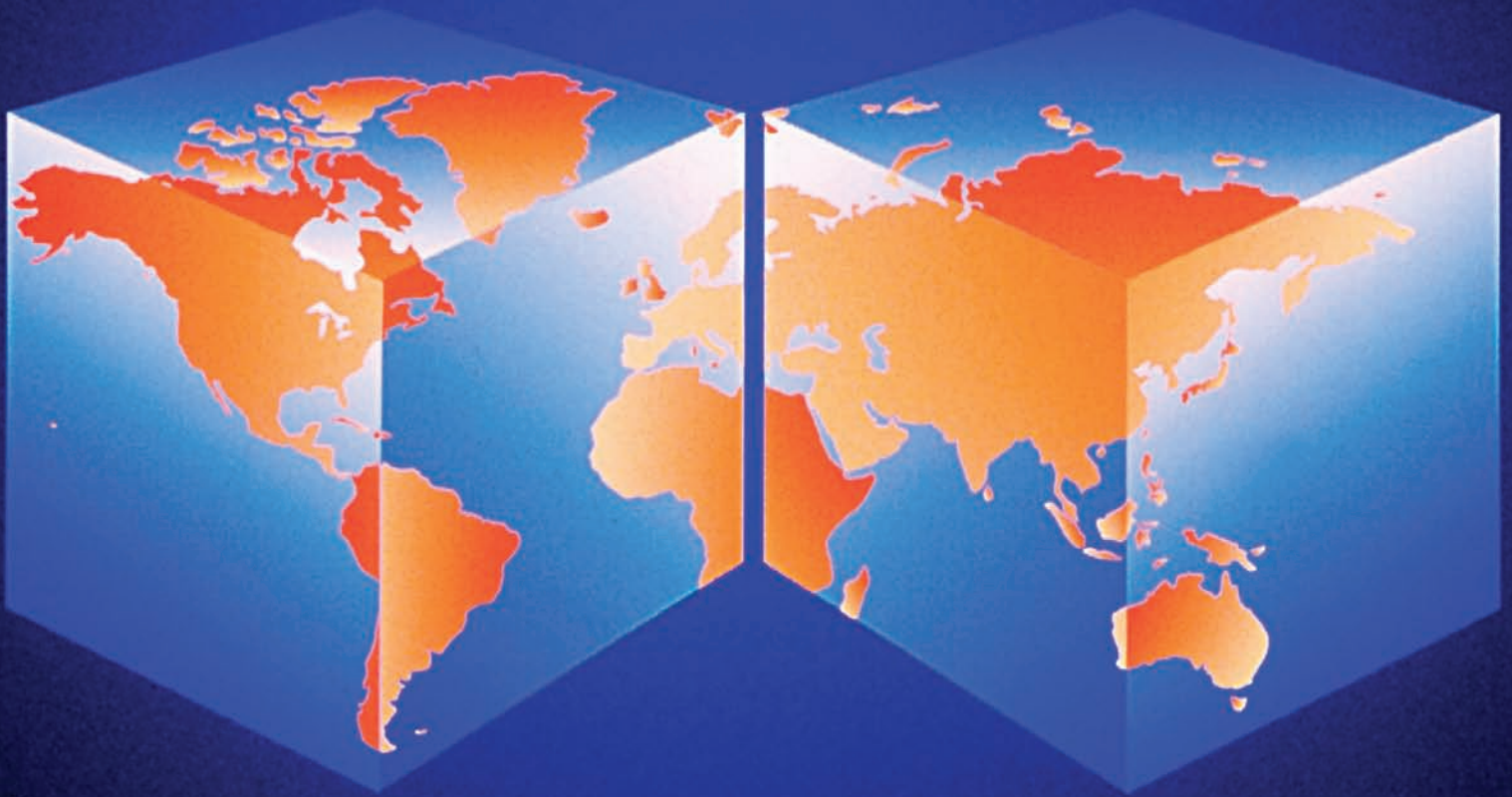


Strategies for a Global Environment

ASHRAE's strategies for institutional change
that lead to fully engaging members globally
and sharing best practices worldwide



Approved by ASHRAE Board of Directors, June 24, 2007

1.0 Introduction

ASHRAE's Strategies for a Global Environment set a path for institutional change.

The objective of that change is to fully engage members globally so that a worldwide best practices databank of innovative and successful technologies can serve the HVAC&R community.

These strategies recognize and cultivate opportunities that will create a forum for idea exchange among a multi-national array of HVAC&R practitioners. An analogy can be made to the Internet where each member is a node in an information network.

Global interaction results in a multi-level exchange of ideas, information, technology, services and products, creating a global structure for product development, product delivery, and individual interaction.

By its nature, globalization will expose ASHRAE members to new technologies because HVAC&R technology differs due to particular geographic, environmental, cultural and economic requirements.

ASHRAE's Strategies for a Global Environment understands and appreciates the impact that globalization has on trade, business, technology and communication. ASHRAE's approach to this phenomenon respects national and international membership organizations, partnering to create resources that are more than the sum of their parts and delivering them beyond where they were available previously.

Effectively implementing global strategies enables ASHRAE to arrive at a destination that benefits all ASHRAE members. Critical to success is partnership with other HVAC&R societies worldwide and especially Associate Societies, those national associations that share the same objectives as ASHRAE and with whom ASHRAE extends rights and privileges). The goal is to expand the amount and the quality of information that is available to members everywhere.

The benefits of adopting global strategies must be weighed against the costs. But just as importantly, *the cost of failing to achieve these strategies squanders opportunities for the community of HVAC&R practitioners to contribute to a sustainable built environment worldwide.*

2.0 The Ad Hoc Committee

ASHRAE's Strategies for a Global Environment were prepared by an ad hoc committee appointed by ASHRAE President Lee Burgett on May 25, 2006 and reappointed by President Terry Townsend on August 16, 2006 with the charge, "Define broad initiatives required for the globalization of ASHRAE and action plans that are needed for implementation."

