

The Energy Efficiency Search Engine: The Energy Ideas Clearinghouse

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Abstract

The goal of the Energy Ideas Clearinghouse (EIC) is to provide a centralized location for credible, convenient, timely and unbiased energy information and is intended to address two market barriers: lack of awareness of energy information and search and acquisition cost of energy efficiency information. To reach these goals the EIC has developed a tiered structure approach to customer service that streamlines the task of information delivery so that client needs and requests can be met in a least cost manner. Customer information services include a Web site, EnergyIdeas.org, targeted energy listservs, a telephone hotline, library/literature search services, and energy specialist and engineering consulting. The evaluation goals are to document the project, track how well the EIC is addressing the identified barriers, and document how well the services are being delivered. The evaluation has repeatedly surveyed hotline users, energy professionals that have not used EIC services Web site visitors, and listserv recipients, and also performed Web site benchmarking. The evaluation has found that the EIC has been successful in implementing its tiered delivery approach and in attracting and providing valuable services to its targeted audience, energy professionals.

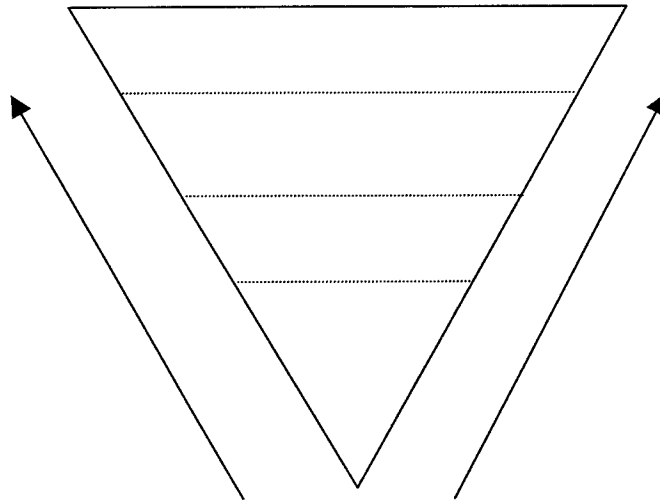
Introduction

The goal of the Energy Ideas Clearinghouse (EIC) is to provide a centralized location for credible, convenient, timely and unbiased energy information. It is funded by the Northwest Energy Efficiency Alliance (Alliance). The EIC primarily serves energy professionals in the commercial and industrial sectors. The EIC is intended to address two market barriers:

- 1) lack of awareness of energy information and
- 2) search and acquisition cost of energy efficiency information

To reach these goals the EIC has developed a tiered structure approach to customer service. This system streamlines the task of information delivery so that client needs and requests can be met in a least cost manner. Customer information services include a Web site, EnergyIdeas.org, targeted energy listservs, a telephone hotline, library/literature search services, and energy specialist and engineering consulting.

Figure -1
EIC Tiered Service Structure



The EIC's EnergyIdeas.org Web site and the multiple targeted listservs are viewed as the least cost method for providing information to a specific client's need for information. The EIC also offers a human contact through their customer hotline. The hotline's experienced staff will typically be able to answer the client's question, refer them to an appropriate source on the Internet, or supply them with an available fact sheet. More detailed questions/requests or high priority queries may be referred to library staff, energy specialists or appropriate engineering staff.

The goal of the evaluation is to document the project, track how well the EIC is addressing the identified barriers, and document how well the services are being delivered. The evaluation has repeatedly surveyed hotline users, energy professionals that have not used EIC services, Web site visitors, and Listserv recipients, and also performed Web site benchmarking.¹ The evaluation has

¹ For more detailed information see the three market progress evaluation reports (E00-059, E99-043) at <http://www.nwalliance.org/resources/reports/special.html> and an earlier Results Center (Results Center 1994) at <http://solstice.crest.org/efficiency/irt/86.pdf>

found that the EIC has been successful in attracting and providing valuable services to its targeted audience, energy professionals.

Since 1998 the annual number of hotline callers has gone up from 297 in 1998 to 539 in 2000.² Most of these callers (>80%) have been energy professionals with approximately 50% being professionals employed at utilities, government agencies, and architectural, engineering and other consulting firms. The most recent survey of hotline users shows that the average hotline caller had over 14 years of experience making energy related decisions and 70% believed that they had some (34%) or substantial (36%) influence on energy related decisions in their organization. Hotline survey respondents have an average of 14.3 years of experience making energy related decisions.

