

The Role of Energy Efficiency Business Councils in the Development of a Vibrant Energy Efficiency Sector in Developing Countries

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ABSTRACT

The lack of a strong, organized energy efficiency industry in developing countries impedes the development and implementation of cost-effective energy-saving projects as well as the enactment of sustainable national energy policies. This paper discusses a program that seeks to resolve the “Catch-22” in which energy-saving technologies are not deployed because of a lack of policy incentives, and policy incentives are not implemented because of the perceived lack of appropriate technologies on the marketplace. Through the creation of Energy Efficiency Business Councils (EEBCs), efficiency companies gain a valuable mechanism for transforming their countries’ markets for energy efficiency products and services, and for providing critical private sector input into national-level energy policy debates.

Background

The energy efficiency sector in many developing countries suffers from an identity crisis. Only a limited number of companies offer energy efficiency products and consulting services in the developing world, and the quality of their product mix and technical expertise varies widely, as does their motivation for encouraging implementation of energy-saving measures. Many businesses do not perceive themselves as energy efficiency companies, even though energy efficiency goods and services make up a significant percentage of their product lines. Companies that offer innovative financing such as equipment leasing and performance contracting are rare in most developing countries.

The lack of companies marketing energy-saving equipment and services is one of the major barriers to increased investment in energy efficiency in the developing world. Of the companies that do market such equipment, many suffer from inventory shortages due to the limited demand and higher up-front costs. Consequently, interested customers are not assured of timely delivery of equipment, which impedes the widespread use of energy efficiency technologies and services.

China offers a prime example of the great need for private sector infrastructure in the energy efficiency industry, and the potential for an organized, Energy Efficiency Business Council (EEBC) to fill this void by challenging (instead of ignoring) the existing constraints to energy efficiency market development. Although the Chinese government has taken some steps to encourage industries and state-owned facilities to reduce their energy use, energy efficiency companies that stand to benefit from regulatory measures to save energy lack the market incentives to help their clients improve energy efficiency. Few companies choose to market energy-efficient equipment in China, and still fewer companies actually have such

equipment in stock. In addition, only a limited number of Chinese companies offer energy efficiency consulting services to manufacturers, commercial businesses, or the construction industry, making it difficult for those that want to save money by lowering their energy use to get the assistance necessary to do so. For the most part, energy efficiency consulting services in China are left to universities, technical institutes, and the 150-or-so local and provincial energy-saving associations whose technical expertise and motivation to encourage the implementation of energy saving measures varies widely.

In general, those companies in developing countries such as China that have been brave or clever enough to embrace energy efficiency as a marketing tactic for selling their products remain isolated and limited in achieving their goals. They often become frustrated by the many non-tariff related trade barriers and counterproductive energy policies -- such as subsidized fuel prices and payment difficulties -- that hinder their best efforts to develop a successful energy efficiency business. Companies are often unaware of the potential of a cohesive, collective energy efficiency business group, opting instead to operate independently to accomplish their marketing and policy goals rather than banding together with like-minded businesses to try and influence the political and/or regulatory process in favor of energy efficiency.

On the policymaking side, the lack of effective advocacy for energy efficiency, coupled with a relatively uninformed consumer sector, contributes to the lack of pressure on key developing country decision-makers to embrace the economic and environmental benefits of energy efficiency. This is especially unfortunate because improving energy efficiency is one of the most effective means for ameliorating the severe shortages of reliable or safe energy supplies—as well as the environmental harm from the use of dirty coal or nuclear energy—that are often encountered by developing countries. Yet there is often only a small group of people in a particular country championing energy efficiency as a critical component of the resource mix rather than a marginal policy tool. In addition, because there are few examples of successful domestic efficiency projects, policymakers may have poor understanding of the technologies themselves and too few case studies to use as examples in debates on pending legislation.

To help address these challenges, the Alliance and other groups have worked both within the United States and overseas to establish non-profit trade associations to represent the interests of energy efficiency companies and the broader interest of saving money through energy efficiency. Domestic examples include the Northwest Energy Efficiency Council and Northeast Energy Efficiency Council, while overseas we find the Council of Energy Efficiency Companies of India (CEEC), the Hungarian Energy Efficiency Business Council, and the Council of Energy Efficiency Companies of Egypt. These EEBCs have begun to figure prominently in regional energy policy debates, and their successes have proven that the strength and visibility of the energy efficiency sector can be measurably enhanced if individual companies work together toward a common goal.