The committee's membership is as follows:

Thomas E. Watson, P.E., Member ASHRAE, chair (USA); David Arnold, Ph.D., FR Eng, Fellow ASHRAE (UK); Harley W. Goodman, Jr., P.E., Presidential Member/Fellow/Life Member ASHRAE (USA); Sheila J. Hayter, P.E., Member ASHRAE (USA); Gordon V.R. Holness, P.E., Fellow/Life Member ASHRAE (USA); Prem C. Jain, Ph.D., Fellow/Life Member ASHRAE (India); Ronald E. Jarnagin, Member ASHRAE (USA); Samir R. Traboulsi, P.Eng., Member ASHRAE (Lebanon); Vincent K.C. Tse, Fellow ASHRAE (Hong Kong); Ronald P. Vallort, P.E., Presidential Member/Fellow ASHRAE (USA); William A. Harrison, Member ASHRAE, consultant (USA); W. Stephen Comstock, Associate Member ASHRAE, staff liaison (USA).

The following individuals served on regional subcommittees and contributed to the recommendations formulated by the committee:

European Subcommittee: Tim Dwyer, Member ASHRAE (UK); Costas Balaras, P.E., Member ASHRAE (Greece); Irene Reichert, Associate Member ASHRAE (Germany); Maciek Sobczyk, Member ASHRAE (Poland).

Indian Subcontinent Subcommittee: Ashok Virmani, Member ASHRAE (India); Ashish Rakheja, Member ASHRAE (India); Pankaj Shah, Member ASHRAE (India); Farooq Mahboob, Member ASHRAE (Pakistan); Pandu Amarsinghe, Member ASHRAE (Sri Lanka).

Middle East Subcommittee: Walid Chakroun, Ph.D, Member ASHRAE (Kuwait); Bassel Anbari, P.E., Associate Member ASHRAE (UAE); Mahmoud Fouad, P.E., Member ASHRAE (Egypt).

China Subcommittee: Robert Hu, Member ASHRAE (Taiwan); Edward Tsui, Member ASHRAE (Hong Kong); Philip Yu, Member ASHRAE (Hong Kong); W.K. Pau, Member ASHRAE (Hong Kong); Raymond Man-Hung Yau, Ph.D., Member ASHRAE (Hong Kong).

Southeast Asia Subcommittee: Raymond Wong, Member ASHRAE (Singapore); C.S. Ow, Ph.D., Fellow ASHRAE (Malaysia).

Australia-Oceania Subcommittee: Pradeep Bansal, P.E., Member ASHRAE (New Zealand).

Others, representing organizations in the Associate Societies Alliance and the European HVAC Federation, REHVA, also provided information in the the document.

ASHRAE, like many other corporate and institutional entities, has been impacted by globalization. New technologies allow information and ideas to flow more freely than before. People meet more easily whether in person or virtually. The notion of companies serving multi-national or international markets has achieved prominence in the marketplace.

As ASHRAE's membership growth accelerated outside the US and Canada, ASHRAE made efforts to serve these members. However, these efforts merely extended membership services developed for the North American market rather than adapting them to meet the needs of HVAC&R practitioners in other parts of the world. Of greater importance, an infrastructure was not developed to support the flow of information about innovative technologies throughout the ASHRAE network, no matter where those technologies were developed and practiced.

We are entering a phase where we are going to see the digitization, virtualization, and automation of more and more of everything. The gains in productivity will be staggering for those countries, companies and individuals who can absorb the new technological tools. And we are entering a phase where more people than ever before in the history of the world are going to have access to these tools ...the world has gone from round to flat. Everywhere you turn, hierarchies are being challenged from below or are transforming themselves from top-down structures to more horizontal and collaborative ones....It is not simply about how governments, business and people communicate, not just how organizations interact, but it is about the emergence of completely new social, political and business models.....The flattening of the world, if it continues, will be seen in time as one of those fundamental shifts or inflection points, like Gutenberg's invention of the printing press, the rise of the nation-state, or the Industrial Revolution.

Thomas L. Friedman
The World Is Flat: A Brief History of
The Twenty-First Century

3.0 Impetus for Developing Global Strategies

The impetus for developing ASHRAE's Strategies for a Global Environment came from a desire by ASHRAE's leadership to embrace service and product development and delivery models that meet the unique requirements of all members. The work of the Globalization Ad Hoc Committee is intended to bring global best practices to all ASHRAE members, enabling the Society and its members to thrive in a flat world.

4.0 ASHRAE's Strategic Plan And the Global Environment

With its adoption in 2006 of a new Strategic Plan, ASHRAE made a significant commitment to becoming a truly global society. The four strategic directions in the plan are:

1. ASHRAE will be one of the global leaders in the advancement of sustainable building design and operations.
2. ASHRAE will be a world-class provider of education and certification programs.
3. ASHRAE will position itself as a premier provider of HVAC&R expertise.
4. ASHRAE will be a global leader in the HVAC&R community.

A moment's reflection will confirm that the first three directions can only be achieved if ASHRAE becomes a truly global society. And to be a leader globally, ASHRAE must understand and be responsive to needs and tendencies in all HVAC&R constituencies. This means building the infrastructure which enables member participation globally, while at the same time working more closely and cooperatively with Associate Societies and other associations in the HVAC&R field.

For example, advanced practice and leadership in some sustainable technologies is found outside of the United States and Canada. To be a world class provider of education and certification programs, ASHRAE's products must be developed so that they are meaningful globally and able to be applied locally. Similarly, if ASHRAE is to be recognized as a leading provider of HVAC&R expertise, that recognition must be global instead of regional.

