35 peer reviewed proceeding paper and 2 textbooks in the field of HVAC optimization, building commissioning and more.

Bes-Tech is an energy efficiency company providing solutions for customer's facilities that save energy, increase comfort, improve reliability and meet their return on investment criteria. The processes Bes-Tech utilizes are scientific in nature and field proven through years of research, testing and implementation. Bes-Tech Saves Energy while improving Building Comfort.

Mr Leetzow has been involved in designing a lighting fixture product sold worldwide, which solves a wide variety of problems in many different types of applications. Most of the solutions involve saving large amounts of energy, while improving visual acuity, or "see-ability" - the eyes' ability to use light. Working with solar power engineers, contractors, and distributors has led to the development of Totally Solar Powered Parking Light Lighting Systems for large areas where it can be costly to obtain "grid" power.

Magnaray® International provides exterior visually efficient lighting systems for new construction and retro-fit projects that save from 30%-99% in energy costs. Floodlighting, as well as surface mount (wall packs) are Dark Sky friendly. Lamps last to 30,000 hours, and lighting fixtures have 5 year warranty (lamps, abuse excluded). Magnaray® produces visually and energy efficient lighting products, that improve lighting quality, while reducing energy costs. Higher maintained light levels for longer periods of time are due to standard fluorescent lamps used, with standard electronic ballasts. Productivity increases are also usual results for area lighted with our products.

Panel – Sustainability EPA

August 6th 1:00 - 2:00 PM Salon A



CHAIR
Tom Murray
Chief of Prevention Analysis, EPA
United States Environmental Protection Agency



John Kinsella, PG, RAB
Vice President, National Practice Program
Shaw Environmental & Infrastructure, Inc.



David Griffin
Vice President of Environment, Health and Safety
Michelin North America, Inc.



Thomas V. Easterday
Senior Vice President, Secretary and General Counsel and Member of the Board of Directors
Subaru of Indiana Automotive, Inc.

The Future of Manufacturing Summit

Tom Murray is a senior biologist with the United States Environmental Protection Agency. The Pollution Prevention Division is located within the EPA's Office of Pollution Prevention and Toxics and is the Agency's voice for pollution prevention programs and approaches. Pollution prevention (P2) is reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream.

John Kinsella has designed and implemented successful environmental programs for a range of clients including Biogen, DOE, HP and Sony. John also helped facilitate a very successful EPA/Industry/NGO project that invited EPA and citizen groups to view EMS operations first hand. During this time he worked with Annette Dennis McCully with whom he co-authored ***How to Implement an ISO 14001 EMS: A Practical Guide***. John holds a B.S. from Trinity College (University of Dublin) and an M.S. from the University of London, U.K.

Shaw Environmental & Infrastructure, Inc., a subsidiary of The Shaw Group Inc., is a leading provider of consulting, engineering, construction, remediation, facilities management, and technology services for government and private-sector clients worldwide. Our highly-skilled team of approximately 7,000 professionals is strategically located in more than 90 offices throughout the United States and abroad.

David Griffin, a West Point graduate, served in the U.S. Army through 1988. Joining Michelin in 1986, he's held positions in North America and Europe as Manager, Staff Engineer, Business Manager, Operations Manager, and currently Vice President of EHS. David, his wife, Kathleen, and five children live in Greenville, South Carolina.

Thomas V. Easterday joined Subaru of Indiana Automotive, Inc. (formerly Subaru-Isuzu Automotive Inc.) in July, 1989, as the Management Associate – Legal and Corporate Counsel. In November 1992, he was promoted to Senior Management Associate – Legal and General Counsel. In January, 1998, Tom was promoted to the newly created position of Vice President – Corporate Affairs and General Counsel. He was promoted again in August, 1998, to Vice President – Human Resources & Corporate Affairs and General Counsel. In June, 2004, Tom was promoted to Senior Vice President, Secretary and General Counsel. He was also appointed to serve as a Member of the Board of Directors of Subaru of Indiana Automotive, Inc. He is the first American to be appointed to the SIA Board of Directors.