What is an Energy Efficiency Business?

Energy efficiency can be defined in many ways. A type of equipment or system might be said to be energy efficient because it exceeds an established performance threshold (e.g., 88% average fuel use efficiency for a gas furnace). Alternatively, prescriptive requirements could be established (e.g., electronic ballasts). Either of these requires a

substantial amount of analysis to be credible and will almost invariably involve negotiation among the various stakeholders. Companies that already manufacture equipment meeting a proposed standard will likely support it, while companies selling equipment that does not meet the standard will likely oppose it. In short, the development of performance or prescriptive-based standards is likely to generate controversy or opposition.

Consequently, EEBCs have defined the “energy efficiency industry” to include all producers, distributors, and service providers that actively market, or express interest in marketing, their goods and services based on their energy efficiency characteristics.¹ This encourages participation by companies that are interested in associating their products and services with energy efficiency without excluding any company for failure to meet some predetermined efficiency standard.

While self-selected companies may not always have the most energy-efficient products, they are likely to have an interest in energy efficiency programs that can be nurtured through membership in an organization of like-minded businesses. In addition, companies can be pushed to develop more energy-efficient products through involvement in energy efficiency programs.

Strength in Numbers

Trade associations have been around for centuries and currently exist for virtually every industry imaginable, from motors to mutton, nurses to nuts. It is somewhat surprising, then, that the idea of establishing trade associations for the energy efficiency industry is relatively new. In the United States, perhaps the first such organization was the National Association of Energy Services Companies, which represents the interests of energy services companies. The Northeast Energy Efficiency Council (formerly the Massachusetts Energy Efficiency Council), founded in 1992, was the first energy efficiency industry association with a broader industry membership. Today there are at least three broad-based energy efficiency trade associations, covering the Northeast (New England), the Northwest (Washington, Oregon, and Idaho), and Minnesota, while several more are underway, such as the Midwest Energy Efficiency Coalition.²

Energy efficiency companies are the private sector army that the government needs to make energy efficiency happen. Providers of energy efficiency products and services are technical experts that know where energy is being wasted in which sectors and why. They have pricing information and they understand how the marketplace works. The interest of individual energy efficiency companies in policies that encourage the purchase of their products and services naturally lead to collective action aimed at mobilizing the political will needed to develop and implement such policies.

EEBCs can raise awareness about the economic and environmental benefits of improved energy efficiency; provide energy efficiency training; demonstrate the results of energy efficiency through hands-on experience as well as educational seminars and outreach;

¹ Energy efficiency companies generally include manufacturers of energy efficiency technologies or products (i.e. sensors, lighting, insulation, and windows), energy service companies (ESCOs), engineers, auditors, and energy service consultants.

² The Alliance to Save Energy is technically not a trade association, although it does have “associates” representing a broad cross-section of the energy efficiency industry.

and work with policymakers to develop policies that promote investments in energy efficiency improvements.

EEBCs can also:

- build consensus among the diverse members of the energy efficiency industry so that the EEBC can serve as a common voice to raise the profile of issues critical to all EEBC members;
- promote the development of energy efficiency policies, programs, and technologies that create jobs, foster economic growth, and improve the local and global environment;
- educate private and public energy sector consumers about energy efficiency opportunities in their facilities, businesses, and homes; and
- provide member companies with a platform for marketing their products in tandem with other companies in the efficiency industry.

This same approach has begun to resonate with those trying to spur the development of an energy efficiency industry in developing countries. While EEBCs are most effective when coupled with at least a nascent market for energy efficiency goods and services, each can encourage the growth of the other. By providing companies with the technical assistance and training to better identify and reach their customers, as well as the opportunity to provide input into the development of policy positions, such as tax incentives and building codes, EEBCs can be a critical component of a robust energy efficiency sector.

What Makes a Successful Council?

The strength of the successful EEBC lies in its ability to provide two primary benefits to members: (1) a strong sense of value from their participation in the organization, and (2) a clearly defined strategic vision.

Value

Providing value added to members is critical to the success of any EEBC. However, the benefits of membership or affiliation need not be direct or explicit. Companies often base their decision to stay in fledgling organizations on whether the organization successfully “raises the tide” for their industry (in this case the energy efficiency industry) overall in the country. This differs somewhat with the expectation that companies will participate only if such participation leads to direct and quantifiable sales of their products. For example, while the Hungarian EEBC’s work to overturn a particularly onerous municipal procurement law has to date resulted in small short-term gains in sales for member companies, it offers the promise of future growth in revenue and is therefore valued by the EEBC’s members.

