



SUPPLIERS PARTNERSHIP
FOR THE ENVIRONMENT™

**Suppliers Partnership for the Environment (SP)
2011 Activities Report**

The Suppliers Partnership for the Environment (SP) is an association of automobile original equipment manufacturers (OEMs) and their suppliers working in collaboration with the US Environmental Protection Agency (EPA) and other governmental entities to identify and implement creative projects and programs that will advance environmental sustainability while providing economic value to the automotive supply chain through strategic action and engagement.

SP's members work together to improve environmental performance while increasing value throughout the automobile supply chain. SP provides a forum for small, mid-sized and large automotive and vehicle suppliers to work with automobile OEMs to learn from each other and share environmental best practices while also providing economic value throughout the supply chain.

In 2011, SP members & liaisons included:



2011 SP Members / Liaisons

2V Industries, Inc. | aevitas | ALBEMARLE | ARCADIS | ASSET RECOVERY | Atwater Steel Trading Corporation | BAE industries, inc. | Chemico | CHRYSLER | Crystal Filtration | DENSO | edss | electricfil corporation | FEDERAL MOGUL | Ford | fts Technologies | GAGE | GDC, INC. | GTI | GM | Goodwill | GreenTree | HALEY & ALDRICH | HERITAGE | Invest Victoria | Johnson Controls | LEAR CORPORATION | MOBILE | MPS group | NIST | Oemeta | PERFORMANCE | PFA | POLAR | Quaker | RTI LABORATORIES, INC. | SRG | TestAmerica | USIT | VmX | WORK FORCE NETWORKING

SUPPLIERS PARTNERSHIP FOR THE ENVIRONMENT™

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2011 QUARTERLY MEMBERSHIP MEETINGS

In 2011, SP held four Quarterly Membership Meetings providing an opportunity for members to network with industry and government leaders, share environmental best practices and advance Work Group objectives. Meetings included:

- SP 1st Quarter Meeting – January 13, 2011 (Detroit, MI)
- SP 2nd Quarter Meeting – June 7, 2011 (Detroit, MI)
- SP 3rd Quarter Meeting – September 8, 2011 (Spring Hill, TN)
- SP 4th Quarter Meeting – November 8, 2011 (Detroit, MI)

As the Executive Committee has set a strategic goal for SP to expand its activities within the Southern United States SP collaborated with the [Tennessee Automotive Manufacturers Association \(TAMA\)](#) to host its 3rd Quarter Membership Meeting in Spring Hill, Tennessee. Over 150 representatives from the automotive supply chain participated in the meeting, making it the most well attended SP meeting to date. SP plans to continue to work toward its goal to expand its activities in the southern automotive supply chain in 2012.



Pictured (left to right): Steve Hellem, SP, Keith Updike, TAMA, Donald Stoegbauer, MAMA, Rick Walker, GAMA, Amy Bunton, SAWF, Lew Drummond, AAMA, Hal Johnson, SCAC at SP's 3rd Quarter Meeting

A diverse representation of guest speakers from the government, non-profit and automotive sectors participated in SP meetings in 2011, to discuss their efforts, share opportunities and report on the latest information and trends impacting the automotive supply chain. In 2011, SP created opportunities for several groups to meet with SP member companies, including:

- Martin Chilcott, Founder & CEO, 2degrees
- Lew Drummond, Executive Director, Alabama Automotive Manufacturers Association (AAMA)
- Benjamin Teitelbaum, Special Projects' Coordinator, Commission for Environmental Cooperation (CEC)
- Andre de Fontaine, Partnership Development & Deployment, Department of Energy (DOE) – Industrial Technologies Program
- Ben Vickery, Senior Technical Analyst, Department of Commerce, National Institute of Standards & Technology (NIST), Manufacturing Extension Partnership Program
- Rick Walker, Falcon Automotive Manufacturing; President, Georgia Automotive Manufacturers Association (GAMA)
- Donald Stoegbauer, Nissan North America; President, Mississippi Automotive Manufacturers Association (MAMA)
- Mike Coast, President, Michigan Manufacturing Technology Center (MMTC); Board Member, American Small Manufacturers Coalition (ASMC)
- Hal Johnson, Upstate Alliance; South Carolina Automotive Council (SCAC)
- Amy Bunton, Pathway Lending; Vice President, Southern Automotive Women's Forum (SAWF)
- Keith Updike, BBK; President, Tennessee Automotive Manufacturers Association (TAMA)
- Kevin Butt, General Manager/Chief Environmental Officer of Environmental/Safety Engineering, Toyota North America
- Stephen Zimmer, Executive Director, United States Council for Automotive Research (USCAR)
- A.W. Armstrong, Program Manager, By-Product Synergy, United States Business Council for Sustainable Development (US BCSD)
- Steve Owens, Assistant Administrator, Office of Chemical Safety and Pollution Prevention, US Environmental Protection Agency (EPA)
- Tom Murray, Chief, Prevention Analysis Branch, US Environmental Protection Agency (EPA)

A number of SP member companies shared case studies & lessons learned, best practices and technologies, products & processes that may be utilized by companies in the automotive supply chain seeking to improve their environmental performance during SP's 2011 Quarterly Membership Meetings, including:

- Albemarle Corporation – Specialty Chemical Company
- Asset Recovery & Management Group – Zero Waste, Zero Landfill and Lowest Lifecycle Cost
- Chrysler Group LLC – Seats from Recycled Foam: An Industry First; Zero Waste To Landfill; Corporate Sustainability Report
- EDSS – Profitable Energy Strategies in a Challenging Business Climate: Benefits for Designing or Upgrading an Energy Efficient Property
- EQ – The Environmental Quality Company – Environmental Management Services
- Ford Motor Company – Ford's Sustainable Materials Story: Then, Now and Future Opportunities; Strengthening OEM and Supplier Relationships through SP
- FTS Technologies – Flame Treatment of Interior TPO Parts Before Soft Touch Paint: Application & Environmental Benefits
- GDC Inc. – Total Solutions Provider for a Variety of Products & Components
- General Motors – Strengthening OEM and Supplier Relationships through SP
- Goodwill Industries of Greater Detroit – Training Individuals and Creating Employment Opportunities
- Green Tree Products and Technologies – Putting New Life Into Your HVAC System
- Haley & Aldrich, Inc. – Environmental and Engineering Services
- Johnson Controls – Greening the Automotive Supply Chain
- MPS Group – Industrial, Environmental and Facility Services
- Work Force Safety – Introduction to Hazardous Vapor Detection Systems and Service

SP QUARTERLY MEETINGS – SIDE EVENTS

Several additional events were organized in conjunction with SP's Quarterly Meetings, providing added value to participating companies. A few examples include:

SP 1st Quarter Meeting & the North American International Auto Show (NAIAS)

SP's 1st Quarter Meeting was organized in conjunction with the Industry Preview Day of the 2011 North American International Auto Show (NAIAS) in Detroit, MI providing members an opportunity to tour the show floor. Following the 1st Quarter Meeting, SP organized a special tour of the Show with Steve Owens, Assistant Administrator for the Office of Chemical Safety and Pollution Prevention (OCSP), US Environmental Protection Agency (EPA) and a group of SP member companies. Senior leaders from Chrysler, Ford, General Motors and Johnson Controls hosted Mr. Owens for a tour of their companies' exhibits.



Pictured: (left) Tom Murray, EPA, Greg Rose, Chrysler, Steve Owens, EPA, Kyle Jones, Jay Wilton and Reg Modlin, Chrysler; (middle) Vickie Mecsey and Mike Robinson, GM and Steve Owens, EPA; (right) Bob Holycross, Ford and Steve Owens

SP 2nd Quarter Meeting & National Environmental Sustainability Summit – Auto Industry Day

On June 7, 2011 SP partnered with the National Environmental Sustainability Summit (NESS) to organize a half-day session targeted towards the auto industry in conjunction with SP's 2nd Quarter Membership Meeting. Events included:

- *Sustainable Communities: Detroit Driving It Home!* in which speakers discussed how Detroit is becoming a sustainable community and creating a model for other urban cities across the country to follow. SP member Heather Cataldo of MPS Group moderated a panel of speakers including: Susan Mosey, University Cultural Center Association (UCCA) - Midtown Project; Jean Redfield, NextEnergy; and, Jacob Corvidae, WARM Training Center.
- A panel of government and auto industry representatives from the US, Canada and Mexico focused on opportunities to *Improve the Economic and Environmental Performance of the North American Automotive Industry Supply Chain*. Panel participants included: Maria Petrou, Environment Canada; Sandra Galindo, Profepa; Tom Murray, U.S. EPA; John Bradburn, GM; Jim Laney, DENSO; and, Benjamin Teitelbaum, CEC.
- A Plenary Panel on *Advancing Environmental Stewardship within the Automotive Industry*. Ken Zarker, P2 Section Manager, Washington State Department of Ecology moderated a panel of SP member company representatives including: Jay Wilton, Vice President, Engineering Planning and Regulatory Compliance and Certification, Chrysler Group LLC; Teri Kline, Manager, Environment & Energy Policy, General Motors; Bob Holycross, Manager, Vehicle Environmental and Energy Planning, Ford Motor Company; and, Steve Owens, Assistant Administrator for the Office of Chemical Safety and Pollution Prevention, U.S. EPA.



Pictured (left to right) Jay Wilton, Chrysler; Teri Kline, GM; Bob Holycross, Ford; Steve Owens, EPA; Ken Zarker, Washington State Dept. of Ecology

SP 3rd Quarter Meeting & CEC Workshop

On September 7, 2011 SP members participated in a Commission for Environmental Cooperation (CEC) sponsored *Workshop on Environmental Assistance Programs and Resources for Automotive OEMs and Suppliers* in Spring Hill, Tennessee organized in conjunction with SP's 3rd Quarter Meeting which included discussions of voluntary environmental programs and tools available for automotive companies in the US, Mexico and Canada and opportunities to develop new programs across North America.



Pictured: Tom Murray, US EPA

CEC workshop presenters included:

- Tom Murray, Chief, Prevention Analysis Branch, U.S. EPA
- Ben Vickery, Senior Technical Analyst, Department of Commerce, National Institute of Standards & Technology (NIST), Manufacturing Extension Partnership Program
- Lynn Lane, Human Resources Manager, Electricfil Corporation
- Alejandro Sosa, Director, Navista Mexico
- Maria Petrou, Environmental Protection Operations, Environment Canada
- Rahul Naik, Principal In-Charge, ARCADIS
- Benjamin Teitelbaum, Special Projects' Coordinator, Commission for Environmental Cooperation (CEC)

SP 4th Quarter Meeting & Member Company Facility Tours

In conjunction with SP's 4th Quarter Meeting, SP organized a tour of EQ's Belleville, MI facility. Participants toured EQ's [Michigan Disposal Waste Treatment Plant](#), the largest stabilization and treatment facility in North America (by volume) with the ability to process hazardous and non-hazardous materials through stabilization, chemical oxidation/reduction, deactivation, micro encapsulation and other permitted technologies. The tour also included EQ's [Wayne Disposal, Inc. Site #2 Landfill](#), the only commercial hazardous waste landfill in Michigan and the only landfill in EPA Region V permitted to accept PCB contaminated wastes.



Pictured: Breakout Groups Tour Goodwill Industries of Greater Detroit

In addition, SP members had the opportunity to tour the facility of [Goodwill Industries of Greater Detroit](#) during the 4th Quarter Meeting where they viewed the work of Goodwill's client / trainee teams, including:

- Small parts kitting with hand pack and AutoBaggers
- Automated 4-Hopper AutoBagger producing multi-component kits
- License Plate Bracket Kits
- Mopar Service Parts
- SASO Kits
- Diesel Pressure Sensors (DPS) assemblies
- Bracket Assemblies
- Custom Data, Power and Brake Cable assembly

SELECTED SP SUCCESS STORIES

Energy Management

In 2011, SP's Energy and Water Work Group hosted a Workshop on *Strategies in Energy Program Management and Available Resources for Manufacturers* at Chrysler's Headquarters in Auburn Hills, MI.