ASHRAE members – no matter where they reside – should have access to technologies and products that draw upon the knowledge of all individuals involved in these advanced efforts. Additionally, ASHRAE members should have forums at which they can engage in peer exchange with all leaders of HVAC&R technologies to develop the technologies and create the best products.

Because of its size, resources, and existing international presence, ASHRAE with its Associate Societies can build bridges to span gaps between and among individuals and organizations that will create a global network for sustainable HVAC&R technologies. This network will result in service, design and product development that provides “best practice” guidance and “building block” research.

Strategies for a Global Environment

ASHRAE's operating rules, programs and products for the past hundred years have been tailored to meet the needs of its US and Canadian members while carefully balancing the costs and revenues of attracting and serving members, chapters and regions within the United States and Canada. These programs and products were developed primarily through the voluntary effort of members from the United States and Canada being engaged in the Society. While volunteers from outside of the United States and Canada also contributed, their ability to participate was more difficult and opportunities not as widely known as in the United States and Canada.

Using or mimicking the tools and processes elsewhere in the world that are, and have been, successful in North America without evaluating their appropriateness would endanger the entire process of globalization. To develop the infrastructure that allows for multi-directional and multi-level exchange with full engagement of members from all parts of the world and enhanced partnership with Associate Societies and others, a wide range of strategies focused on the needs, challenges and opportunities presented by a global environment need to be pursued.

It should be noted that assumption of an advocacy role with governmental bodies has been omitted from ASHRAE's Strategies for a Global Environment by design. This might change as ASHRAE's global posture expands and a balanced collection of volunteers step forward to drive the effort. For the present, however, ASHRAE's advocacy effort will be U.S. based.

Finally, implementing many if not all of these strategies will require that member and market research be conducted for the purpose of determining local needs and methods of product and service delivery. It is envisioned that such research would be budgeted for and commissioned by the ASHRAE groups responsible for measures to be implemented.

The following are recommended strategies that ASHRAE should pursue to implement Strategic Direction 4 of the Strategic Plan.

Strategy 4.1

While ASHRAE's chapter and regional structure shall be the backbone of ASHRAE's structure globally, it shall be flexibly applied to serve our membership.

The most effective way that ASHRAE has found to promote member growth, exchange among members, and member participation in the governance process is through formation of chapters and their alignment into regions.

Within ASHRAE, the chapter is the structure by which members within a geographic area meet regularly to share information and voluntarily engage in activities that advance the HVAC&R industry. This includes interaction with companies to support ASHRAE Research, serving as a resource to colleges and universities offering engineering studies, and promoting technically sound codes and regulations by local government. Chapters do not receive funding from ASHRAE but receive volunteer training and support materials.

Grouping chapters into regions is how ASHRAE delivers training to members who volunteer in chapters. It also provides a structure through which recommendations from chapter members can be made to the Board of Directors for new ASHRAE activities, improved membership services, or policy changes.

At the time of this document's development, ASHRAE's regional alignment of chapters is as follows:



- Regions I to XI are North American Chapters, which includes chapters in Canada, Mexico and the United States.
- Region XII consists of chapters in Florida and Central/South America
- Region XIII is the Asia Pacific grouping of Chapters
- Region at Large is the grouping of chapters in the Middle East, Western Asia, and Europe.

The fundamental process for chapter and regional formation that has led to this alignment should be maintained for the foreseeable future. It is the basic backbone of ASHRAE's organization in future growth. A major benefit of this process is that it draws members into volunteer roles and provides a process by which a steady stream of volunteers are assigned roles of increasing responsibility.

Chapter threshold requirements, alignment of chapters into regions, and chapter activity guidelines, however, must be flexible as ASHRAE responds to needs of members throughout the world. Creativity can be applied in expanding or sustaining the chapter and regional structure globally, keeping to the principles that sections, chapters and regions are comprised of ASHRAE members; sections, chapter and regions provide a voice for members within the governance process; chapters and regions spur ASHRAE interaction with local communities; and that chapters and regions are communication vehicles for best practices information.

At present, several geographic areas represent potential opportunities for major growth in number of ASHRAE members in the coming decade:

- China;
- Indian Subcontinent;
- Middle East;
- South America; and
- Developed countries with existing HVAC&R societies.

ASHRAE's global growth will likely create further impetus to realign regions and the chapters they serve. As long as chapters and regions can be structured so they serve the needs of the members they comprise and contribute to the well being of the Society as a whole, ASHRAE should nurture their creation.

Implementation Assignment: Members Council should examine potential hurdles in each of these areas — annual ASHRAE membership fees, governmental policies, required support for chapters and regions – to make structural and procedural changes as needed to promote chapter creation and to respond to member desires in those areas. Fiscal impacts need to be carefully analyzed, taking into account cost of providing membership services with modified and expanded chapter and regional structures along with potential for income growth. It is essential that there be dialogue with existing national associations many of whom are Associate Societies of ASHRAE whenever applicable so that the most effective means of technological development, dissemination and service to individual engineers is achieved.



Strategy 4.2

ASHRAE will cooperate with organizations with shared objectives and strengthen the ASHRAE Associate Societies Alliance.

National HVAC&R technical societies respond to the cultural, governmental, economic, and geographic needs of HVAC&R practitioners and industry in a way that differs from ASHRAE as an international organization.

ASHRAE's Global Strategy 4.2 emphasizes respect for these organizations, encouraging partnerships to create shared resources that deliver added value to ASHRAE members and members of national societies.

Effective partnerships with Associate Societies and with other national organizations

that share ASHRAE's purpose establish bridges for new information to flow between ASHRAE and these organizations and for this body of information to have a greater impact on worldwide engineering practices.

