

National Insulation Association

PROGRAMS & OUTREACH

A YEAR OF CHANGE: CREATING OPPORTUNITY



OUR INDUSTRY, OUR TIME

The National Insulation Association (NIA) is a not-for-profit trade association representing 350 member companies consisting of contractors, distributors, laminators, fabricators, and manufacturers that provide thermal insulation, insulation accessories, and insulation components to the commercial, mechanical, and industrial markets throughout the nation. Since 1953, the Northern Virginia-based association with a dedicated, professional staff has been the voice of the insulation industry and is dedicated to keeping the commercial and industrial insulation industry up to date on the latest industry trends and technologies.

NIA FOUNDATION FOR EDUCATION, TRAINING, AND INDUSTRY ADVANCEMENT

Broadening exposure for the mechanical insulation industry and NIA

The NIA Foundation promotes the benefits of commercial and industrial insulation to end users, specifiers, architects, energy managers, plant operators, building owners, facility managers, government agencies, and others. Our mission is to establish NIA as the recognized authority in the insulation industry, to increase industry professionalism, to provide educational tools and resources, and to increase awareness of the need for and benefits of mechanical insulation.

Strategic Partnerships

As a result of the Foundation's efforts, NIA has entered into agreements with several strategic industry partners to educate specifiers and end users about the benefits of insulation. These partners include:

- The American Institute of Architects (AIA)
- American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE)
- American Society of Mechanical Engineers (ASME)
- The Association of Energy Engineers (AEE)
- Association for Facilities Engineering (AFE)
- The Construction Specifications Institute (CSI)
- Industrial District Energy Association (IDEA)
- Mechanical Contractors Association of America (MCAA)
- National Association of State Energy Officials (NASEO)
- Plumbing-Heating-Cooling Contractors Association (PHCC)
- Refrigerating Engineers & Technicians Association (RETA)
- TAPPI (Technical Association for the Pulp & Paper Industry)

Each group works differently, as each has a unique membership with targeted interests. NIA's approach and partnership with each group is customized to meet the needs of their members by

providing relevant information that increases their awareness of insulation. Following is a detailed summary of the Foundation's involvement with each of its strategic partners.

AIA

NIA has been recognized by AIA as a "registered provider," which acknowledges that its training classes provide valid AIA learning units. AIA lists all registered training classes on its website.

ASHRAE

NIA has developed a partnership agreement with ASHRAE, primarily focused on HVAC and refrigeration applications but also including other mechanical insulation applications.

- NIA, the North American Insulation Manufacturers Association (NAIMA), and ASHRAE have developed a training class focused on Mechanical Insulation in the HVAC market segment. The class was held in Dallas in January 2007 and in New York City in January 2008 in conjunction with ASHRAE's Annual Show and Convention.
- The ASHRAE training class has been converted to a webinar format, with the first webinar presented in April 2008.
- NIA is currently reaching out to the ASHRAE Chapter network with a series of awareness educational presentations.

ASME

A Memorandum of Understanding between ASME and NIA was signed.

- NIA created a customized training program for ASME members entitled "Insulation Materials and Applications," modeled after the National Insulation Training Program (NITP) course. The program is currently being reviewed and potentially revised to include portions of the Insulation Energy Appraisal Program (IEAP).
- NIA has developed a series of educational presentations about mechanical insulation awareness that are being offered to ASME's chapter network. Fifty such presentations

were made through 2009, and additional meetings are scheduled for 2010.

- NIA provided a major presentation at the ASME International Mechanical Engineering Congress and Exposition in 2005 in Orlando, Florida; in 2006 in Chicago, Illinois; and in 2007 and 2009 at the 53rd and 55th Annual Citrus Engineering Conferences in Lake Alfred, Florida.
- By invitation, NIA participated in ASME's Grand Energy Challenge Workshop in Washington, D.C., in March 2009.
- NIA has established mechanical insulation under ASME's "Communities of Practice" on the ASME website and has published several mechanical insulation articles in ASME publications.

AEE

A Strategic Partnership Agreement was executed to leverage the resources of both organizations. The agreement contains an outline of activities, including NIA presentations at AEE chapters; exploring joint energy appraisal certification programs; website linkage; presentations at mutual annual meetings; NIA's continued participation in the World Energy Engineering Congress; mutual article development; potentially creating a section on mechanical insulation in future energy handbook-type publications; and several other initiatives focused on promoting the use of insulation in energy conservation and the reduction of greenhouse gas emissions.