IBM

Nicola Marrone

Honda Industriale - Italia RFid Project Manager

Giovanni Gerini

Industrial Sector Client Executive - IBM Italy

Honda Italia: A Case for RFID in Work in Process Manufacturing



Honda Italia has remained on the leading edge by providing products of the highest quality at a reasonable price. But keeping track of key components in an industrial environment was becoming more of a challenge. Looking for a way of improving work in process and after sales tracking of motorcycles, Honda

looked for a centralized platform for all of their RFID application areas. The presentation will share the process and solution that Honda Italia implemented for improving their manufacturing operations, reducing errors, and improving critical parts availability at the assembly line. In addition, the workshop will review the business benefits of integrating RFID with product lifecycle management (PLM).

Nicola Marrone is the Applications' Development Manager at Honda Italia Industriale. With experience of 16 years in IT application management and development, 10 of which in Honda, he took care about the delivery of mission critical projects, such as SAP and Mapics implementation, budgeting, business control and production processes monitoring applications. His competences extended also to the newest RFID, Portal and Document Management areas. In the last 4 years he has also been involved in the networking and communications areas empowerment, and he has been the champion of the introduction of VOIP technologies in the Italian subsidiary. His last project delivered the Honda Web Supplier Portal, a mission critical project to improve the Honda supply chain quality and productivity. He is now delivering the Honda RFID project with IBM, a mission critical project to improve the productivity area (Logistic, Planning, Warehouse, Replenishment, Assembly, Quality and Assembly Line productivity) by June 2007.

Since joining IBM as a System Engineer in 1981, *Giovanni Gerini* has been involved in a wide range of projects in the Industrial, telecommunications and public sector industries. Focused on large account management, his area of specialization has been in the development and successful implementation of Strategic Outsourcing, On Site Services and Manufacturing Projects. His clients have included companies such as Honda Industriale Italia, Piaggio & C. spa, GE Oil&Gas Nuovo Pignone, Ericsson TEI, Leaseplan, Telecom Italy and the Italian Ministry of Post and Telecommunications.

*The Future of Manufacturing Summit
August 6th 1:00 - 2:00 PM Salon B*

Caterpillar Logistics Services, Inc.

Dan Spellman

Vice President

6 Sigma

Dan Spellman is a Vice President of Caterpillar Logistics Services, Inc., and is responsible for a team of 95 experts in engineering, sales and marketing, and business strategy. The five divisions monitor industry changes, identify opportunities for alliances, support selling capability, and provide expert logistics solutions to clients worldwide.

Caterpillar's logistics division (Cat Logistics) has applied 6 Sigma lean principles to create world-class integrated logistics solutions. This, in turn, supports and enhances lean principles in manufacturing. The key aspect is to unite operating, cultural and management systems with 6 Sigma, Class A and supply chain excellence.

Cat Logistics provides world-class supply chain solutions to its parent company, Caterpillar Inc., and 65 other leading corporations throughout the world. Headquartered in Morton, Illinois, Cat Logistics operates 105 offices and facilities in 25 countries on six continents. Cat Logistics provides full service capabilities to companies in automotive, industrial, aerospace, consumer, and high-tech industries.





Solution Dynamics

Dan Chumbley

Executive Business Development

Demand Side Management Program

Solution Dynamics is focused on the evaluation, development, and implementation of energy related cost reduction strategies and opportunities. Our knowledge and experience allows us to evaluate all aspects of energy consumption in complex facilities and develop opportunities to reduce energy consumption and cost in a low risk, cost effective manner.

Solution Dynamics will discuss what makes a successful Demand Side Management Program. What are the “must haves” and “pitfalls to avoid” to achieve maximum results. Reasons to partner with a provider specialized in Industrial and manufacturing who is driven to produce High-Value results. SD will present examples of energy saving projects.



*The Future of Manufacturing Summit
August 6th 3:00 - 3:30 PM Salon B*

Raytheon Company
Robert “Rusty” Patterson
Vice President
Raytheon Six Sigma™ Business Excellence



Robert “Rusty” Patterson is the Vice President of Raytheon Six Sigma Business Excellence for Raytheon. He sits on the Industry Advisory Council of the Automation and Robotics Research Institute, the Board of Governors of the Shingo Prize, and is the Chairman of the Board of the National Coalition for Advanced Manufacturing.

Aligning Your Improvement Activities with the Corporate Strategic Plan for Bottom Line Results

This talk will focus on the trends in industry today and how they will change in the future with respect to the competitive environment. Various improvement activities will be examined and the need for alignment with the strategic plans of the company to insure success in the future will be presented.

