

# EnergyIdeas Clearinghouse

*Market Progress Evaluation Report, No. 1*  
*Executive Summary*

*prepared by*

**Quantec**

*report #***E99-043**

December 1999



**NORTHWEST ENERGY EFFICIENCY ALLIANCE**

[www.nwalliance.org](http://www.nwalliance.org)

529 SW Third Avenue, Suite 600  
Portland, Oregon 97204  
telephone: 503.827.8416  
fax: 503.827.8437

# **Energy Ideas Clearinghouse**

## **Market Progress Evaluation Report**

*Prepared for:*  
Northwest Energy Efficiency Alliance

*Prepared by:*  
quantec

*In association with:*  
Jupiter Communications  
and  
Gilmore Research Group

# Executive Summary

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Since 1990, the Energy Ideas Clearinghouse (EIC or Clearinghouse) has served energy professionals in the Pacific Northwest by providing fast, centralized access to comprehensive and objective information and technical assistance on energy related topics.

The Clearinghouse was originally funded by Bonneville Power Administration (Bonneville), which saw the need for a centralized source of energy related information as it entered the commercial and industrial demand-side management arena.

In 1997 the Northwest Energy Efficiency Alliance (the Alliance) began funding the program in support of its market transformation efforts. The Alliance hoped that the Clearinghouse could target its informational services to decrease at least two market barriers that limit the adoption of energy-efficient practices:

- ➔ Lack of awareness of how energy is used and the associated energy/non-energy benefits
- ➔ Search and acquisition costs of energy efficiency information

## Project Characterization

The Clearinghouse currently offers two primary services: a hotline and a Web site.<sup>1</sup>

Customers served by utilities in the Pacific Northwest can call (toll-free), e-mail, or fax questions concerning energy use into the Clearinghouse hotline. Topics include (but are not limited to) motor systems, HVAC, industrial electrotechnologies, life cycle cost analysis, computer simulation, energy policy, agricultural

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<sup>1</sup> The EIC staff has initiated a number of other projects, including a Targeted Intervention Program (TIP) to provide facility managers and residence hall administrators' with effective information about the safety and energy efficiency of halogen torchieres. This project, however, is not evaluated in this report.

energy issues, and cogeneration. Responses to questions, usually within eight hours, can take a number of forms, including:

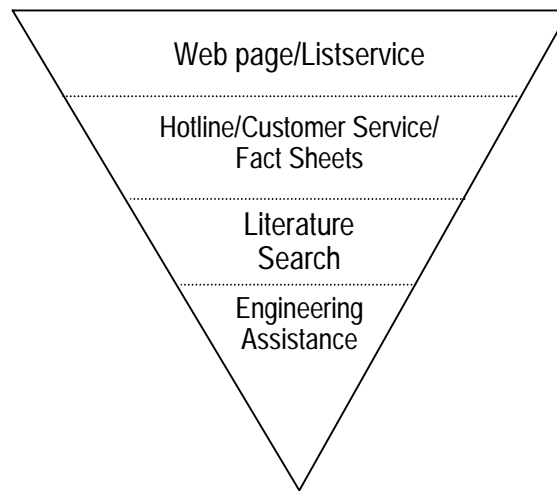
- A literature search
- Publication or fact sheet
- Product or pricing information
- Engineering assistance or analysis
- Referrals to other energy programs, services, or resources

The Web site has incorporated many of the services that were previously on the BBS, and some new services as well:

- Energy Solutions database
- Energy-related job listings
- A calendar to search for energy conferences, meetings, or upcoming events
- Links to energy software, publications, and tools for energy professionals.
- Bulletins, newsgroups, listservice and current news about energy efficiency nationwide
- Links to other Web sites with energy information

The Clearinghouse has structured itself in a tiered system of information dissemination. The goal is to refer most clients to low-maintenance electronic information, such as the Web page or the listservice. Clients with more customized needs can contact the customer service representatives using the Hotline. If customer service cannot assist the caller (using a tool such as the fact sheets), then the request for information is forwarded to the library or the engineers, the “deeper” tiers of the system.

