

US EPA ARCHIVE DOCUMENT

**INTRODUCTION** Since the early 1990s, EPA has collaborated with businesses and trade associations to establish and meet shared environmental goals. Beginning with the 33/50 and Green Lights Programs, which promoted voluntary efforts to reduce releases and transfers of priority chemicals and to increase the use of energy-efficient lighting, respectively, EPA has expanded the depth and breadth of its partnership programs to more than 40 efforts, including the Sector Strategies Program.<sup>1</sup>

EPA designed the Sector Strategies Program to take advantage of trade associations' leadership positions within their respective sectors. Active participation in the Sector Strategies Program now includes 24 trade associations in 12 key sectors,<sup>2</sup> representing a combined \$2.1 trillion (19%) contribution to the U.S. gross domestic product, with more than 780,000 facilities and locations across the country.<sup>3</sup>

**THE MISSION OF TRADE ASSOCIATIONS** Trade associations often serve as the voice of their industries before the government, public, and media. At the same time, trade associations provide a forum for their industries to share information and ideas and to work jointly on programs of benefit to the sector, such as environmental, health, and safety (EH&S) initiatives. Trade association representatives with deep knowledge of their respective industries can have valuable credibility within their sectors and can provide helpful technical, regulatory, and compliance assistance to their members and allies. Through a variety of mechanisms, ranging from Web sites, electronic newsletters, and print materials to workshops, meetings, industry events, and awards programs, trade associations can promote research, education, and other activities that address the needs and concerns of their members. Many trade associations also develop, promote, and

distribute sector-specific information to the full array of small, medium, and large businesses within their industries and to affiliated groups, such as suppliers, vendors, and consultants.

Through the above mechanisms, trade associations can play an important role in promoting environmental stewardship. For example, they can provide critical technical expertise in identifying and vetting innovative ideas to advance their sectors' performance, and they can take on leadership positions to encourage the adoption of these ideas. Many trade associations promote changes that better prepare members to meet evolving market conditions, such as increasing preferences for greener products and production activities or certification to International Organization for Standardization (ISO). ISO 14001, for example, is an internationally accepted specification for environmental management systems (EMS).<sup>4</sup>

## **TRADE ASSOCIATIONS AS ENVIRONMENTAL LEADERS**

The 24 trade associations that participate in the Sector Strategies Program provide examples of four key roles associations can play in promoting environmental stewardship:

- Setting environmental standards for members;
- Setting "stretch" goals for the sector;
- Providing guidance and technical assistance to members; and
- Measuring environmental progress by the sector.

**Setting Environmental Standards for Members** A number of trade associations, including the Synthetic Organic Chemical Manufacturers Association (SOCMA), National Paint and Coatings Association (NPCA), and American Forest & Paper Association (AF&PA) have demonstrated leadership by setting and promoting specific standards for their members.

In each of these cases, conformance with the standards is a prerequisite for participating in the trade association. In addition, the American Meat Institute (AMI) developed a voluntary EMS program for its members.

**ChemStewards<sup>SM</sup> – Road to Continuous Improvement** In September 2005, SOCMA launched the ChemStewards performance improvement program to advance the EH&S and security profile of its members. All active SOCMA members participate in the program as a condition of membership in the association. ChemStewards offers a three-tiered approach to participation: Fundamentals, Enhanced Performance, and Excellence. All three tiers require adherence to a set of core principles, in addition to metrics, security, and implementation of an environmental, health, safety, and security (EHS&S) management system verified by an independent third party. SOCMA promotes the program through regular outreach meetings for its members and its annual EHS&S awards program.<sup>5</sup>

**Coatings Care<sup>®</sup> – Providing for a Cleaner, Safer Coatings Industry** Coatings Care is a comprehensive program developed by NPCA to assist its members with integrating EH&S activities into corporate planning and operations. Organizations make a commitment to Coatings Care as part of their membership in NPCA. Coatings Care organizes EH&S activities into five codes of management practice – Manufacturing Management, Transportation and Distribution, Product Stewardship, Community Responsibility, and Security – and NPCA provides extensive support to its members in these areas. Coatings Care integrates EH&S practices that are consistent with other industry standards, such as those found in the ISO 14000 series.<sup>6</sup> Five individual paint and coatings facilities have been accepted into EPA's Performance Track program based in part on their Coatings Care EMS systems.<sup>7</sup>