As with earlier evaluations of the EIC (Peters, Baggett, et al 1994, Results Center 1994)) the majority of hotline users were overwhelmingly satisfied: over 80% were somewhat or extremely satisfied with the EIC's services. Nearly 77% of the survey respondents indicated that the EIC provided most or all of the information they were seeking. Users were also questioned on how they used the information provided by the EIC. Less than 10% of the respondents did not use the information. Most importantly the information is being used to support energy-efficiency decisions. Almost half of the EIC hotline users said they changed their business practices as a result of energy efficiency information either often (28%) or very often (15%). Finally, 34% of surveyed users report that "a lot" or "some" energy savings resulted from the EIC services.

Surveys of energy professionals³ who had not used the EIC's hotline services were also fielded in 1999 and 2000. Each of these surveys had approximately 100 respondents coming from five major customer groups: utilities, consultants, commercial building operators, industrial plant managers and institutions. These surveys indicated that there was a low level of awareness of the EIC and its services, with 28% being aware of the EIC in 1999 and 15% in 2000. This lack of awareness of the EIC was viewed by the evaluation as a major barrier to increasing the impact of EIC. This should also be viewed from the angle that close to 50% of the non-users tend to make changes to their business practices as a result of energy information; information the EIC could provide. This lack of awareness is partially due to the lack of marketing on the part of the EIC. Another indicator of this is that 20% of the people that had used the EIC prior to 1998 had not used the EIC again because they had forgotten about it.

² Total number of calls has gone from 422 to 763

³ Obtained from membership lists of energy related professional organizations and energy related magazine mailing lists.

One unexpected result of the evaluation was that the surveys acted as marketing for the EIC. The survey reminded current and prior users and informed non-users of its existence by notifying them about the establishment of the EnergyIdeas.org Web site. In addition many were also immediately signed up for the EIC's Energy Newsbriefs listserv. With surveys consistently showing high levels of satisfaction with the EIC services, and the consistent message that more marketing was needed to expose more people to the EIC's services, it was decided to put any further hotline participant surveys on hold (a third round of surveys had been planned).

The evaluation also sought to evaluate the EIC EnergyIdeas.org Web site itself and the various listservs that the EIC maintained. An online survey was developed to evaluate the use of the Web site. The survey used a subset of 12 questions that were used in the hotline-user telephone survey to make comparisons between the two groups. The questionnaire was placed on the EnergyIdeas.org Web site from April through June 1999, removed during a Web site upgrade, and then placed on-line again in October 1999 where it has remained since. To encourage Web site visitors to participate in the survey, they were entered into a drawing to win either a free airline ticket (drawing August 1999) or a digital camera and a palm pilot (August 2000). Since then winners have been selected each month to receive a CFL light bulb or torchiere. As of January 2001 a total of 387 valid survey responses were obtained.

The results of the on-line survey were surprisingly similar to those of the hotline survey. Again most of the visitors to the site were energy professionals with about 60% employed at utilities, government agencies and architectural, engineering and other consulting firms. The on-line respondents also appeared to be in a position to effect energy decisions in their organizations. Thirty-seven percent defined themselves as either an executive or a program/department manager.

Overall the visitors rated the site highly with 71% giving the score "4" or "5", with 5 being extremely satisfied. The finding that 48% of the respondents recommended the site to others, and that 58% of all first time users bookmarked the site (79% of repeat users), indicate how interesting or useful the Web site users found EnergyIdeas.org. Users of the site also indicated that they made good use of the information. For, example 40% shared materials with others, and 46% used technical data obtained through the site to support a decision.

The EIC also maintains nine listservs. Four listservs⁴ are sent out with information on recent energy efficiency news on a periodic basis (every 1 to 3 weeks) and were the focus of the evaluation. The emails provide links to these sources of information as well as a short "teaser" on the content.

⁴ The other 5 are used either to send announcements out to various Alliance stakeholders or are used as discussion forums by specific groups.

People receiving these listservs do not have to visit the EnergyIdeas.org Web site but can directly click through to the energy efficiency news source. Participants can sign up for these listservs on the EnergyIdeas.org Web site or if the listserv has a sponsoring agency, that organization's Web site.

All of the 648 listserv subscribers were sent an email on January 26, 2001 asking them to provide the EIC with feedback and a link to the survey. A reminder was sent out on February 1, with a final reminder February 26. A total of 187 surveys were completed for an overall response rate of 29% (Energy Newsbriefs, the listserv with the most subscribers, had a 31% response rate).

Again the listserv messages are being received by energy service professionals in the Northwest (69%) at their work (80%) who predominantly work for utilities, government agencies and architectural, engineering and other consulting firms (>50%). They are also not strangers to other EIC services with over 50% of the respondents having used the hotline or accessed EnergyIdeas.org. The most common ways that people learned about the listservs was word of mouth (46%), the EnergyIdeas.org Web site (30%), and the telephone hotline (16%).