- NIA developed a series of mechanical insulation awareness educational presentations presented to 14 AEE chapters through 2009, with several additional meetings scheduled for 2010.
- AEE published two mechanical insulation articles, "Insulation Management—Maintenance and Its Value to Industry" and "Insulation Is a Forgotten Technology That Can Provide an Unrivaled Return on Investment," in its Facility Managers Institute e-newsletter. "Insulation, The Forgotten Technology for Energy Conservation" was published in the

NIA has participated in more than 100 meetings with Congressional offices, beginning with these United States **Senators & Representatives**



April/May 2008 issue of *Energy Engineering*.

- NIA presented a paper, “Insulation: The Forgotten Technology for Energy Conservation,” at the 30th World Energy Engineering Congress in Atlanta in August 2007 and the 31st Congress in Washington, D.C. in October 2008, and an insulation track (4 presentations) at the 32nd Congress in Washington, D.C. in November 2009.

AFE

An agreement was reached to enter into a Strategic Partnership Program. This includes promoting NIA presentations at AFE chapters; providing articles and appropriate links to AFE’s online membership newsletter; exploring the potential of educational presentations by NIA through AFE’s virtual seminar program; mutual article exchange; and other initiatives geared toward awareness and educational programs on the value of properly specified, applied, and maintained mechanical insulation in the workplace.

CSI

NIA signed an Educational Partner Agreement with CSI.

- NIA presented both “Mechanical Insulation—How Do I Choose the Best for My Application?” and “Mechanical Insulation—Selecting the Right Design Criteria for the Job” at the April 2005 Annual CSI Show & Convention in Chicago.
- NIA received exposure through the CSI website, which recognizes the NIA presentations, as well as the partnership between NIA and CSI.
- NIA presented “The Power of Insulation” at the 2006 CSI Show and “Insulation Technology and Innovation” at the 2007 CSI Annual Show and Convention.
- NIA conducted a webinar through CSI’s network entitled “Insulation, The Forgotten Technology.”

IDEA

NIA is developing a strategic alliance with IDEA

that will include a variety of awareness and education initiatives focused on “district energy” systems and potentially working together on energy and emission reduction federal legislative matters.

MCAA

MCAA has published a series of insulation articles in its *Reporter* newsletter. To date, articles on the following topics have been included:

- Insulating Against Mold Growth
- Insulation’s Role in Sustainable Design
- The Old and New Generation of Elastomeric Insulation.

NASEO

NIA has joined NASEO, and various initiatives are being developed, including a working alliance on Capitol Hill and state initiatives. Most recently, NIA was invited to their September 2009 meeting and gave a mechanical insulation presentation to the NASEO Industrial Committee. NIA has also been invited to present during a NASEO webinar in 2010.

PHCC

A Memorandum of Understanding between PHCC and NIA was signed.

- PHCC will provide NIA copies of its Tool Box product catalog and will extend PHCC member pricing to NIA members.
- A version of NIA’s Products and Services catalog was customized for PHCC’s use, including special discounted pricing to its members.
- Insulation articles will be submitted to PHCC’s industry newsletter, *Connection*.

RETA

NIA has developed an alliance with RETA that includes a variety of educational initiatives focused on insulation in the refrigeration/below-ambient temperature industry. The initiatives have included making two presentations at their Annual Meeting, September 2008, in Hershey, Pennsylvania; several articles published in the RETA technical and membership communication documents; two presentations for their 100th Annual Meeting, October 2009, in Monterey, California; and a “Power of

Insulation” column in their 2009 membership newsletter. Several chapter presentations have been confirmed for 2009, and NIA has accepted an invitation to participate in their 100th Conference & Trade Show, November 2010.

TAPPI

NIA has executed an alliance with TAPPI that will focus on insulation educational initiatives applicable to the pulp and paper industries. The initiatives will include outreach to TAPPI chapters and member organizations with presentations, articles, etc. NIA’s first presentation was at TAPPI’s annual meeting, PaperCon 09, in June 2009 in St. Louis, Missouri, and the annual NE Regional meeting in September in Orone, Maine.