**Sustainable Forestry Initiative<sup>®</sup> – Growing Tomorrow's Forests Today<sup>®</sup>** AF&PA members participate in an EH&S Principles Program, which requires annual adherence to eight principles as a condition of membership in the association. An accompanying EH&S Principles Verification Program requires members to submit data biennially to AF&PA.<sup>8</sup>

These programs work in harmony with the Sustainable Forestry Initiative (SFI) Program, to which member companies must also adhere. The SFI Standard, developed by an independent Sustainable Forestry Board, establishes a land stewardship ethic that integrates the reforestation, nurturing, and harvesting of trees for useful products with the conservation of soil, air and water resources, wildlife and fish habitat, and forest aesthetics.<sup>9</sup> The SFI Program includes 150 million acres of forestland in North America. By the end of 2005, 136 million acres had been independently certified to the SFI Standard.<sup>10</sup>

In the past year, the SFI Standard was expanded to include new performance measures and indicators related to international procurement, old growth forests, invasive exotic species, imperiled and critically imperiled species, landscape assessments, wood supply chain monitoring, and social issues.<sup>11</sup>

**Environmental MAPS Program – EMS for Meat and Poultry Processing Companies** AMI's Environmental MAPS Program is a voluntary program providing tools coupled with recognition to increase EMS development and implementation throughout the meat and poultry industry.<sup>12</sup> The program has four performance tiers – Master, Achiever, Pioneer, and Star. The EMS component of the program is based in part on the customized *EMS Implementation Guide for the Meat Processing Industry*, developed by AMI in partnership with the Sector Strategies Program.<sup>13</sup>

**Setting “Stretch” Goals for the Sector** In addition to the programmatic standards and certification requirements identified above, some trade associations, including AF&PA, American Iron & Steel Institute (AISI), and Portland Cement Association (PCA), have set voluntary goals for their sectors with respect to EMS adoption or other priority voluntary activities.

**Climate VISION – Voluntary Actions to Reduce Greenhouse Gas (GHG) Emissions** AF&PA, AISI, and PCA are members of Climate VISION, a voluntary program administered by the U.S. Department of Energy (DOE) to reduce GHG intensity (the ratio of emissions to economic outputs).<sup>14</sup>

- AF&PA expects that its members will reduce the sector’s GHG intensity by 12% by 2012 (relative to 2000 levels).
- AISI has committed to achieving a 10% increase in sector-wide average energy efficiency by 2012 (from 2002 levels).
- PCA has committed to a 10% reduction in CO<sub>2</sub> emissions per ton of product by 2020 (from 1990 levels).<sup>15</sup>

**Cement Manufacturing Sustainability Program – Concrete Thinking for a Sustainable World®** Through PCA, the U.S. cement industry set voluntary targets to increase the adoption of auditable, verifiable EMS in cement plants across the nation. Specifically, the industry set the following goals for EMS adoption: at least 40% of U.S. cement plants will adopt EMS by the end of 2006, 75% by the end of 2010, and 90% by the end of 2020. PCA also adopted a voluntary target of a 60% reduction in the amount of cement kiln dust (CKD) disposed of per ton of production by 2020 (from a 1990 baseline).<sup>16</sup>

**National Metal Finishing Strategic Goals Program** Prior to launching the Sector Strategies Program, EPA worked with three national metal finishing trade associations and other

stakeholders to develop EMS guidance and facility-level performance goals under the Strategic Goals Program (SGP). Between 1998 and 2002 more than 500 metal finishers, 20 states, and 80 local regulatory agencies participated in the SGP. Data from reporting facilities indicate substantial progress toward goals for water use, energy use, and reduction of emissions and releases. Results are available on the SGP Web site.<sup>17</sup> SGP activities continue in several EPA regions.

### **Providing Technical Assistance to Members**

A fundamental role of many trade associations is to provide technical assistance to their members on areas of interest across their industries. Virtually every sector partner has played a key role in developing and promoting tools to enhance the environmental performance of its membership.