**Figure ES-1**  
**EIC Tiered Service Structure**



The number of hotline cases has varied widely since the inception of the Clearinghouse in 1990. Hotline inquiries peaked in 1992, following a large marketing effort by Bonneville. Bonneville continued with small marketing campaigns to utilities and other specific audiences following this, but stopped marketing in 1996 since they knew funding would end in 1997. Lack of marketing led to a steep decline in hotline inquiries; in fact, in 1998, there were only 422 inquiries, representing 297 clients. The steep drop in hotline inquiries was also influenced by the fact that the Energy Ideas Clearinghouse began adopting a more regional focus in the mid-1990s.

The majority of Clearinghouse hotline inquiries were about the commercial sector. This percent, however, has been steadily dropping from 89% in 1995 to 73% in 1998. Calls from the residential sector, by contrast, have been steadily increasing since 1995, to 20% in 1998.

Callers from utilities make up the majority of 1998 inquiries (24%). There were also many callers from government organizations (13%) and consulting firms (8%).

The most common hotline questions concerned Heating, Ventilation, and Cooling (HVAC) (13%). Other common topics included lighting (6%), motors (6%), renewable resources (6%), and codes/standards/laws (6%).

## Staff Interviews

**quantec** conducted extensive interviews with EIC staff in December 1998. Participants in the interviews included the technical group, library staff, the Web team, customer service staff, and management. Each group provided valuable insights into the current structure and functions of the Energy Ideas Clearinghouse.

For example, there were a number of EIC strengths that were identified by program staff. These included, customized personal service, comprehensive information, objective advice, no cost for services, and the speed of responses.

During the course of the interviews, program staff were asked why they felt more users were not using the EIC services. The answers to this question fell within four categories: *awareness, performance uncertainty, relative energy costs, and established networks.*

## Current and Prior User Analysis

In order to better understand who is using the Clearinghouse services and how the information is being used, **quantec** conducted interviews with current and prior users of the Clearinghouse. Current users were classified as those who have used the services in the past 12 months (through the beginning of 1998), while prior users were considered to be those who had contacted the EIC from 1995 to 1997 but not during the past year. For clients that contacted the EIC more than once, only the most recent contact was considered for classification.

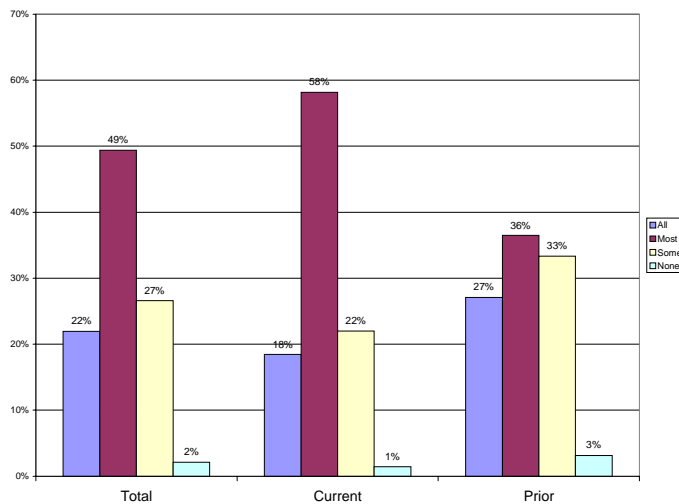
The sample was drawn from the EIC program database. A total of 244 interviews were completed: 143 with current users and 101 with prior users.

There were a number of findings from the surveys, including:

- The EIC users held a wide range of positions within their companies.
- Hotline users had a substantial amount of experience in the energy field

- ➔ Respondents had a substantial amount of influence on their companies' decisions to implement energy efficient practices or equipment.
- ➔ EIC users were overwhelmingly satisfied with the Clearinghouse services. Overall, 79% of respondents were either “somewhat” or “extremely” satisfied with the EIC services.
- ➔ EIC users appeared satisfied that the EIC was answering their questions: 71% of the users said the Clearinghouse provided “all” or “most” of the information they were seeking (Figure ES-2).