The recipients of the listservs indicated that they actively follow the links to the energy stories: nearly half of the respondents (47%) reported that they "always" follow the links (6 or more stories a month). Another 46% of the sample indicated that they follow at least one or two stories a month. This relatively low cost information service also helped influence energy-related decisions with almost half of the respondents (49%) reporting that they had used the technical data from the listserv stories to support a decision at least once (11% used it several times). As expected by the way respondents actively follow the links and made use of the information, they generally found the information valuable (71% found it valuable and 9% found it very valuable). In addition, a remarkably high number of respondents (79.1%) had recommended the listserv to others.

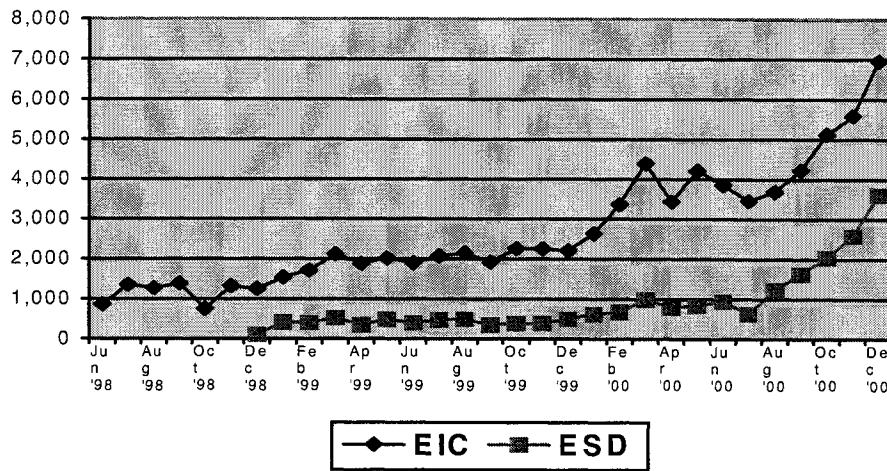
The implementation and refinement of the tiered service strategy has also been working. The number of EIC requests for the hotline has increased from 422 in 1998 to 763 by the end of 2000. However, between 1998 and 1999 the number of requests that were answered by the frontline staff increased while use of library and engineering staff time decreased. In addition, the listservs managed by the EIC allow subscribers to immediately access the information and reduce any costly searches for hard to get journals. Interviews with EIC staff have also indicated that providing information electronically and improved access to information on the Internet has sped up response times and lowered overall costs of providing the information.

As shown in Figure 2, the Web site user sessions, as well as those on the Energy Solutions Database (ESD) page of the site, have increased dramatically over the past three years, rising steadily

each year. In 1998, for example, the site averaged about 1,170 user sessions per month; in 1999 user sessions nearly doubled to 2,000 per month, and in 2000 user sessions more than doubled to 4,241 per month. The user sessions increased dramatically throughout the second half of 2000, reaching nearly 7,000 users by December 2000. The number of unique users per month also had a substantial increase from 1999 to 2000 (309 to 843 per month). The cause of this increase in traffic may be due to both the current energy crisis as well as EIC's increased marketing efforts in 2000.

Figure 2

Total EIC Web Site and Energy Solutions Database User Sessions



The nine listservs that the EIC sends out to targeted groups of professionals has also increased its client base, growing from 82 at the beginning of 1999 to 748 less than two years later. Accessibility to information has also increased as many of the reports or articles initially cited in the listserv may still have been difficult to obtain, but the EIC has adapted and now most of the listed articles have direct links embedded in the email.

The EIC has demonstrated that the combination of online and real world expert advice is an effective means for providing valuable energy information that will be used to support energy decisions. The evaluation has helped document the growth in use of the EIC's services and has given important input into what features and services are of interest to the many client groups. The evaluation results have also been helpful in the ongoing design of the EnergyIdeas.org Web site and even in the marketing of the EIC's listservs. Finally, the evaluation has identified that lack of awareness of the EIC on the part of energy professionals has been a major obstacle that has slowed the growth in demand for EIC services.

References

1. J.S. Peters; S. Baggett, et al, "Process Evaluation of the Electric Ideas Clearinghouse Final Report."; Barakat & Chamberlin, Inc., submitted to the Bonneville Power Administration, Portland Oregon, April, 1994.
2. quantec, "Market Progress evaluation report: Energy Ideas Clearinghouse, No.1", Northwest Energy Efficiency Alliance, E99-043, Portland, OR, December 1999.
3. quantec, "Market Progress evaluation report: Energy Ideas Clearinghouse, No.2", Northwest Energy Efficiency Alliance, E00-059, Portland, OR, August 2000.
4. quantec, "Market Progress evaluation report: Energy Ideas Clearinghouse, No.3", Northwest Energy Efficiency Alliance, Portland, OR, May 2001.
5. The Results Center, "Washington State Energy Office: Energy Ideas Clearinghouse", 1994