Raytheon is a technology leader specializing in defense, homeland security, and other government markets throughout the world. With a history of innovation spanning more than 80 years, Raytheon provides state-of-the-art electronics, mission systems integration, and other capabilities in the areas of sensing; effects; command, control, communications and intelligence systems, as well as a broad range of mission support services.

Raytheon





Greater Phoenix Economic Council (GPEC)

Dr. Peter Johnston

*Manager Technology Development Group
at Arizona Public Service Company*

Clean Energy Technology Development in Arizona

Dr. Peter Johnston currently holds the position of manager of the Technology Development group at Arizona Public Service Company in Phoenix AZ. He was born and educated in England where he obtained his bachelors degree in Electronic Engineering at the University of Leeds in 1972. He continued his post graduate studies at Sheffield University between 1972 and 1975. While at Sheffield he obtained his Master of Engineering and Ph.D. degrees through research in plasma physics.

Current programs in Peter's department include the development and application of solar and renewable energy technologies, distributed generation and energy storage, hydrogen and alternative fuels and technology transfer.



**GREATER PHOENIX
ECONOMIC COUNCIL**

*The Future of Manufacturing Summit
August 6th 3:30 - 4:00 PM Salon B*

Mercer

Pete Foley

Principal

Naomi Stanford

Principal

Workforce Strategies Group



Pete Foley works with Mercer clients around the globe to improve their bottom-line performance through more effective management of their human capital. Pete's industry experience includes financial services, manufacturing, pharmaceuticals, professional services, retail and telecommunications. Pete holds a BA in Psychology from the University of Michigan and MS and PhD degrees in Organizational Psychology from the University of Georgia.

Naomi Stanford is an expert organization design and human capital consultant based in Washington DC. She is experienced in both an internal and external consultancy in multiple private sector and government organizations. Stanford has a PhD (focused on growing leadership capability) and is the author of two books on organization design: *Organization Design: The Collaborative Approach*, and *The Economist Guide to Organization Design*.

While organizations have many tools to measure operational efficiency, companies still struggle with measuring and managing their investments in people. Often, human capital is one of the largest assets that organizations understand the least about. Pete Foley and Naomi Stanford provide an overview and case studies of new techniques that allow companies to better manage their human capital investments and understand the impact of workforce dynamics on business performance.

Mercer Human Resource Consulting is the global leader for trusted HR advice, products and services. In our work with clients, we make a positive impact on the world every day. With offices in 41 countries and territories worldwide, we do this by enhancing the productivity, health, financial and retirement security, and employment relationships of the global workforce.

MERCER

Human Resource Consulting

Panel – Renewable Energy

August 6th 4:05 - 5:00 PM Salon C



CHAIR
Douglas Kaempf
Program Manager
U.S. Department of Energy



Reginald D. Carter Sr.
Chairman/Chief Executive Officer (CEO)
BioTech Energy Company



Roland O. Fjallstrom
President & CEO
Envio Energi LLC

Douglas Kaempf is the Program Manager of the Industrial Technologies Program (ITP) within the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy. He leads ITP efforts to improve industrial energy efficiency through a coordinated program of research and development, technology deployment, best practices, and industry partnership. He has managed multi-million dollar R&D portfolios for the biomass, forest products, agriculture, chemicals, petroleum refining, glass, and metals industries. He also has more than 21 years of process industry experience, including 12 years in the electric power industry. Mr. Kaempf earned a Master of Science degree in Technology Management from the University of Maryland and a Bachelor of Science degree in Electrical Engineering from the Pennsylvania State University.

BioTech Energy Company started with a group of individuals from all walks of life who decided to do something to improve the environment. Dr. R. D. Carter, a former Biology major in college, decided to bring together a group of friends who are professionals from the business, religious, scientific and engineering fields to improve our overall quality of life.

Dr. Carter is the former Executive Vice President and Chief Operating Officer of Global Resources Inc., a company involved in research of providing flexible fuels from organic substances.

As the former Senior Chief Executive of the \$5.5 billion Tetra/Alfa Laval Group of Companies, with degrees in mechanical and chemical engineering, **Roland Fjallstrom** brings more than 35 years of senior management experience in engineering, business economics and technology development to Envio Energi.

Envio Energi designs, manufactures and constructs bio-fuel energy systems for the production of heat, power or combined heat and power (CHP) for global clients. Our technology leading combustion process developed in Scandinavia guarantees a safe and efficient solution with effective combustion and low environmental impact.