**Figure ES-2**  
**Did the Clearinghouse Provide the Information Respondent Was Seeking?**



- ➔ Prior users reported that they primarily did not use the EIC as much because of a lack of need (45%) and because they simply forgot about it (21%).
- ➔ A majority of the clients reported that they made use of the information they received.
- ➔ Respondents indicated that they collect energy and energy efficiency information from a variety of sources. The two most common were magazines/newsletters (35%) and the Internet (30%).

- ➔ A great majority of the respondents had access to the Web either from their desk at work (90%) or from another desk at work or home (7%).
- ➔ Only about half (49%) of all the survey respondents, however, had accessed the Clearinghouse Web page.
- ➔ Nonusers of the Web page didn't know it existed (40%) or couldn't find it (7%).

## Nonuser Analysis

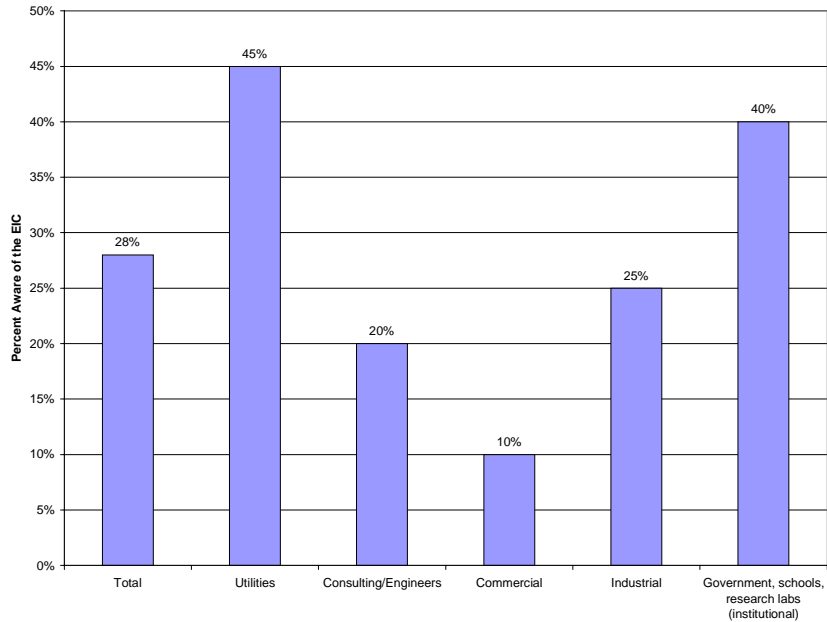
In order to better understand why more energy decision-makers aren't using the EIC services, Quantec conducted a survey with 100 energy professionals from five quota groups: utilities, consulting/engineering firms/ESCOs, commercial building operators/energy decision makers, industrial plant managers/energy decision makers, institutional (government, schools, and research labs). The sample was selected via "snowball" sampling and by contacting professional organizations and magazine mailing lists.

There were a number of findings from the nonuser analysis, including:

- ➔ A total of 28% of the respondents were aware of the EIC (Figure ES-3).



**Figure ES-3**  
**Awareness of the Energy Ideas Clearinghouse among Nonusers**



- ➔ Of the 100 nonuser interviews, only 12% provided reasons for not contacting the Energy Ideas Clearinghouse. The rest of the respondents were either not aware of the EIC or didn't know enough about them to contact them.
- ➔ Nonusers tended to focus on the same sources of energy information as the users, but use them more heavily.
- ➔ Like the current and prior users, a great majority of the nonusers had access to the Web either from their desk at work (85%) or from another desk at work or home (11%).
- ➔ Nonusers were less dependent on the Internet (17%) than current/prior users (30%) for energy information. This difference could be caused by the nature of the companies; the nonuser surveys contained a higher percentage of commercial and industrial energy decision-makers, who may be less dependent on the Internet than utility, consulting, engineering, and institutional workers who comprised most of the user surveys.