### **EMS Tools – Guidance, Training, and Marketing Outreach**

Under the Sector Strategies Program, more than a dozen trade associations and numerous member companies have provided insights and inputs to EPA in developing and disseminating sector-specific EMS guidance and training. By tapping into the partners’ networks, the Sector Strategies Program maximizes the chances that the entire universe of parties EPA wants to reach is receiving the materials. The following *EMS Implementation Guides* are the direct result of investments of time, energy, and expertise on behalf of EPA and the sector trade associations:

- Die casting, created in partnership with the North American Die Casting Association (NADCA);
- Shipbuilding and ship repair, created in partnership with the American Shipbuilding Association (ASA) and the Shipbuilders Council of America (SCA);
- Meat processing, developed with AMI member companies and the state of Iowa;

- Foundries, created in partnership with the American Foundry Society (AFS) and Indiana Cast Metals Association;
- Specialty-batch chemical manufacturing, created in partnership with SOCMA;
- Metal finishing, created in partnership with the American Electroplaters and Surface Finishers Society, Metal Finishing Suppliers' Association, and National Association of Metal Finishers;
- Construction, created by the Associated General Contractors of America (AGC) with assistance from EPA; and
- Electric arc furnace operations, created in partnership with the Steel Manufacturers Association (SMA).

Each guide provides detailed, sector-specific information for facilities interested in implementing an EMS.<sup>18</sup> Several of the guides also incorporate lessons learned and examples drawn from the experiences of companies that participated in EPA sector pilots with die casting, foundry, meat processing, shipbuilding and ship repair, and metal finishing facilities. Both the associations and EPA have promoted these products through their Web sites, industry meetings, and other mechanisms.

Many associations, including AGC, SMA, ASA and SCA, have teamed with EPA to provide focused training workshops for facilities adopting or improving their EMS. Also, with support from the Sector Strategies Program, ASA and SCA are exploring ways to combine EMS with “lean production” principles to help companies improve efficiency, drive down costs, and increase profit margins.<sup>19</sup> This combined EMS/lean program will enable shipyards to increase their production efficiency while meeting environmental standards.

Members and partners from six sectors – agribusiness (meat processing), construction, metal casting, metal finishing, ports, and shipbuilding and ship repair – also worked jointly with

EPA to develop sector-specific marketing materials that lay out the “business case” for implementing an EMS, highlighting the financial and environmental benefits. Each of the guides and brochures are available on the trade associations’ Web sites as well as on the Sector Strategies Program Web site, further broadening the reach to target audiences.<sup>20</sup>

Additionally, the six national organizations representing the colleges and universities sector<sup>21</sup> developed a strategy to deliver outreach tools, training resources, and support to promote EMS development on college and university campuses. In 2005, the organizations sent a letter to college and university presidents/chancellors to promote the implementation of EMS and encourage environmental stewardship within their organizations.<sup>22</sup> The letter included a one-page business case, *EMS Fact Sheet for Senior Administrators*, which was developed to raise awareness about the benefits of an EMS and to share testimonials from universities that have realized many of these benefits.<sup>23</sup> In addition, a national Web site has been established to assist colleges and universities with EMS development.<sup>24</sup>

With Sector Strategies Program funding as seed money, the American Association of Port Authorities (AAPA) and the Global Environment and Technology Foundation established an EMS Assistance Project to help public seaports develop EMS.<sup>25</sup> Nine ports and two federal maritime facilities participated in the pilot project. Early results indicate improvements in environmental awareness and communication among employees and tenants, documentation and operational efficiency, integration of environmental considerations into strategic business plans, emergency response planning, and root cause analysis. Other improvements include increased purchases of sustainable energy, reductions in air emissions through retrofits and replacement of old diesel equipment and the purchase of low sulfur fuel, and reductions in waste and



water quality impacts.<sup>26</sup> In early 2006, AAPA initiated a second round of the EMS Assistance Project with nine facilities. Some participating facilities will implement a traditional EMS, while others will use a systems approach to security management, integrating or linking the resulting system with their EMS as appropriate.<sup>27</sup>

**Other Outreach and Assistance** AGC, PCA, AISI, SCA, and ASA are galvanizing support for green initiatives.

For example, AGC is promoting green construction through its *Environmental Solutions Series* and *Constructor* magazine. AGC also is making a variety of green construction resources available to the sector through the Web, including AGC's *Green Construction Bible* and links to a green products directory, information on state and local green buildings programs, a tutorial about the Leadership in Energy and Environmental Design (LEED®) rating system, and information on recycling construction and demolition debris.<sup>28</sup>

PCA is embarking on an industry-wide communications program to educate peers, customers, and the public on the benefits of concrete for sustainable development and green buildings.<sup>29</sup> Similarly, the Steel Recycling Institute, a unit of AISI, advises architects, engineers, designers, and others on how to build green with steel framing, roofing, and siding through publications such as *Steel Takes LEED™ with Recycled Content*.<sup>30</sup>

SCA, ASA, and Gulf Coast shipyards, along with representatives from EPA and state environmental agencies, developed guidance and training on a series of practical, cost-effective best management practices aimed at reducing pollutants in stormwater.<sup>31</sup>