Pete Foley
Principal
**Mercer Human Resource
Consulting**



Naomi Stanford
Principal
**Mercer Human Resource
Consulting**



Barbara E. Allushuski
Worldwide Partner
**Mercer Human Resource
Consulting**

MERCER

Human Resource Consulting

Pete Foley works with Mercer clients around the globe to improve their bottom-line performance through more effective management of their human capital. Pete's industry experience includes financial services, manufacturing, pharmaceuticals, professional services, retail and telecommunications. Pete holds a BA in Psychology from the University of Michigan and MS and PhD degrees in Organizational Psychology from the University of Georgia.

Naomi Stanford is an expert organization design and human capital consultant based in Washington DC. She is experienced in both an internal and external consultancy in multiple private sector and government organizations. Stanford has a PhD (focused on growing leadership capability) and is the author of two books on organization design: *Organization Design: The Collaborative Approach*, and *The Economist Guide to Organization Design*.

Barbara Allushuski heads up the Mercer operations for the Detroit, Cleveland, Columbus, Cincinnati and Pittsburgh offices. Additionally, she manages several of Mercer's largest automotive relationships. Barbara has over 25 years experience in various executive and managerial positions in all aspects of corporate human resources including executive compensation, employee benefits, organizational development, labor relations and talent management. Barbara graduated cum laude from Ohio University, majoring in economics and has completed the Wharton School of Business Executive Development Program.

*The Future of Manufacturing Summit
August 7th 9:00 - 9:30 AM Salon B*

Subaru of Indiana Automotive, Inc.

Thomas V. Easterday

Senior Vice President, Secretary and General Counsel

Subaru's Award-winning Environmental Programs

Thomas Easterday joined Subaru of Indiana Automotive, Inc. (formerly Subaru-Isuzu Automotive Inc.) in July, 1989, as the Management Associate – Legal and Corporate Counsel. In November of 1992, he was promoted to Senior Management Associate – Legal and General Counsel. In January, 1998, Tom was promoted to the newly created position of Vice President – Corporate Affairs and General Counsel. He was promoted again in August, 1998, to Vice President – Human Resources & Corporate Affairs and General Counsel. In June, 2004, Tom was promoted to Senior Vice President, Secretary and General Counsel. He was also appointed to serve as a Member of the Board of Directors of Subaru of Indiana Automotive, Inc. He is the first American to be appointed to the SIA Board of Directors.



Best Practices in Environmentally Sound Manufacturing A Look at Subaru of Indiana Automotive

Subaru of Indiana Automotive (SIA), the home of the Subaru Legacy, Outback and Tribeca, was the first automotive assembly plant in the United States to achieve zero landfill status. SIA Senior Vice President Tom Easterday will discuss SIA's award-winning environmental programs, which were recently featured in both print and television advertising by Subaru. In addition to focusing on SIA's efforts to reduce, reuse and recycle, Easterday will explain how SIA has decreased its energy consumption through kaizen improvements and maintained a certified wildlife habitat on its 832 acre plant site.

Subaru of Indiana Automotive, Inc. (SIA) is the home of the Subaru Outback, Legacy, Tribeca and also the Toyota Camry. SIA- built vehicles have been recognized for their outstanding quality, reliability, safety and performance. SIA has been recognized for being the industry leader in environmental stewardship, including becoming the first automotive plant in North America to achieve zero landfill status.

August 7th 10:20 - 11:20 AM Salon B



Greater Phoenix Economic Council (GPEC)

Barry G. Broome

President and CEO

Jan Leshner

Director of the Arizona Department of Commerce

Greater Phoenix Today

Barry G. Broome is president and CEO of the Greater Phoenix Economic Council (GPEC). With over 17 years experience in economic development, he is shaping GPEC to become the leading economic development organization in the nation by 2010.

Under Broome's leadership, GPEC and Greater Phoenix have achieved notable wins, including the launch of the Arizona Global Network, designed to attract foreign investment; the commission of a fact-based analysis that led to the enactment of 80% sales factor enabling Arizona to better compete for multi-state corporations; the attraction of Covance—one of the world's largest and most comprehensive drug development services companies; and expansion of Intel's \$3.5 billion fabrication plant, the world's largest capital investment in 2006.