## Change Agent Profile

**quantec** conducted an analysis of the survey data to help the Clearinghouse identify and better target “change agents” – leaders in implementing energy efficiency measures.

The first step in identifying change agents was defining them. The definition which provided the best distribution used one level for change agent: current/prior users that had “significant” or “some” influence on their companies energy decisions (Q14) and used the Clearinghouse information in at least two ways (Q5). Applying this definition, 138 (57%) of the 244 current/prior users were classified as “change agents.”

A number of tables were developed to more closely examine the relationship of change agent status with other variables, such as type of company and position within company. There was little relationship, however, between change agent status and these variables. For example, a nearly equal percentage of followers (28.3%) and change agents (29.0%) worked in utilities.

Change agents were not more likely to be in any particular company or position. In addition, we found similar results using other demographic variables, such as education level.

These findings indicate that change agent status cannot be predicted through any specific demographic or firmographic variables: instead, they are really dependent on attitudinal variables. These attitudinal variables cannot be known in advance, nor can they be predicted by some demographic or firmographic variables. In other words, change agents can be found in many different kinds of companies and in many different types of positions. Targeted marketing to groups of individuals, though, is probably a viable option with 33%-46% of the users and nonusers identified as change agents.

## Assessment of Web-Based Information Services

**quantec** implemented a four-stage approach to evaluating the Clearinghouse Web based information services.

### *Analysis of Web Site Statistics*

As the first step in analyzing the Web page, **quantec** collected statistics from the Web trends report from February 1998 (the earliest date they were available). These descriptive statistics revealed a number of interesting findings about the EIC Web page.

First, the number of user sessions for the Home page has varied sharply over the past year. After reaching a low of less than 600 Home page user sessions in October 1998, user sessions appear to have increased in 1999 and have remained at over 1,000 user sessions per month. Much of this increase appears to be coming from the Energy Solutions Database, which was fully introduced in January 1999.

After the Home page, the jobs database has consistently been the most popular page, with approximately 200 to 470 user sessions a month. The Energy Solutions Database, recently put online, also quickly became a favorite, with over 400 user sessions per month. The “Links,” “Software,” and “Publications” pages are the next most popular, each averaging about 100 to 200 user sessions per month. Other pages, like “Training Events,” “Newsgroups,” “About EIC,” “Codes,” and “Files” are the least accessed pages, averaging less than 100 user sessions per month.

### *Web Site Benchmarking Study*

Jupiter Communications, an Internet consulting firm, conducted a Web site benchmarking analysis comparing the EIC Web page to other “state of the art” Web pages. Two conference calls were then conducted with the EIC staff to discuss the findings from their analysis.

The first conference call, on January 7, focused on general design ideas for the Web page. Jupiter Communications recommended that EIC examine the layout of other popular Web pages for ideas and offered a number of suggestions for improving the page.

The Web staff at the EIC began making modifications to the page based on these suggestions and also developed a “mock-up” of a new page. A second conference call on March 3 discussed additional questions and the new “mock-up” page.

The Web site benchmarking analysis also includes a one-year subscription to the Jupiter Communication Strategic Planning Service (SPS). The service provides weekly analyst notes and monthly analyst reports on “best practices” for Web site operations strategies. The Clearinghouse can call Jupiter through the end of 1999 with any questions about the Web page.

### *Focus Groups*

On April 27 and 28, 1999, three qualitative focus groups were held at the headquarters of The Gilmore Research Group in Portland, Oregon. Each group was comprised of three respondents. The sessions lasted 90 minutes each and were conducted using a discussion guide prepared jointly by **quantec**, EIC, and Gilmore Research. The groups were led by a professional moderator from Gilmore Research and were observed by members of the Clearinghouse, **quantec**, and the Alliance.