NIA has identified and will be investigating similar alliances with other organizations.

NIA’S FOUNDATION FOR EDUCATION, TRAINING, AND INDUSTRY ADVANCEMENT—MECHANICAL INSULATION MARKETING INITIATIVE (MIMI)

This initiative began through the Foundation’s effort to create a national, product-generic marketing campaign. The Foundation sought out its contributors’ marketing experts and formed the Mechanical Insulation Marketing Initiative (MIMI).

MIMI is focused on developing commercial and industrial opportunities that will grow the market, increase the professionalism of the industry, and increase the value of NIA membership.

With the changes in our nation’s capital and the economy, MIMI recognized an unprecedented opportunity in the tremendous attention to the nation’s move toward energy efficiency and independence, the environment, and job creation/ preservation, as well as the many prospects around the stimulus. Golin-Harris Public Affairs, which has government relations, issue, and public relations expertise, is helping NIA work aggressively on Capitol Hill to:

- Advocate for creation of a meaningful tax incentive for installation of mechanical insulation and/or an extension of existing

From Left: Senator Evan Bayh (D-IN); Senator Robert Byrd (D-WV); Senator Barbara Boxer (D-CA); Representative Russ Carnahan (D-MO); Senator Susan Collins (R-ME); Senator Energy & Energy Efficiency Caucus; Representative Jay Inslee (D-WA); Representative Steve Israel (D-NY); Senator Tim Johnson (D-SD); Senator John Kerry (D-MA) Finance; Senator (R-AK) Ranking Member, Senate Energy & Natural Resources Committee; Representative Ed Pastor (D-AZ); Speaker Nancy Pelosi (D-CA); Senator Harry Reid (D-NV) Majority Leader; Senator Tester (D-MT); Senator Peter Visclosky (D-IN); Senator George Voinovich (R-OH) Appropriations; Rep. Zach Wamp (R-TN) Energy & Water Subcommittee.



- incentives for mechanical insulation;
- Urge the establishment of a national green building standard that recognizes the important role of mechanical insulation in the commercial and industrial sectors;
- Identify and secure federal funding for federal, state, and local government and private sector contract opportunities for members; and
- Seek grants and contracts to fund an NIA program that would educate industry on the benefits of mechanical insulation.

Department of Energy's Best Practices Steam Program (DOE BPS)

NIA has been a member of the DOE BPS Steering Committee since its inception in 1998. NIA's Executive Vice President, Bill Pitkin, was elected their inaugural chairman for the first several years. NIA serves on the Steering Committee, and Michele Jones, NIA's current EVP/CEO, serves as the Marketing and Business Chair. This group is responsible for developing tools that will assist the industrial sector in achieving greater energy efficiencies. They have developed several software measurement tools, tip sheets, and educational and awareness programs and are now very supportive of the Save Energy Now (SEN) program, which utilizes all the tools this group helped develop. NIA continues to work with DOE in this partnership to better the energy efficiency of the industrial sector.

Contractors Coalition

Recently, NIA was asked to participate in a Coalition of Contractors to promote stimulus funds for "shovel ready" projects to the Obama transition teams. In addition, this group promoted increased tax incentives toward these projects. Two letters submitted to President Obama were created and signed by 25 organizations, including NIA. In addition, several ads were created and placed in the Capitol Hill publication *Roll Call* to support these endeavors.

NIA and Regional Insulation Associations

NIA enjoys a unique relationship with six regional insulation associations within the United States:

- Central States Insulation Association (CSIA), Robert Poje, Executive Director

- Eastern States Insulation Contractors Association (ESICA), John F. DeLillo, Executive Director
- Midwest Insulation Contractors Association (MICA), Tom Shimerda, Executive Secretary
- Southeastern Insulation Contractors Association (SEICA), Dee Gowen, Executive Secretary
- Southwest Insulation Contractors Association (SWICA), Linda Tracey, Executive Director
- Western Insulation Contractors Association (WICA), Robert Bergman, Executive Secretary

Each relationship supports collaborative efforts to improve the industry and assist with membership development.

NIA AND INTERNATIONAL ASSOCIATIONS

NIA supports the efforts of and has unique relationships with international insulation organizations:

- European Federation of Associations of Insulation Contractors (FESI)
- Thermal Insulation Association of Canada (TIAC)

Representatives from NIA participate in meetings, share information on industry-related matters, and participate in joint programs with these groups.