Jan Leshner is a former business owner and director of Governor Janet Napolitano's Southern Arizona Office. Born, raised and educated in Tucson, Leshner's professional experience is extensive; she served as Vice-President of Communications and Marketing for the Tucson Economic Development Corporation, Executive Director of the Tucson Community Cable Corporation and Vice-President of Warner-Amex Cable. She founded Leshner Communications in 1990, handling corporate, public and government relations for various entities.

Appointed by Governor Napolitano as director in January, 2007 and charged with modernizing the Arizona Department of Commerce, Leshner brings a new level of energy to the agency through a long list of community and professional associations. Leshner holds positions on numerous panels and commissions, including the Arizona-Mexico Commission, the Greater Arizona Development Authority, the Arizona Aerospace and Defense Commission, the Governor's Council on Innovation and Technology, Governor's Council on Workforce Policy.

Canada Arizona Business Council

Glenn Williamson

CEO and Founder

Tim Lindquist

ASU Professor & Dean

Arizona State University

Glenn Williamson has more than 25 years of entrepreneurial executive level experience, primarily in the financial and operation aspects of companies. His strengths extend from advanced capital formation to marketing to positioning people, products, and concepts and companies both private and publicly listed. During the last four years, Mr. Williamson has been involved in over a dozen engagements ranging from designing a world-class fractional yacht ownership program in the Cayman Islands to working with a world-class film animation production company based in Montreal.

From 2000 to present Mr. Williamson has been CEO of Nest Ventures L.L.C. a Private equity firm with offices in Montreal Canada and Phoenix Arizona . Mr. Williamson also currently holds his series 7 and 66 NASD securities licenses.

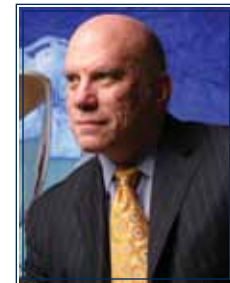
Tim Lindquist discusses ASU's Polytechnic Campus:

Embracing Industry Partnerships in Delivering Professional Baccalaureate Education. He describes how Arizona State University is responding to the economic, demographic and workforce needs of the Phoenix metropolitan area. As one of ASU's four campuses, the Polytechnic focuses on professional programs that are driven by cooperation with regional employers and learn-by-doing educational paradigm. While the campus provides a broad range of professional programs, the talk will focus on characteristics that differentiate the engineering, computing and technology programs offered on the Polytechnic campus from traditional offerings in these areas.

The Greater Phoenix Economic Council (GPEC) provides expert support in streamlining site searches for businesses, connecting decision-makers who can expedite the process and leveraging knowledge assets that spur innovation. A true public-private partnership, GPEC and our partners help ensure a competitive, world-class economy supported by a talented and diverse workforce. ASU's Polytechnic campus: Embracing Industry Partnerships in Delivering Professional Baccalaureate Education.



**GREATER PHOENIX
ECONOMIC COUNCIL**





Raymor Industries Inc.

Stéphane Robert

President and CEO

John P. Sauer

President and Chief Engineering Consultant

**Sauer Engineering, a Materials and
Process Engineering**

Stéphane Robert is emerging as one of the top international business leaders in the field of nanotechnology, driving Raymor Industries to new heights as a global nanomaterials company. He has raised more than C\$26M for Raymor, and has led the company's efforts to acquire over 20 advanced material and nanomaterial patents, including the highly scalable, plasma-based process to produce single-walled carbon nanotubes, a material which will be the technology platform for a multitude of applications in aerospace, defense, electronics, cleantech, and consumer fields.

Raymor Industries (RAR: TSX-V) is a leading developer of high technology for the production of single-walled carbon nanotubes, nanomaterials and advanced materials for high value-added applications.

John P. Sauer is President and Chief Engineering Consultant of Sauer Engineering, a Materials and Process Engineering located in Cincinnati, Ohio. John is a Professional Engineer with over 25 years experience in industries with special emphasis in the field of Thermal Spray (TS). Mr. Sauer has traveled around the world consulting and teaching courses on TS having just recently returned from Singapore. He was heavily involved in the Hard Chrome Alternative Team (HCAAT) and Canadian Hard Chrome Alternative (CHCAT) Team Programs which supported replacement of hard chrome in Canadian landing gear companies such as Goodrich, Messier Dowty, and Heroux. John consults with Raymor on a variety of TS issues.