After a brief introduction, respondents were led to desktop computer workstations and asked to search the Internet for information about a topic of their choice involving energy efficiency. A record was kept of each Web site visited. In addition, each page within the Web site was recorded, as was each search term used on internal and external search engines. Respondents then returned to the focus group room for a discussion of their search and the results of that search.

Respondents were then asked to return to the workstations for the purpose of conducting a thorough evaluation of the EIC Web site. They were instructed to take notes on the content, clarity and quality of the EIC Web pages. This review took about 25 minutes and was followed by a discussion of the EIC Web site.

Recommendations included: redesign the Home Page to be less “text heavy”, make it clearer how to return to the Home page, make the site easier to find, continue to add additional topics to the database, give user-friendly labels to the articles that come up as a search result, redesign the menu bar and page so it is not cut off on the right.

### *Online Survey*

A subset of questions from the current user survey has also been developed as an online survey (the instrument is included in

Appendix A). The survey was placed online on March 30, 1999. To encourage users of the page to participate, those that take the survey were entered into a drawing for a free airline ticket.

By the end of July there were a total of 73 participants. All participants from the study – including those that responded to the telephone survey – were entered into the drawing for the airline ticket, which took place on August 5, 1999. A winner was selected, and an announcement was placed on the EIC Web page. Results to the online survey will be presented in the next status report.

## Conclusions and Recommendations

Previous evaluations have demonstrated that satisfaction among users of the EIC was extremely high. In this study, the overwhelming conclusion across the various data collection and analysis methods is that users are extremely satisfied and the service provided is both desired and needed. The other overwhelming conclusion is that the reason more people do not use the service is lack of awareness. The following recommendations, therefore, focus on efforts that may help the EIC increase its outreach as the source for energy information in the Pacific Northwest.

**Issue 1: Awareness of the EIC.** Awareness of the Energy Ideas Clearinghouse was, by far, the largest market barrier to increased use of the EIC services. An increase in the number of repeat callers in 1998 and a decrease in the number of general informational calls are indications that there are fewer new users than in the past. The surveys uncovered additional evidence that lack of awareness is the primary market barrier. Increased marketing through direct mailings, press releases, and the Internet is needed.

**Issue 2: Continue to Improve and Promote the Web Page.** The conference calls with Jupiter Communications and the Web focus groups revealed that the EIC Web page contains valuable information but that it can continue to be improved with some formatting changes.

**Issue 3: Targeting Change Agents.** Staff members within the EIC sometimes disagreed as to who the best target market was. Part of this uncertainty arose from trying to identify which clients were most likely to be change agents: the clients most likely to

implement energy efficient measures. Our analysis revealed that that agents can be found in many different kinds of companies and in many different types of positions. Targeted marketing to groups of individuals, though, is probably a viable option with 33%-46% of the users and nonusers identified as change agents.

**Issue 4: Decreasing Market Barriers.** For EIC users, the program has been extremely effective at increasing awareness of energy efficiency information and decreasing acquisition for this information. In 1998 the EIC hotline averaged only one or two calls a day. *If the EIC could reach more people, it could further raise awareness about energy efficiency, thereby more effectively decreasing these market barriers.* Increased marketing through direct mailings, press releases, and the Internet is needed to increase both *awareness* and *use* of the EIC.

**Issue 5: Tiered Service Structure.** The statistics indicate that the tiered service structure is working, and that many of the inquiries into the EIC are fielded by the “frontline” services, such as the Web page and the customer service representatives. For example, the Energy Solutions Database receives approximately 400 user sessions a month, far more than the number of hotline telephone calls (422, or 35 per month, in 1998). In addition, less than half of the hotline inquiries (only about 44%) require library assistance, and even less require engineering assistance (30%). Approximately 18% of the calls require only customer service representatives, and no additional assistance. In order to continue to reinforce the tiered service structure, the EIC should update and develop new fact sheets and continue to improve content and traffic on the Web page.