NIA'S TRAINING PROGRAMS

Insulation Energy Appraisal Program (IEAP)

The IEAP is a fully accredited 2-day certification program. Students learn how to evaluate the thermal performance of insulated versus uninsulated piping and equipment; determine the amount of energy and money a facility is losing with its current insulation system; interview customers to gather information for the appraisal; conduct a facility walk-through; use the 3E Plus® computer software program; complete a final customer report; and market their new appraisal skills. This program teaches appraisers to outline a facility in its current state of energy use and efficiency, and it can also demonstrate scenarios that may improve energy

efficiency and the environment, as well as save money.

National Insulation Training Program (NITP)

The NITP is a 2-day training program that covers all aspects of commercial and industrial insulation as a powerful technology for enhancing energy and cost efficiency, as well as process performance. Students acquire a working knowledge of insulation materials and system design that can help avoid costly mistakes that result in system failures and injury of plant personnel. Students learn basic insulation science, system design and materials, insulation thickness determination, general insulation system installation considerations, the specification process, and insulation system maintenance.

3E Plus® Insulation Software Training Seminar

NIA's 3E Plus training workshop is a short, comprehensive session that introduces users to all aspects of the 3E Plus Insulation Thickness Software Program. In 3 to 4 hours, users review 3E Plus program capabilities, understand the data necessary for accurate thickness calculations, and learn how to run the energy, economic, and environmental program calculations. Users also learn about additional options available in the program, such as how to customize the insulation criteria by inputting specific manufacturers' K-values. In this hands-on workshop, attendees work through a series of commercial and industrial insulation system scenarios using various insulating criteria.

NATIONAL MECHANICAL INSULATION COMMITTEE (NMIC) FOR BUILDING AND INDUSTRIAL APPLICATIONS

The National Institute of Building Sciences (NIBS) formed the National Mechanical Insulation Committee (NMIC) for Building and Industrial Applications in late 2006 to bring together major government agencies, private industry, and organizations concerned with the design, installation, and maintenance of mechanical insulation.

Richard Durbin (D-IL) *Appropriations*; Representative Chet Edwards (R-TX); Representative Jo Ann Emerson (R-MO); Representative Chris Van Hollen, Jr. (D-MD) *Co-Chair, Renewable Energy*; Mary Landrieu (D-LA); Senator Patrick Leahy (D-VT); Senator Richard Lugar (R-IN); Rep. Alan Mollohan (D-WV) *Appropriations*; Senator Patty Murray (R-WA); Senator Lisa Murkowski (R-AK); Senator Jay Rockefeller (D-WV) *Finance*; Representative Tim Ryan (D-OH) *Appropriations*; Senator Bernie Sanders (I-VT); Senator Olympia Snowe (R-ME) *Finance*; Senator Jon



The overall objective of NMIC is to identify, develop, and disseminate information related to mechanical insulation in building and industrial applications by examining current policies, procedures, and practices; using the best knowledge about the value of proper insulation systems; establishing a roadmap to implement improvements in design and insulation system selection; and establishing application best practices.

In January 2008, NMIC launched the *Mechanical Insulation Design Guide* (MIDG), a comprehensive, unbiased, living online document to be housed as part of NIBS' Whole Building Design Guide at www.wbdg.org. This web-based vertical portal is the result of 2 years of development with contributions from 15 organizations, 60 manufacturers and fabricators, and 12 contractors, as well as the involvement of more than 100 individuals. It is designed to help specifiers, facility owners, and other end users of mechanical insulation systems with a wide range of industrial and commercial applications, and it is available to all users at no cost.

The MIDG takes a decision-tree approach to provide the most valuable and reliable information in one easy-to-use resource. It is the most comprehensive mechanical insulation resource developed in decades. It is a one-stop resource to assist the novice or experienced user in the design, selection, specification, installation, and maintenance of mechanical insulation systems. It also includes a series of online calculators related to energy conservation, emission reduction, and other engineering requirements.

The MIDG provides links to specific material data from various insulation manufacturers to save end users time. When users search for specific product information on a certain type of insulation, it links them to NIA's MTL Product Catalog, an online technical library with searchable PDFs submitted by insulation manufacturers.