ASHRAE's Associate Societies Alliance provides a framework for these partnerships. While the chapter and regional structure franchises ASHRAE members, the Associate Societies Alliance provides for inter-organizational relationships, often establishing business relationships whereby resources can be shared and communication enhanced. Umbrella organizations, such as the European Federation REHVA, governmental bodies, such as IIR, and groups with international memberships, such as CIBSE based in the UK, provide other opportunities.

Activities that could be initiated through the Associate Societies Alliance include the following:

- Organize conferences and other learning events.
- Engage in copublishing activities.
- Share staffing resources.
- Enlist assistance to develop regional versions of ASHRAE Handbook, ASHRAE Journal, and other publications as appropriate, particularly for non-English speaking regions.
- Participate in national or regional expositions.
- Develop standards and guidelines in areas of mutual interest.
- Survey technical needs and resources.
- Participate on technical panels and committees that guide the development of mutually beneficial programs.
- Provide a worldwide library or directory on international HVAC&R events and conferences.

A strengthened Associate Societies Alliance does not preclude interaction between ASHRAE and individual national or international organizations. It provides a framework for discussion and activity within ASHRAE that fosters global cooperation and the sharing of technical information.

Implementation Assignment: The Executive Committee of ASHRAE's Board of Directors should identify where the Associate Societies Alliance can have permanent and more prominent and visible standing within ASHRAE's committee structure so that resources available through the Alliance can be effectively utilized and business relationships explored.

Strategy 4.3

The cost of annual membership dues will be balanced with the cost of providing membership benefits and services in different geographic regions.

ASHRAE annual membership fees will be priced to serve all global areas and not necessarily uniformly. ASHRAE can only reach its global potential if the dues structure is affordable.

While all members are equal, membership services provided do not need to be equal if the dues paid are not equal. In adopting a principle that the cost of membership will be evaluated with the cost of providing services, ASHRAE will not price membership at less than the cost of providing it.

ASHRAE's primary membership benefits are:

- Annual volumes of the ASHRAE Handbook;
- Monthly issues of ASHRAE Journal;
- Support of chapter activities through educational programs, volunteer training



- resources, and out-reach materials;
- Discounted pricing of publications and educational services and reduced conference registration fees;
- Digital access to selected technical information through the ASHRAE web site.

To serve members in a global environment with a multi-tiered dues structure, ASHRAE will need to balance benefits and costs by considering various benefit development and delivery options, for example:

- Provide ASHRAE Handbook and ASHRAE Journal access in print or digital form;
- Offer regionalized publications or regional editions of existing publications;
- Globalize ASHRAE Handbook and ASHRAE Journal so that ASHRAE’s principal membership benefits and reference vehicles can lead the effort to globalize ASHRAE;
- Offer regionalized periodicals as a substitute for or a variation of ASHRAE Journal;
- Deliver Internet-based programs for chapters;
- Establish Internet-based membership grade providing web access to information on demand as the sole membership benefit;
- Establish a base membership fee allowing purchase of publications at reduced prices, such as ASHRAE Handbook and ASHRAE Journal and purchase of Internet-based access to information.

Implementation Assignment: Members Council and Publishing and Education Council need to establish the benefit/cost balance points that reach established membership growth targets within fiscal budgets. Such a process will support ASHRAE’s transition to a global organization, fulfilling objectives of membership growth, fostering free flow of technical information, and treating all members fairly.



Product and
Services Pricing

Strategy 4.4

Publications and educational products will be priced so they are within reach of ASHRAE’s global membership but will not be priced at less than the cost of providing them.

If individuals cannot afford access to the products and services that establish the value of ASHRAE as a technical resource, ASHRAE will not achieve true global significance. At the same time, it is unfair to expect one group of members to subsidize another. As in determining the fees and services associated with membership globally, an equitable balance between affordability and expense must be determined.

In adopting this strategy, it is understood that pricing flexibility is required for various marketing and promotional efforts. For example, products, from time to time, may be priced below cost to stimulate sales or to increase interest in ASHRAE membership

Implementation Assignment: The Publishing and Education Council will determine differential pricing formulas and the mechanisms by which they can be implemented.



Technology
Access

Strategy 4.5

ASHRAE will develop its expertise in HVAC&R technologies to embrace whole building sustainable design and be one of the most valuable global resources for publications and educational products related to sustainable HVAC&R technology.

ASHRAE provides the HVAC&R community—members and nonmembers—with access to technology through a variety of vehicles:

- ASHRAE Handbook
- HVAC&R Research, ASHRAE's archival research journal
- ASHRAE Journal
- Standards and Guidelines
- Research reports and topical publications
- Classroom texts
- Interactive on-demand web-based learning systems
- Instructor-led programs, face-to-face and online
- Conference proceedings
- Design guides
- Data compilations
- Digital tools and programs
- Self-Directed Learning Courses
- www.ASHRAE.org

As impressive and extensive as these resources are, they represent only a fraction of the knowledge sources that are available globally. As technology advances in different parts of the world at different speeds and as new technologies emerge regionally, complementing ASHRAE resources with those of others becomes a prime objective in the Society's efforts to bring best practices to its members.

Establishing a Worldwide Bookstore at www.ashrae.org for the global HVAC&R community would be one way to address this strategy. ASHRAE currently makes products available from other organizations when those products are the most appropriate for a given technological or geographical area. The Society has joint publication sales and discounting agreements in effect covering standards, guidelines and publications. This effort should be expanded so that practitioners can go to a single source to find ASHRAE literature and literature of Associate Societies and other organizations in the field.

Much of this Worldwide Bookstore's capability might be achieved by digital distribution of products or re-directing visitors to other global web sources. Also through www.ashrae.org, advanced educational program technology could be utilized to allow for global participation through digital distribution of learning products, expanded on-demand web-based learning, and on-line courses that are scheduled at convenient times for all viable markets. Satellite broadcasting should be considered to achieve this objective as well. The Associate Societies Alliance should be an ally in establishing the Worldwide Bookstore and distributing learning products as business enterprises.