**Partnerships with Other Voluntary Programs** Several trade associations work side-by-side with EPA to promote other voluntary efforts, providing education, outreach, and assistance to their membership networks. For example, AGC, AISI, NPCA, NADCA, SMA, and SOCMA are all Performance Track Network Partners, promoting EMS and facility membership in EPA's Performance Track program.<sup>32</sup> Together these network partners have helped to increase the number of Performance Track member facilities in their industries from 11 to 56 between 2001 and 2005.<sup>33</sup> Other associations, including AGC and AAPA, are participating in EPA's National Clean Diesel Campaign through Clean Construction USA, Clean Ports USA, and other voluntary efforts to reduce diesel emissions across the country.<sup>34</sup>

Several trade associations in the Sector Strategies Program also participate in other agencies' voluntary programs that address environmental issues. For example, AF&PA, AFS, NADCA, AISI, and SMA participate in DOE's Industrial Technologies Program, which, through its Industries of the Future initiative, coordinates joint industry-government funding for research and development to generate new technologies to boost productivity and save energy.<sup>35</sup>

**Measuring Environmental Progress by Sectors** Many sectors in the Sector Strategies Program are collecting data on their environmental performance to establish baselines against which to measure future improvements and to increase public awareness of their achievements. Several associations have tracked performance for more than 30 years, while others are initiating data collection efforts.

**Forest Products' Biennial EH&S Report** In 2000, AF&PA began publishing biennial reports on EH&S program implementation and environmental performance across its membership. These reports incorporate earlier information collected by AF&PA and predecessor organizations going back to 1975. The reports display trends in areas such as energy use, air emissions, and water quality.<sup>36</sup>

**Cement Manufacturing's Annual Survey** PCA has conducted an annual survey of members since 1970 to collect data to measure performance toward reduction targets related to energy use and labor practices. Recently, PCA modified its survey to collect information on industry targets for EMS implementation, CKD reduction, and CO<sub>2</sub> emissions. Additionally, PCA is collecting data to set baselines for future environmental improvements in areas such as water use and air emissions of NO<sub>x</sub> and SO<sub>x</sub>. PCA recently reported on these results and other issues in its inaugural Sustainable Development Report.<sup>37</sup>

#### **Specialty-Batch Chemical Data Collection and Reporting**

In January 2004, SOCMA began collecting company metrics data on energy efficiency. This information will be made available to the public in 2006. In addition, SOCMA provides information about its members' releases to air, land, and water (as reported to EPA's Toxics Release Inventory) on its Web site.<sup>38</sup>

**Iron & Steel Reporting on Sustainability Indicators** Starting with a 2004 reporting year, AISI members have agreed to begin collecting data on energy intensity, which is part of their Climate VISION commitment, as well as the following four additional sustainability indicators: GHG emissions, material efficiency, steel recycling, and EMS implementation.<sup>39</sup>

**Preliminary Survey of Port Authorities** In December 2004, AAPA initiated a survey of its U.S. member ports. The survey measured interest in environmental issues and identified indicators for environmental activities that ports are undertaking, primarily on a voluntary basis.<sup>40</sup> The results are described in more detail in the Ports chapter of this report

**Colleges & Universities' Self-Tracking Tool** The colleges and universities sector is taking steps to develop performance metrics, collect data, and track performance. In 2005, six national organizations in the sector launched a Web-enabled Self-Tracking Tool that enables colleges and universities to collect and analyze data on their campuses' environmental impacts. The Self-Tracking Tool gathers four years of retrospective data on four environmental indicators – energy use, hazardous waste, solid waste/recycling, and water use. Schools can use the tool to identify and analyze trends in their data and benchmark their environmental performance against aggregated data from other schools of similar size and type (school names are kept confidential).<sup>41</sup>

**CONCLUSION** Trade associations can play a vital role in leading environmental stewardship by setting goals and standards, providing assistance, and measuring progress. In addition, the collaboration between trade associations and EPA is advancing the concept of environmental stewardship throughout these sectors. Working together through voluntary approaches such as the Sector Strategies Program enables industry and EPA to meet shared environmental goals. Implementation of improved, and often certified, EH&S and EMS systems enhances environmental performance, allowing sectors to show progress through established metrics. Over the coming year, the Sector Strategies Program will continue to promote environmental leadership in cooperation with its sector partners, with emphasis on performance measures and other opportunities to improve environmental performance.