*The Future of Manufacturing Summit
August 7th 11:20 - 12:00 PM Salon B*

Rockwell Collins, Inc.
Mark E. Correll
Vice President, Manufacturing Operations
Innovation Through Partnership



Mr. Correll is the Vice President of Manufacturing Operations (Government Systems) for Rockwell Collins. He is responsible for leading a global manufacturing organization of approximately 2400 employees which support \$1.3 billion in sales. Mr. Correll obtained his B.A. in Business from the University of Northern Iowa and has an MBA from the University of Iowa.

Innovation through Partnership addresses the story of a manufacturing facility that moved from the brink of failure to become a benchmark facility. This was accomplished in large part through the establishment of a strong company / union partnership. Key areas of discussion will include:

- Cultural and performance dynamics which drove the need for change
- Establishing and communicating the “Case for Change”
- Creating a “Joint Vision of Partnership”
- Establishing an organization structure that promotes a healthy partnership
- Building trust across all levels of company and union leadership
- Establishing a culture where both the company and union drive continuous improvement
- Results
- Lessons Learned

Rockwell Collins is a pioneer in the development and deployment of innovative communication and aviation electronics solutions for both commercial and government applications. Our expertise in flight deck avionics, cabin electronics, mission communications, information management and simulation and training is delivered by 19,000 employees, and a global service and support network that crosses 27 countries. To find out more, please visit www.rockwellcollins.com.

The Rockwell Collins logo consists of the word 'Rockwell' in a bold, black, sans-serif font above the word 'Collins' in a similar font. A small orange and red graphic element is positioned between the two words.



WorldEnergy

World Energy
Glen Lindgren
Director, Environmental Markets
Competitive Energy Markets

Glen Lindgren is World Energy's Director, Environmental Markets. He has 19 years of industry experience that includes water treatment, energy efficiency, renewable energy, project finance, and carbon emissions management. Before joining World Energy, he was a Global Program Manager for CH2M Hill, engaged in developing emissions reduction projects around the world.

This presentation will discuss the current state of competitive energy markets, and the integration of new markets for renewable energy and emissions credits. We will also compare various market mechanisms for trading energy and environmental commodities and discuss World Energy's view on future development of these markets domestically and internationally.

World Energy operates leading online exchanges for energy and energy-related products. Our proven approach provides market intelligence, promotes liquidity, and creates price transparency for all market participants, helping our customers to transact with confidence and get the best possible price. Our methodology supports Sarbanes-Oxley compliance and has helped our customers win awards for innovation, cost savings and green procurement.

*The Future of Manufacturing Summit
August 7th 9:40 - 10:10 AM Salon B*

Shaw Environmental & Infrastructure, Inc.

John Kinsella, PG, RAB
Vice President, National Practice Program

John Kinsella has designed and implemented successful environmental programs for a range of clients including Biogen, DOE, HP and Sony. John also helped facilitate a very successful EPA/Industry/NGO project that invited EPA and citizen groups to view EMS operations first hand. During this time he worked with Annette Dennis McCully with whom he co-authored ***How to Implement an ISO 14001 EMS: A Practical Guide***. John holds a B.S. from Trinity College (University of Dublin) and an M.S. from the University of London, U.K.

Managers at all levels are being cajoled and directed to “go green” with their business at the same time as they implement such tools as Lean Six Sigma, balanced Scorecard, and ISO management systems. Using examples, we’ll show how organizations are integrating these tools into a single management process to build sustainable green programs and recognize business efficiencies.

Shaw Environmental & Infrastructure, Inc., a subsidiary of The Shaw Group Inc., is a leading provider of consulting, engineering, construction, remediation, facilities management, and technology services for government and private-sector clients worldwide. Our highly-skilled team of approximately 7,000 professionals is strategically located in more than 90 offices throughout the United States and abroad.



August 7th 1:00 - 2:00 PM Salon B

Supply Chain



CHAIR
Teresa M. Finn
*Vice President of Operations
North America*
Supply Chain Consulting



Gary G. McCann
*Business Development Executive
Sensors & Actuators EBO*
IBM Canada Ltd.



What Business Demands.