Implementation Assignment: The pursuit of this objective falls to Publishing and Education Council. Investigated will be the benefits to members through access to an expanded knowledge base and the costs associated with inventory, administration of cooperative sales agreements, and creation or acceptance of digital collections.

Strategy 4.6

ASHRAE will pursue opportunities and processes along with translation to publish its literature in various languages.

The new ASHRAE membership demographic will require ASHRAE be multi-lingual. With that fact stated, ASHRAE's language strategy must address the practical and economic realities involved. Copublishing opportunities along with translations by ASHRAE volunteers should be considered.

In geographic areas where there is significant demand for ASHRAE literature, it is important to develop a process for providing ASHRAE documents in languages other than English that balances speed to market, investment and pay-back without compromising technical accuracy.



Some of the issues involved in determining whether to publish a document in a language other than English include:

- Market size and sales projections;
- Copyright;
- Liability;
- Costs, including initial investment and ongoing marketing and distribution;
- Use of volunteer effort in exchange for regional use of ASHRAE literature royalty free or at reduced pricing;
- Availability of comparable non-English literature from other sources;
- System of units to be used;
- Time to develop;
- Opportunities for publishing partnerships.

The language strategy does not state that ASHRAE must undertake or fund translations. It requires consideration of all processes that can achieve similar results. The Publishing and Education Council is to explore these options on a case-by-case basis, with the Associate Societies Alliance potentially providing strategic partners.

More broadly, ASHRAE will review other elements of its business operation, such as its web site and dues invoices, to determine where benefits can be achieved from a multi-lingual approach.

Essentially, ASHRAE requires a flexible language strategy to allow a variety of approaches to suit each circumstance and country for each document type.

In addressing this strategy in the implementation plan, the broader issue must be considered of whether ASHRAE's publications, educational products and technical resources adequately meet the needs of members globally and if they successfully draw upon knowledge sources worldwide.

The end result of implementing this strategy is that ASHRAE membership is broadened. Within this broadened or "flat ASHRAE," ASHRAE members must be able to understand and interact with one another and be able to use ASHRAE literature in ways that suit their localized needs.

Implementation Assignment: Publishing and Education Council will examine making ASHRAE's English literature in other languages. As ASHRAE becomes a truly global society, the Publishing and Education Council and Technology Council will together need to explore such questions as whether ASHRAE should publish or distribute literature when the original version is not in English, undertake translations of such literature into English and whether the ASHRAE Handbook should be prepared not just in multiple languages but from material written in multiple languages?



Strategy 4.7

Volunteer participation obstacles will be overcome through meeting planning and organization that is sensitive to global participation and that benefits from electronic communication technologies.

Individuals join ASHRAE to increase their technical knowledge. They achieve this by participating in an infrastructure that fosters the sharing of experiences, identifies common concerns, and responds to those concerns through research, standards writing, publishing and credentialing.

To be successful in a global environment, ASHRAE's infrastructure must give members from all countries opportunities to become engaged—if not physically, at least virtually—such that their participation offers equivalent member value. This infrastructure must allow for the global exchange of technology addressing widely

diverse climatic conditions and occupational environments.

The key to providing valued member benefits in a global environment is the breaking down of participation barriers to volunteer involvement and peer exchange. Opportunities must exist for members to contribute to the knowledge base and to influence the Society's decision-making process. Fully engaging members throughout the world can only be achieved and maintained by active and continuous interaction. This means a continuous two way, multi-level flow of technical knowledge, ideas and experiences.

Communication technology offers a partial solution. Members can now meet in conferences and on committees without traveling. While face-to-face contact for learning and committee planning cannot be completely replaced, logistics of travel time and expense require ASHRAE use alternative meeting methods. New meeting formats will attract greater volunteer participation and conference attendance from different countries.

An example is provided by ASHRAE's Annual and Winter Meetings. They are the Society's premier events in terms of engaging members. Examples of what could be offered are delivery of poster sessions to members via the Internet. Members could pose questions by e-mail to authors. Subsequent steps might be to air web casts of selected meeting speakers. Similarly, Standing Committee and Technical Committee meetings with high international interest could be offered by Web casts to increase the involvement of members outside (and even inside) North America.

Another approach would be to organize meetings in various geographic regions aimed at attracting global participation. These meetings could be theme-based, drawing attention to a technology that is developing or has matured in the hosting region. Because the current structure of ASHRAE's Region-at-Large limits personal contact with officers and other colleagues in the region, distance meeting and interaction should be pursued for volunteer training and chapter activities.

It is critical that a member anywhere in the world have personal contact with ASHRAE volunteers so that he or she feels adequately represented in ASHRAE and concludes that this Global ASHRAE is "My ASHRAE." Opportunities of being engaged will lead to opportunities for members to take ownership of and pride in ASHRAE, fostering their volunteer participation. Policies adopted by ASHRAE must enable members to put a "face" on ASHRAE, to have contact with individuals who work on their behalf within the volunteer structure of ASHRAE.

Implementation Assignment: To initiate a staged process of engaging members globally through the meeting structure, all three councils—Members, Publishing and Education, and Technology—and the Board of Directors should expand use of the Internet to conduct meetings.

Strategy 4.8

ASHRAE will support, in cooperation with national associations, a uniform, international standard for credentialing in the disciplines and practices of HVAC&R.

As in other areas, the challenge in applying globally relevant objectives in education and credentialing is to create an operational infrastructure that addresses widely diverse cultures, climatic conditions and occupational environments. In-depth market research will assist ASHRAE to work in cooperation with national associations to globally address this need.