INDUSTRY MEASUREMENT SURVEY

NIA's Industry Measurement Survey, funded by the Foundation for Education, Training, and Industry Advancement, is conducted biannually and helps gauge the size of the market and identify growth trends in the industry. NIA employs a third-party survey company, Industry Insights, Inc., to collect the data and ensure complete confidentiality. Results are published in *NIA News*. The 2008 survey is the tenth year of survey numbers.

LEGISLATIVE UPDATE

In February 2009, NIA kicked off a campaign to

increase awareness of mechanical insulation, grow market share for NIA members, and secure federal funding for continued and expanded association educational and awareness initiatives—or more simply, give mechanical insulation a voice.

This initiative began through NIA's Foundation for Education, Training, and Industry Advancement's effort to create a national, product- and system-generic national marketing campaign. The Foundation sought out its contributors' marketing experts and formed the Mechanical Insulation Marketing Initiative (MIMI). Through the direction of this committee, the Foundation, and the Board, NIA developed a plan to move forward and be recognized.

In May 2009, NIA in conjunction with its Foundation entered into a Memorandum of Understanding with the International Association of Heat and Frost Insulators and Allied Workers' Labor Management Cooperative Trust (LMCT) to work together on the many opportunities available to the industry.

NIA launched a legislative action plan at the federal and state level. The legislative action plan is centered on the need to:

- Obtain funding for national educational and awareness programs
- Secure tax incentives related to increasing the use and maintenance of mechanical insulation for energy efficiency/conservation and the reduction of greenhouse gas emissions in the industrial and commercial industry segments
- Preserving and creating sustainable industry jobs
- Implementing processes to review codes and standards to update mechanical insulation thermal performance/energy efficiency that exceeds ASHRAE 90.1 2007
- Urge the establishment of a national green building standard that recognizes the important role of mechanical insulation in the commercial and industrial sectors
- Foster the professionalism of the mechanical insulation industry.

In just 8 months, a tremendous amount has been accomplished.

ESTIMATING ENERGY SAVINGS, EMISSION REDUCTION, AND JOBS CREATED

NIA worked with Oak Ridge National Laboratory (ORNL) and the Department of Energy's Industrial Technologies Program to assess possible energy savings and emission reductions derived from Save Energy Now assessments to determine the energy and environmental benefits from mechan-

ical insulation use in large and medium plants. NIA and DOE/ORNL estimated that mechanical insulation could deliver more than \$1.9 billion in energy savings from simple maintenance of insulation in large and medium industrial plants. NIA estimated this maintenance work would create 12,000 jobs per year.

Combining that data with additional data estimates for small plants, the power/utility sector, and data for increasing insulation thicknesses beyond the ASHRAE 90.1 2007 guidelines for piping and HVAC applications, NIA's preliminary estimates indicate there is an additional potential of \$2.3 billion in energy savings, a reduction of 15 million metric tons of CO₂ emissions, and 73,000 jobs created. The total estimate illustrates the huge opportunity in the industrial and commercial sectors: \$4.8 billion in energy savings, a reduction of 43 million metric tons of CO₂ emissions, and 89,000 new jobs. What is even more impressive is that those numbers do not represent the total potential.

On June 25, NIA began a media outreach campaign with a press release and a news conference announcing the results of the analysis, while also distributing the news to dozens of congressional offices.

STIMULUS INITIATIVES

- In March and April, NIA wrote thousands of letters introducing mechanical insulation to all governors and state energy officials and asking them for consideration in the deployment of their federal stimulus monies.
- NIA met with the governors and/or state energy offices in New Jersey, Ohio, Kentucky, Washington, West Virginia, and Montana. The message for those meetings was, "Educate Users, Assess the Opportunity, and Allocate Funding." Based on the results of those meetings, NIA is developing a model state initiative, which will allow NIA members to become engaged with their respective state officials.

MECHANICAL INSULATION'S VOICE ON CAPITOL HILL

Over an 8-month period, NIA participated in over 100 meetings on Capitol Hill with House and Senate members and/or their staffs, various committees, legislative councils, advisors, and others. For a complete list, visit www.insulation.org/mimi. The message was simple: mechanical insulation, a forgotten technology, is one of the most sustainable initiatives that can deliver shovel-ready jobs, provide long-term energy

efficiency, and improve our environment.