Similarly, EEBC members may value the access to a wide variety of energy efficiency-related companies (i.e., engineers, suppliers and manufacturers, service providers, and consultants), along with the resulting opportunities for integrated project development, gained through participation in the EEBC forum. The range of services and technologies represented by the EEBCs fosters business-to-business networking, critically important in any industry. Members use the many events and forums of the EEBCs as a chance to meet and develop professional relationships with companies and sectors that they might not otherwise have come in contact with, thus strengthening the ability of the developing country

energy efficiency industry to grow and prosper. For example, as a result of the networking opportunities presented by EEBC meetings, several members of the Indian EEBC have expanded their customer base to new regions and increased their sales opportunities.

In order to provide the value added needed to ensure success, EEBCs must carefully develop products and services that reflect the changing needs of their members. In addition to the now ubiquitous newsletters and websites, EEBCs are developing both informal and formal programs to showcase member technologies and update member skills. For example, the Indian EEBC organized four seminars in the fall of 1999 in which members gave technical presentations on their various energy-saving products and services to targeted groups of industrial, government and commercial energy consumers. Similarly, Hungarian EEBC members recently participated in an educational seminar designed for facilities managers in the hotel and hospital industries. Both EEBCs provided member companies (and potential members) with large targeted audiences and in turn, their members provided the assembled audience with technical presentations suited for the needs of their particular industry.

At least domestically, lunch forums and panel discussions have proven an effective method for introducing members to new concepts and technologies. Speakers, who often include policymakers, often welcome the chance to hold an “off the record” discussion with a private sector group of energy efficiency enthusiasts. The Northwest Energy Efficiency Council, for example, holds regular lunch meetings to discuss topics of interest to members such as pending state legislation and Bonneville Power Administration (BPA) policies. Both the Indian and Hungary EEBCs are considering holding these types of events.

Similarly, EEBC members may be introduced to senior policymakers and programs to which they would not otherwise have direct access. Occasionally, policymakers will use EEBC members as a sounding board for a new policy or proposed regulation, thus garnering an important source of real-world feedback from practitioners. Often the request goes farther than an informal discussion of the issues, as was recently the case in Hungary when the Hungarian Energy Efficiency Council was asked by the Ministry of Energy to provide formal, written comments on a new energy efficiency statute. And in December 1999, the Indian EEBC held a policy roundtable on electric power restructuring, which included a number of high-level government decision-makers and regulators.

EEBCs also have provided venues for companies to educate end-users regarding the economic and environmental benefits of energy efficiency. Educational seminars have been effective in this regard. For example, the Indian EEBC organized seminars in which members provide targeted end-users with non-commercial information about the potential for energy efficiency improvements in their facilities. The Indian EEBC has held five such seminars on a variety of energy efficiency topics including energy-saving opportunities in the information technology industry and the textile sector. Companies participate as presenters offering case studies and energy efficiency recommendations specifically tailored for the targeted audience. These types of seminars provide value to EEBC members by:

- familiarizing members with the specific needs of potential clients;
- increasing consumer awareness of specific energy efficiency technologies and services;
- surveying potential customers to identify energy saving opportunities; and
- introducing members to potential product representatives and distributors.

Moreover, because the seminars are designed to be educational rather than sales oriented, many of the traditional competitive rivalries that often characterize relationships between companies can be set aside in favor of a frank discussion of the relative benefits or disadvantages of the technologies themselves.

Strategic Vision

Although an EEBC's vision for energy efficiency is critical in terms of ensuring the commitment of its members, the development of a cogent mission statement agreeable to all members can be difficult to achieve. Although all EEBC members are presumably interested in transforming the market for energy efficiency, individual companies may have very different methods in mind for achieving this goal. On the domestic front, large and small members of the Northwest Energy Efficiency Council, for example, differed over whether the Bonneville Power Administration should be allowed to create an energy services company subsidiary. Small companies thought it would mean more business for them. Larger companies felt that BPA would have unfair advantages in the marketplace and would compete with them for projects. Similarly, there was some disagreement among the Indian EEBC's members about the efficacy of electronic versus high-efficiency magnetic ballasts given the poor quality of electric power in India.