ASHRAE is currently implementing credentialing programs in specific HVAC&R related disciplines such as health care facility design. Once the body of knowledge for each desired program is determined and the needed content developed, distance-based



delivery technology must be used to allow for global participation. And, as with all ASHRAE products and services in the global environment, different pricing schedules must be considered to encourage widespread use.

ASHRAE can utilize credentialing standards that are uniform and that draw upon a single, expanded body of knowledge. But that does not mean that examinations in various geographic areas can be identical.

The fact ASHRAE's credentialing program are intended to be applied locally by those who sit for them requires local consideration and judgment by qualified practitioners. Such is the value and benefit of creating a global credential.

What ASHRAE, in cooperation with national associations, can do is standardize a process of developing and delivering credentialing programs maintaining a constant objective: To verify what is an acceptable demonstration of knowledge based on local need.

Implementation Assignment: Publishing and Education Council will direct programs that fulfill this strategy, identifying local bodies and working with national associations and the Associate Societies Alliance to assist in promoting the value of credentials.



Strategy 4.9

ASHRAE will actively support and participate in international standard development activities.

Internationally recognized standards and their adoption and utilization play an increasingly crucial role in the HVAC&R industry. ASHRAE recognizes their importance to its membership by participating in various international standards development activities. The Society is committed to achieving a set of internationally recognized standards that improve the ability of its membership to serve globally.

To further increase the Society's role in international standards and to continue to serve and provide leadership, the following direction on international standards is recommended:

Relationships: ASHRAE will establish and maintain formal relationships with international standards developers.

Participation: ASHRAE will actively support and participate in international standards development activities for the benefit of its membership and Society. Participation should begin early in the standards development or adoption process and at a level to maximize the Society's ability to add value to the process.

Adoption: ASHRAE will pursue the adoption of international standards for use in the United States and will promote ASHRAE's standards internationally in accordance with the following principles:

1. Adopt an existing or proposed international standard for use in the U.S. where there is no equivalent ASHRAE standard.
2. Harmonize standards when ASHRAE and international standards both already exist and there is a need for harmonization.
3. Promote ASHRAE standards internationally and in other countries or regions where:
 - The ASHRAE standard is the industry's standard of first choice with global relevance, or
 - There is no equivalent international, national or regional standard, or
 - It is in the best interest of the HVAC&R community.

Implementation Assignment: Technology Council is charged with implementing ASHRAE's international standards program.

Strategy 4.10

ASHRAE will actively protect its intellectual property rights.

ASHRAE's most important asset is the collective knowledge of its membership as represented in its publications and educational products.

As ASHRAE initiates commercial partnerships, engages in cooperative activity with Associate Societies and others, and as ASHRAE publications are developed and formatted for widespread usage around the world, it becomes increasingly important that ASHRAE protect its assets.

Unauthorized uses of ASHRAE's knowledge base allow others to unfairly benefit from the labors of volunteers who contribute their understanding, their time and talent to benefit ASHRAE. It also weakens ASHRAE's position in the marketplace and jeopardizes the technical integrity of the ASHRAE brand.

To satisfy this demand while preserving the value of ASHRAE literature, the following principles must be followed with regard to Intellectual Property protection:

1. Dissemination of information in digital formats must be protected from unauthorized use whenever feasible without unduly making ASHRAE products difficult to access.
2. Use of any ASHRAE product or portion thereof must be licensed in accordance with international copyright law, recognizing fair use provisions.
3. ASHRAE must strive to reach agreement with reputable publishers, associations and distributors so that demand for ASHRAE products is satisfied to the greatest extent possible through legitimate and approved endeavors.
4. ASHRAE must protect its trademark and copyright of its products internationally.
5. ASHRAE must pursue violations of its trademark and copyright to protect the reputation of the ASHRAE brand; the integrity of its volunteer contributions; and the value of its products.

Implementation Assignment: Publishing and Education Council establishes the policies that staff administer to implement the global strategy for intellectual property.

Strategy 4.11

ASHRAE will provide enhanced staff support outside of the United States.

Increased membership outside the United States and Canada and increased cooperative activity with non-US based organizations requires accompanying staff presence. ASHRAE members must feel as if ASHRAE, and its products and services, are within easy reach to them.

A staff presence can be achieved in a number of ways. For example:

1. Use of an association management service to provide membership database access and phone and e-mail support in strategic locations during business hours at those locations.
2. Cooperative office arrangement and staff support through an American association or collection of associations that have an existing global presence.
3. Cooperative office arrangement and staff support through a non-North American association or a collection of associations not based in the United States. For



example, ASHRAE may wish to add dedicated staff in the offices of an Associate Society or other association in Europe, like REHVA, in India and in China, in the Middle East, and in South America.

4. Begin staff operations in selected cities that are fully run and operated by ASHRAE.

The objective of creating a non-North American staff presence will be to provide local language staffing support during normal business hours in locations where concentrations of ASHRAE members and ongoing business activities justify the investment.

Implementation Assignment: The Executive Committee of ASHRAE's Board of Directors will explore various alternatives and locations to establish a staff presence outside of North America.



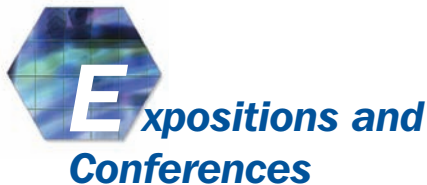
Strategy 4.12

ASHRAE will align its business practices to better serve members globally.

As ASHRAE expands its operations multi-nationally, it is important to address business issues along with language concerns. Credit card transactions, invoicing, documentation for governmental bodies are several examples of issues requiring consideration.

This strategy is a good business practices issue as well as a member service issue. If ASHRAE's business practices are such that members have difficulty purchasing ASHRAE products and services, ASHRAE's business performance will suffer. For ASHRAE to achieve its global membership aspirations and for it to maximize the income potential that membership growth offers, business practices must be audited and changes made as needed to function in a global economy.