Laurent Ducom
Vice President
Satyam Computer Services

The Future of Manufacturing Summit

Teresa Finn is responsible for the day to day operating activities for North America, including revenue and sales growth and overall financial goal management. She has 20 years of experience in software development organizations, providing solutions for industries that include supply chain, energy and defense. Her tenure in the software industry has presented opportunities and value of technology in business and continual operational process improvement.

Gary G. McCann came to IBM Canada with over 23 years of experience in a variety of technical, sales and senior management roles. He has helped build IBM's wireless business over the past seven years as part of IBM's Americas Emerging Business Opportunities Organization. The Sensors and Actuators practice is focused on delivering end to end wireless solutions in a variety of industries, integrating any devices through any networks accessing any data. Solutions include Radio Frequency Identification, Biometrics, Data Collection, Asset Monitoring, Fleet Management, Telematics, GPS/AVL and Smart Card Systems and all Wireless and Broadband Network solutions.

Laurent Ducom is Vice President for aerospace solutions with Satyam Computer Services Ltd. He is responsible to define, grow and implement IT and engineering solutions customized to the aerospace and defense industries, leveraging Satyam's leadership in these domains. Laurent comes with close to 20 years A&D experience with companies such as Bombardier Aerospace and Thales.

Panel – Advanced Materials

August 7th 2:00 - 3:00 PM Salon B



CHAIR

Jens Hinrichsen
*Director Aerospace Product
Strategy and Development*
Alcoa Technical Center



Stéphane Robert
President and CEO
Raymor Industries Inc.



 National Research
Council Canada



Dr. Prakash C. Patnaik, FASM
Director
Structures & Materials Performance Laboratory
Institute for Aerospace Research
**National Research Council Canada,
Ottawa.**



Louis Luedtke
President & CEO
National Composite Centre

Alcoa is the world's leading producer of primary aluminum, fabricated aluminum, and alumina, and is active in all major aspects of the industry. Alcoa employs 122,000 employees in 44 countries. We serve customers in aerospace, automotive, packaging, building and construction, commercial transportation, defense, and industrial markets. Through design, engineering, production, and other capabilities, we offer integrated solutions to customers.

Manufacturing Processes and Associated Cost for Hybrid Materials of Wing Box Skins

Material research, design and testing of hybrid wing skins delivered a break-through for aircraft maintenance and related cost. Combining thin aluminum sheets with glass fibers and adhesives results in elimination of fatigue crack growth in metal-based wing box skins. In addition, weight is reduced by 20% due to the opportunity to increase loading/stressing of the wing structure. To make the technical success complete, the level of component cost had to be kept below cost levels known from composite structures. The presentation will outline the advanced manufacturing processes designed for a production rate of 480 aircraft per year. High production rates require at first robust processes as well as short process times and optimum flow on the shop floor at a high quality standard. Some of the enablers will be described in detail. Finally, results from a back-to-back comparison of the industrial environments for hybrids and for composites will be discussed.

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Dr. Patnaik current responsibilities as Director of the Structures & Materials Performance Laboratory (SMPL) one of the five Laboratories of NRC Aerospace include the management of the research and development and testing evaluation of aerospace Structures, Materials/coatings for aircraft engines, spacecraft applications and Aeroacoustics & Structural Dynamics, NDE and airworthiness certification related various collaborative projects with Canadian industries and other Canadian Government Departments.

The National Composite Center, a not-for-profit 501c3 entity, exists to incubate both technology and companies, and to accelerate the transfer of advanced composite materials technology and "know-how" to the manufacturing sector for the economic development of the region.



Lattice Technology, Inc.

Bill Barnes

General Manager

Lattice Technology Solutions in Action

Bill Barnes has over 25 years experience with engineering software and technology gained both as a user while working for a manufacturing company and as a vendor after joining a CAD industry in 1983. Since then Bill has continued to work with software companies providing solutions to the manufacturing industry.



The presentation describes how leading companies like Toyota, MAN, L3 communications, TARDEC and others are using Lattice Technology solutions to improve manufacturing processes and share data throughout their extended enterprise. It will include how Lattice Technology solutions are used in lean manufacturing at a large Japanese auto maker.

Lattice Technology provides companies with proven solutions for the use of intelligent 3D data across the enterprise. Lattice's XVL technology enables companies to securely provide highly accurate and compressed 3D files to partners, suppliers, and internal for applications in manufacturing, customer service, parts catalogs, technical documentation and more.



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