Similarly, some companies may wish to focus on influencing national energy efficiency policies and issues, while others—especially smaller firms—will choose to concentrate their efforts at the local or commercial levels where the return on investment may appear more immediate. Ultimately the administrators of the EEBC, if not the members themselves, usually strike a balance between broad policy initiatives and more market-oriented activities. This course usually provides tangible benefits to the broadest range of members.

Subcommittees can help address specific issue areas within the institutional framework of a larger program. For example, the Indian EEBC was established in 1998 by the Alliance to Save Energy and the Conserve Society of India to expand markets for energy efficiency products and services. While the general mission of the Indian EEBC is to promote energy efficiency policies, programs, and technologies, the members have identified inefficiencies in federal buildings as a particular focal point. The Indian EEBC, working with ESCO members within its organizations, has established a small ESCO subcommittee and identified specific goals and activities, such as a recently completed audit of the Ministry of Power building. Subcommittee members report to the Indian EEBC's Board of Directors, but their activities address the needs and activities of a targeted component of the organization.

Challenges Faced by Energy Efficiency Business Councils

As one might expect, the challenges faced by EEBCs in developing countries are not unlike those experienced by their U.S. or European counterparts: securing financing, balancing varied member interests, maintaining a substantive voice in policy and political debates, crafting a cogent strategic vision, and keeping members engaged. However, because their numbers are often smaller and members less experienced in working within associations of this type, these challenges can prove daunting for a new group in a developing country. In

addition to the following challenges that most EEBCs in developing countries share, EEBCs developed in countries lacking experience with capitalism and entrepreneurship, such as the former Soviet-bloc countries and China, also face a lingering distrust of the private sector.

Securing Financing

Because of their unique status as a non-profit organization comprised of for-profit companies, EEBCs often face the common misconception that they have a strictly commercial agenda. While it is important for EEBCs to find revenue mechanisms such as annual dues, publications costs, and training fees that enhance the market for energy efficiency and help serve the mission of the organization, early on in the process external funding sources can be critical. For example, the U.S. Agency for International Development, the U.S. Asia Environmental Partnership, and the W. Alton Jones Foundation have all provided seed money for the initial stages of the Indian EEBC. The trick will now be for the Indian EEBC to develop the capacity to remain a self-sustaining entity if overseas development assistance funding dries up.

Balancing Member Interests of the Council

EEBCs have diverse memberships with varied and potentially conflicting interests. In larger countries such as the United States and India, geographic diversity often plays a significant role as regional or state issues such as privatization or deregulation trump national issues in members' focus. Possible controversies among EEBC members include those arising over electronic versus magnetic ballasts; large versus small ESCOs; and importers versus domestic manufacturers. In their infancy, EEBCs in Egypt, Hungary, and India have taken on issues that are unanimously supported by their members; however, as these organizations mature they will undoubtedly tackle issues that generate controversy and threaten to fracture the unified voice that the EEBCs strive to achieve.

Keeping Members Engaged

Although EEBCs are made up of companies, it is important to remember that participants have "day jobs" and cannot make large time commitments. Ironically, the more successful a member is running its business, the less time may be available for participation in EEBC activities. This is most likely to affect high-level company representatives who often have time for only a ceremonial role in EEBC affairs. We find that all of the EEBCs are dependent on competent full-time staff to develop and refine positions on issues, as well to deal with the administrative burden of maintaining databases, keeping members apprised of new opportunities in the efficiency sector, and marketing the EEBC to new members. Attempts to develop volunteer-based EEBCs have not been successful.

Creating a Bandwagon Effect

Despite the value that the EEBCs can offer, companies may be slow to take advantage of such institutions, often waiting to join only after they see their peers benefit from participation. This makes it essential to elicit the enthusiasm and critical mass needed

for the launch of an EEBC. One excellent way to create this initial membership base is to identify a core constituency of members who can move the process along in the early stages. In both the Indian and Hungarian EEBCs, a core group of companies played key founding roles. Both EEBCs benefited from early recognition by key members of the crucial role that a highly visible core group of companies could play in recruiting additional members from similar companies.

Conclusion

Energy efficiency companies have a strong self-interest in promoting sustainable energy policies. But their diversity makes it difficult for them to be collectively heard. Energy Efficiency Business Councils can play an effective role in bringing the efficiency industry together, raising the industry's profile in the policy arena, and increasing awareness about the economic and environmental benefits of improved energy efficiency.