Implementation Assignment: The Society's Finance Committee will examine ASHRAE's business practices and improve them as required.



Strategy 4.13

ASHRAE, in cooperation with national societies or independently, will pursue conferences and exhibitions outside North America.

Expositions and conferences promote ASHRAE member interaction and interaction with members of Associate Societies. At expositions, manufacturers meet with designers, installers and operators. Conferences enable peer-to-peer exchange and learning opportunities. Both have been essential to the success of the ASHRAE model in the United States and are essential to the success of ASHRAE in many regions of the world.. Because they bring members together, expositions and conferences enable members to put a "face" on ASHRAE's international involvement.

ASHRAE may seek to partner with national societies or with exposition management firms and conference organizers to develop international expositions. If ASHRAE chapters engage in expositions, it must be under arrangements where the financial benefit is shared by the Society and where the ASHRAE brand is carefully protected.

There are many avenues that can lead to the same destination. Also, existing expositions and conferences will be considered in ASHRAE's planning. For the HVAC&R industry to truly become global, however, there needs to be a coordinated exposition and conference landscape on a global scale that includes ASHRAE.

Implementation Assignment: The Executive Committee of the ASHRAE Board of Directors will address this strategy.

Strategy 4.14

The ASHRAE Brand will be strengthened to reflect a global strategy that serves the needs of all members.

The name “American Society of Heating, Refrigerating and Air-Conditioning Engineers” forms the Society’s legal basis for existence. It serves to identify the foundation upon which ASHRAE was built, and to change it would have extensive legal ramifications.

The name “ASHRAE,” however, is a trademark; a brand that can be changed or modified to reflect what best describes the Society in the global environment.

For example, the brand could be extended to state “ASHRAE International” or “ASHRAE Global,” and the logo itself, a hexagon based on the shape of ice crystal capturing the rays of the sun, may be in need of updating to appeal not only to a more geographically diverse membership but to attract attention from a younger potential membership.

Implementation Assignment: The Executive Committee of the ASHRAE Board of Directors will engage a marketing and branding consultant to examine the ASHRAE brand with specific attention paid to branding that reflects a global strategy and represents the wishes and desires of all ASHRAE members.

Operating as a global society requires that ASHRAE invest fiscal resources and monitor fiscal return. If ASHRAE does not make this investment, ASHRAE will become irrelevant to an engineer’s practice and therefore irrelevant in the global economy. To not have a business plan in place that demands economic viability and that is based on sound business policies is equally irresponsible.

The fiscal impacts of pursuing strategies presented in ASHRAE’s Strategies for a Global Environment must be estimated and approved in accordance with ASHRAE’s operating procedures. The adoption of a global strategy by the Board of Directors does not constitute funding approval of specific activities. The merits of those activities must be weighed against the cost by the appropriate approving body for policies and fiscal impacts.

To provide for thorough fiscal analysis, ASHRAE will require that business plans be developed for execution of each global strategy. The basic premise of these business plans within this global framework is that the cost of implementing the programs will be balanced against resulting revenue and membership benefit.

While individual programs may not be self-supporting, the overall cost of global participation will not exceed the cost of providing the services and benefits on a long-term basis. The Society’s Finance Committee will provide this overall financial review of implementing the global strategies.

Each business plan should have, but depending on the nature of and scope of the strategy is not required to have, the following components:

1. Definition of the Strategy
2. Identification of the Outcome(s) that Will Result from the Strategy.
3. Benchmarks against which Progress Will Be Measured
4. Keys to Success
5. Market Analysis including Market Segmentation
6. Main Competitors with Strengths/Weaknesses
7. Description of Services or Products to Be Offered
8. Competitive Comparison (if relevant)
9. Immediate Infrastructure Requirements
10. Future Infrastructure Needs
11. Activity Partners and Strategic Alliances



5.0 The Business Plan for a Global Society

12. Pricing Strategy
13. Sales Strategy
14. How Products or Services Will Be Fulfilled
15. Communication Strategy and Plan
16. Projected Income and Expense
17. Milestones
18. Assumptions for the Business Plan
19. Key Financial Indicators

Investing in global initiatives is to invest in ASHRAE members. Since globalization should benefit all members, ASHRAE dues income should be used to support execution of global strategies. However, implementation requires that the ASHRAE business enterprise be able to be sustained. Developing well-conceived business plans and monitoring them will ensure this.

Ad Hoc Committee Recommendation 1: That the Board of Directors assign to the Finance Committee overall financial review of pursuing Strategies for a Global Environment under Strategic Direction 4 of ASHRAE's Strategic Plan.

6.0 Implementing Strategies for a Global Environment

Implementing ASHRAE's Strategies for a Global Environment will require close cooperation and coordination by ASHRAE's councils and committees across the entire breadth of ASHRAE. The results of a successful implementation will be added value for all members of ASHRAE, without regard for their geographic location. While implementation will occur over a three-year period, market research and planning should begin immediately upon approval of by the Board of Directors of ASHRAE's Strategies for a Global Environment.

The Ad Hoc Committee does not recommend creating additional bureaucracy to manage the global initiative. Existing ASHRAE committees and councils should be charged with developing and recommending for approval as required actions which execute global strategies. The Society, however, should maintain a means to provide guidance on implementing the strategies and to champion efforts that make ASHRAE more global in its perspectives, programs and services. It is critical that actions be carefully scheduled so that prerequisites will not delay downstream activities.

Ad Hoc Committee Recommendation 2: A means to provide guidance on implementing ASHRAE's Strategies for a Global Environment and to champion efforts that create a more global ASHRAE should be established.