The Workshop featured a presentation from SP member Bill Allemon, ARCADIS, on "Managing the Manufacturing Energy Team: Strategies in Energy Program Management". Bill discussed energy management basics, energy management business models, Federal government energy programs such as EnergyStar and Save Energy Now, and utility rebate programs. Bill led workshop participants in a discussion of energy program management strategies and resources, including the upcoming ISO 50001 energy management standard, as well as upcoming regulatory updates with a potential impact on energy efficiency.



Pictured: Bill Allemon, ARCADIS

The Workshop also featured presentations from Gerald Polk, DTE Energy and David MacDonald, Consumers Energy on energy efficiency programs and resources available to Michigan based commercial and industrial customers.

Chemicals Issues Management

Since its formation, SP's Chemical Issues Work Group has provided a forum for discussing emerging chemical issues within the automotive supply chain, sharing best practices and discussing approaches to material risk assessment for automotive products. In 2011, the Work Group focused on Phase 3 of its Materials Assessment Strategy (MAS) project related to assessment of chemicals found in brake and tire wear debris. The MAS documents discussed by the Work Group in 2011 include:

- Hazard Assessment and Dose-Response Assessment for Wear Debris
- Exposure Assessment for Wear Debris
- Risk Assessment for Wear Debris

Materials Efficiency

At SP's 2nd Quarter Meeting in June 2011, SP member Mobile Fluid Recovery, Inc. received the General Motors Environmental Excellence Award for providing unique recycling ideas and collaborating on projects like turning oil-soaked booms from the Gulf of Mexico into Chevrolet Volt components¹.



Pictured (from left to right): Butch Flatt, MFR; Lee Hachigian, GM; David Briggs, MFR; Trevis Lyon, MFR; Shane Bennett, MFR; and, Brett Remington, MFR

In the Gulf oil spill project, Mobile Fluid Recovery extracted the liquid from the boom material. The company used a large high-speed drum to remove the oil and wastewater using a patented "free liquids" removal process. GM's team of partners on the Gulf oil spill project also included SP member companies Heritage Environmental, who collected the boom material in Louisiana, and GDC, Inc., who produced the Volt components.

Recycling the booms resulted in the production of more than 100,000 pounds of plastic resin used in the manufacture of a year's worth of air-deflection baffles for the Chevrolet Volt. The parts, which deflect air around the vehicle's radiator, are composed of 25 percent boom material, 25 percent recycled tires from GM's Milford Proving Ground vehicle test facility and 25 percent plastic shipping aids from GM's Fort Wayne, Indiana, assembly plant. The remaining 25 percent is a mixture of postconsumer recycled plastics and other polymers².

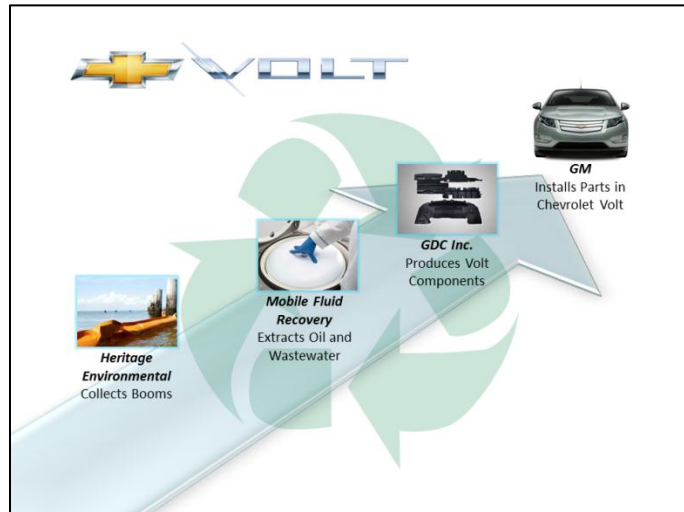


Diagram of Gulf oil spill project process

Using the recycled booms, whose oil and water was refined or used for energy, allowed GM and its supplier partners to:

- Reuse 227 miles of the absorbent boom material
- Save 29,000 gallons of water and oil from the nation's landfills
- Eliminate 212,500 pounds of waste from being thrown out
- Eliminate 149 tons of CO₂-equivalent emissions from entering the air³

"The relationships forged in the Suppliers Partnership group were a driving factor in creating a sustainable way to help in Gulf clean-up efforts," said Trevis Lyon, President, Mobile Fluid Recovery.