- NIA and LMCT members responded to a legislative call to action in June with more than 19,000 letters to Capitol Hill asking Congress to support our industry, as well as thousands more to governors and state energy directors. The result was impressive and has certainly helped increase mechanical insulation and the industry's profile with policymakers, which can help us grow the industry.
- On April 30, Rep. Deborah Halvorson (D-IL) submitted House Resolution 389 on the floor of the House: "Resolved: That the House of Representatives encourage energy-efficient and environment-friendly building and facility certification programs to encourage the use of mechanical insulation as part of their standards and rating systems...."
- On June 26, NIA had its first legislative success of the year. The House of Representatives, as part of its first climate change bill, included NIA's proposal to create a 5-year, \$17.5 million "Industrial Energy Efficiency Education and Training Initiative" for building awareness of mechanical insulation nationwide. Rep. Halvorson submitted Amendment to H.R. 2454—Section 275 Industrial Energy Efficiency Education and Training Initiative (d) Authorization of Appropriations: "There are authorized to be appropriated \$3,500,000 for each of the fiscal years 2010 through 2014 to carry out this section. The Secretary may enter into a cooperative agreement, including grant funding, with an industry association and union working collaboratively and having expertise on the installation, maintenance, measure of efficiencies and standards, and certification of mechanical insulation in buildings and facilities...." If the measure becomes law, the Department of Energy would be empowered to provide funding (appropriated separately by Congress) to manage the program.
- On September 11, NIA met with DOE Assistant Secretary Cathy Zoi to introduce mechanical insulation to her office and to request discretionary funding to allow NIA to jumpstart the educational/awareness campaign.
- In October 2009, NIA secured initial funding for the education and awareness campaign of Fiscal Year 2010 in the Energy and Water Appropriations bill. The conference agreement provides \$96,000,000 for DOE's Industrial Technologies Program, of which \$500,000 is provided for a comprehensive

awareness campaign and training program on how mechanical insulation can improve energy efficiency. A detailed action plan will be submitted to the DOE detailing how the funding should be allocated.

EDUCATION AND AWARENESS CAMPAIGN OUTLINE

NIA is developing an educational and awareness campaign, which will include the following steps:

- Develop data for both the commercial and industrial sectors
- Develop and promote training courses (NITP, IEAP, 3E Plus, etc.) to educate all facets of industry
- Create courses, lectures, and online education for all audiences
- Develop assessment programs and communication materials
- Establish partnerships to increase awareness
- Create a marketing and advertising campaign to promote the benefits of mechanical insulation

MECHANICAL INSULATION TAX DEDUCTION LEGISLATION

NIA is working with Rep. Halvorson's office and legislative counsel developing a tax bill currently entitled Mechanical Insulation Installation Act of 2009. The bill would provide a tax incentive for going beyond the minimum guidelines established in ASHRAE 90.1 2007 in new construction and retrofit applications. It would apply to the commercial and industrial sectors and extend to material and labor components.

LEED AND CODE INITIATIVES

NIA met with the U.S. Green Building Council (USGBC) to obtain a better understanding of the overall LEED certification process and how mechanical insulation may be included in the LEED process. Models are currently in the development phase; NIA hopes to submit an approach to USGBC in the first quarter of 2010.

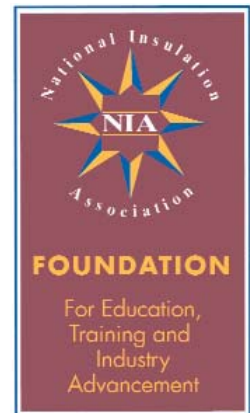
LOOKING AHEAD

NIA has been participating in and investigating other initiatives, such as:

- Various alliance presentations, which now total more than 110 in 3 years
- Establishing a working relationship with the National Association of State Energy Officials and North American Insulation Manufacturers Association
- Energy and High Performance

- Building Caucuses
- DOE webinars
- Development and publication of mechanical insulation-related articles in various media outlets

Stay tuned: NIA is going where it has never gone before. There has never been a more important time to think about insulation differently. NOW IS OUR TIME. It is time mechanical insulation has a voice in federal and state legislative affairs.



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