Assignments and Implementation Period

Strategy	Responsible Councils or Committees	Implementation Period
<p>1. While ASHRAE’s chapter and regional structure shall be the backbone of ASHRAE’s structure globally, it shall be flexibly applied to serve our membership.</p> <p>Study the unique needs of ASHRAE members who do not have access to a chapter and develop methods to allow them to benefit from ASHRAE value-producing services without a chapter.</p> <p>Review the existing regional structure and the rules for formation of chapters, sections, student branches, and regions to determine if they meet the needs of a global organization. More specifically, the current structure—with two non-North American regions and two North American regions having non US/Canadian chapters – may need to change to adequately serve the more than 10,000 members outside of North America.</p>	Members Council	2007/2008
<p>2. ASHRAE will cooperate with organizations with shared objectives and strengthen the ASHRAE Associate Societies Alliance.</p> <p>Immediately begin to strengthen and formalize the Associate Societies Alliance to develop shared objectives that promote cooperation between broad based groups of member organizations.</p>	Executive Committee	2007/2010
<p>3. The cost of annual membership dues will be balanced with the cost of providing membership benefits and services in different geographic regions.</p> <p>Evaluate ASHRAE’s dues structure and its impact on members in developing countries. Develop member services that can be delivered at lower costs than ASHRAE’s traditional methods.</p>	Members Council; Publishing and Education Council	2007/2008
<p>4. Publications and educational products will be priced so they are within reach of ASHRAE’s global membership but will not be priced at less than the cost of providing them.</p> <p>Conduct market research to look for regional trends and to determine the immediate needs of members in centers of ASHRAE activity around the world.</p>	Publishing and Education Council	2007/2009
<p>5. ASHRAE will develop its expertise in HVAC&R technologies to embrace whole building sustainable design and be one of the most valuable global resources for publications and educational products related to sustainable HVAC&R technology.</p> <p>Conduct market research to look for regional trends and to determine the most immediate needs of members in centers of ASHRAE activity around the world.</p> <p>Create a Worldwide Bookstore.</p> <p>Create educational products that serve the needs of members outside of the United States and Canada and develop suitable delivery mechanisms and pricing that encourages wide-spread use.</p> <p>Promote greater use of ASHRAE publications and educational products.</p> <p>Evaluate the publication of regional ASHRAE Journal editions with local language and advertising.</p>	Publishing and Education Council	2007/2010

<p>6. ASHRAE will pursue opportunities and processes along with translation to publish its literature in various languages.</p> <p>Develop a plan to reduce language barriers so that non-ASHRAE literature is considered in developing ASHRAE publications and so ASHRAE's English language content is more accessible to members whose first language is not English.</p> <p>Expand cooperative efforts on ASHRAE research such that more institutions outside the United States and Canada conduct ASHRAE sponsored research. This includes the identification of research that satisfies specific needs of members in regions other than the United States and Canada.</p> <p>Expedite the development of metrics and tools for building performance evaluation and insure that they are applicable globally.</p>	<p>Publishing and Education Council; Technology Council</p>	<p>2007/2010</p>
<p>7. Volunteer participation barriers will be overcome through meeting planning and organization that is sensitive to global participation and that benefits from electronic communication technologies.</p> <p>Publicize ASHRAE honors and awards globally to stimulate submissions from outside the United States and Canada.</p> <p>Task the Electronic Communication Committee with preparing a report on available interactive communication technology that can allow members to participate globally in Society activities.</p>	<p>Members Council; Publishing and Education Council; Technology Council</p>	<p>2007/2010</p>
<p>8. ASHRAE will support, in cooperation with national associations, a uniform, international standard for credentialing in the disciplines and practices of HVAC&R.</p> <p>Conduct market research to look for regional trends and to determine the most immediate needs of members in centers of ASHRAE activity around the world.</p> <p>Ensure that certification produces programs that are applicable globally.</p>	<p>Publishing and Education Council</p>	<p>2007/2010</p>
<p>9. ASHRAE will actively support and participate in international standard development activities.</p> <p>Evaluate International Standards and their applicability in the American market.</p>	<p>Technology Council</p>	<p>2007/2010</p>
<p>10. ASHRAE will actively protect its intellectual property rights.</p> <p>Monitor non-authorized use of the ASHRAE logo and brand and protect ASHRAE's intellectual property rights.</p> <p>Monitor non-authorized use of the ASHRAE logo and brand and protect ASHRAE's intellectual property rights.</p>	<p>Publishing and Education Council</p>	<p>2007/2010</p>
<p>11. ASHRAE will provide enhanced staff support outside of the United States.</p> <p>Cooperate with Associate Societies or other associations to explore providing a staffing and administrative presence for ASHRAE in strategic and key locations outside of the United States.</p>	<p>Executive Committee</p>	<p>2007/2009</p>

<p>12. ASHRAE will align business practices to better serve members globally.</p>	<p>Finance Committee</p>	<p>2007/2010</p>
<p>Develop the ability to do business globally with regard to accepting and disbursing currencies across national borders and implement other business practices that facilitate participation of non-US members in ASHRAE.</p>		
<p>13. ASHRAE, in cooperation with national societies or independently, will pursue conferences and exhibitions outside North America.</p>	<p>Executive Committee</p>	<p>2007/2010</p>
<p>Contribute to the process of globalizing trade fairs for the HVAC&R industry. This entails actively soliciting attendance and exhibitors from outside the United States in the AHR Exposition, encouraging U.S. participation in trade shows outside of the United States when such participation benefits ASHRAE members locally and regionally, and creating through partnerships when advantageous to do so new trade shows that will bridge gaps between technology development, product availability, and systems application.</p>		
<p>14. The ASHRAE Brand will be strengthened to reflect a global strategy that serves the needs of all members.</p>	<p>Executive Committee</p>	<p>2007/2010</p>
<p>Retain a competent firm to advise ASHRAE regarding developing a global brand.</p>		

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