Technology & Networking

Through relationships developed within SP, FTS Technologies introduced its Flame Treatment Technology to General Motors and its suppliers in 2011. The technology lets paint stick to plastic vehicle parts like instrument and door panels without using primers that contain solvents.

According to GM, it evaluated the new technology as a total business case. Not only does it improve efficiency since it's faster than spraying primer, but the capital expense pays for itself in less than four months. In 2011, GM used the technology on the Chevrolet Cruze, Sonic, and Volt.



Pictured: FTS' Flame Treatment Technology

By using the FTS Flame Treatment Technology on the Cruze, for example, GM suppliers:

- Reduced solid and liquid waste (filters, cleaners, solvents and coatings) from 48 tons a year to less than one.
- Decreased air pollutants from 810 tons a year to 80 tons a year.
- Eliminated landfill waste like paint sludge and painted scrap material from 25 tons to nearly zero.⁴

Commission for Environmental Cooperation (CEC)

In 2011, SP members participated in a Commission for Environmental Cooperation (CEC) project that aims to “Improve the Economic and Environmental Performance of the North American Automotive Industry Supply Chain”. The project supports the development of innovative automotive supply chain organizations in both Canada and Mexico modeled after SP. It aims to create a network of industry partners to share best practices and success stories of how companies in the automotive supply chain are improving the environment and creating economic opportunity throughout the manufacturing process in each of the three countries.



SP members participated and presented in CEC project meetings and Workshops in 2011 in Canada, Mexico and the United States to support the development of Suppliers Partnership activities across North America.

SP 2011 LEADERSHIP AWARD

During SP's 2nd Quarter Meeting, SP's Vice-Chair, Russell Brynolf, FTS Technologies presented the 2011 SP Leadership Award to Heather Cataldo, MPS Group, for her leadership, dedication and commitment to SP. Heather was instrumental in working to coordinate the National Environmental Sustainability Summit (NESS) events in Detroit and collaboration with SP in 2011, and has been an active member of SP for many years including through the Materials Efficiency Work Group.



Pictured (from left to right): Steve Hellem, SP; John Bradburn, GM, Heather, Cataldo, MPS Group; and, Russell Brynolf, FTS Technologies

SP COMMUNICATIONS

SP produced five newsletters in 2011. SP News highlights the activities of SP and success stories of its members and is distributed to over 1,500 automotive industry, government and non-profit contacts. In addition SP produced the SP Monitor, a Members Only service highlighting business and government activity of interest to each of SP's Work Group topic areas, as well as general auto supply chain environmental news.

Steve Hellem, Executive Director, Kellen Mahoney, Program Manager and SP's Executive Committee and Work Group Chairs represented SP at Conferences and industry events throughout 2011.

FOR MORE INFORMATION ON SP

Steve Hellem, Executive Director
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REFERENCES

- 1: GM Recognizes Supplier for Environmental Excellence – June 10, 2011
<http://www.prnewswire.com/news-releases/gm-recognizes-supplier-for-environmental-excellence-123621709.html>
- 2: Creative Recycling At Its Best – GM 2010 / 2011 Sustainability Report – January 12, 2012
<http://gmsustainability.com/featureStories/build/waterReduction/wasteReductionPopOut.html>
- 3: Chevrolet Volt Spares Landfills From Gulf Oil Spill Waste – May 23, 2011
<http://www.prnewswire.com/news-releases/chevrolet-volt-spares-landfills-from-gulf-oil-spill-waste-122458453.html>
- 4: GM Eliminates Solvent from Suppliers' Paint Process – August 23, 2011
http://media.gm.com/content/media/us/en/gm/news.detail.html/content/Pages/news/us/en/2011/Aug/0823_solvent