

Evaluation of the EnergyIdeas Clearinghouse

Market Progress Evaluation Report #6

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1. EXECUTIVE SUMMARY

This evaluation assesses the accomplishments of the EnergyIdeas Clearinghouse over the period of May 2005 to August 2007. Of specific interest, were the following:

- ◆ Quantifiable market progress goals and EnergyIdeas' level of achievement.
- ◆ Target Audience awareness and use of EnergyIdeas.
- ◆ User satisfaction with EnergyIdeas.
- ◆ User outcomes resulting from EnergyIdeas' activities.

1.1 What Progress Goals Has EnergyIdeas Met?

From the list of “quantifiable” progress indicators (see section 4.2 for the complete list), the evaluation determined that EnergyIdeas has met or exceeded eleven (11) progress indicators, as listed below:

- ◆ Marketing Goals
 - *Energy Newsbriefs are prepared and issued on a weekly basis (48 issues per year); number of subscribers increases by ten percent per year.*
- ◆ Website Goals
 - *Growth of third-party links (particularly electric utility websites) to the EnergyIdeas website is documented.*
 - *Automated satisfaction survey is maintained on website; results are assessed and reported to NEEA.*
- ◆ Customer Services Goals
 - *The majority of requests are from regional electric utilities or utility referrals.*
 - *Inquiries are responded to in an average of eight working hours.*
 - *Each response by mail or email is accompanied by a customer satisfaction survey postcard to be returned to EnergyIdeas. Results are assessed and reported to NEEA.*
- ◆ Technical assistance Goals
 - *Assistance is targeted to regional electric utilities, utility referrals and NEEA stakeholders.*
 - *Requests handled are relevant (i.e., related to electric energy efficiency).*
 - *Twenty percent of customers are contacted by telephone three months after receipt of service results are assessed and reported to NEEA.*
- ◆ Product and Technology Reviews/Utility Factsheet Goals
 - *Requests for reviews or utility factsheets increase by 50 percent, to 18, in first year.*
 - *All requesting utilities or NEEA stakeholders and PTR listserv subscribers are contacted results are assessed and reported to NEEA.*

Note that these are mainly *process* and *output* indicators rather than measures of the impact on the market, i.e. they are indicators of the quality and relevance of the service, rather than indicators of the magnitude of the effect on the market.

1.2 What Market Progress Goals Has EnergyIdeas Not Met?

EnergyIdeas has not met four (4) progress indicators, as listed below. Three of these four indicators quantify the magnitude of EnergyIdeas' effect on the market (as opposed to the quality or relevance of the service). Although EnergyIdeas did not meet these progress indicators, the number of requests received has increased during the contract period. The following progress indicators were not met:

- ◆ *Information requests through website increase by 100%, to 180, in first year.* EnergyIdeas very nearly met this goal with 178 website requests received in the first year, and 165 in the second.
- ◆ *Total information requests handled by EnergyIdeas increases by approximately 75 percent, to 1028, in first year.* Instead, EnergyIdeas handled 729 requests during the period and only 639 in the subsequent year. This is 29% and 37% less than goal respectively.
- ◆ *Service requests handled by customer service staff increase by 115%, to 660, in first year.* Service requests handled declined by 2% and 17% respectively in the first and second years.
- ◆ *Technical assistance requests increase by 30%, to 350, in first year.* EnergyIdeas handled 304 such requests in 2005/2006 and 299 in 2006/2007. This is 13% less than goal.

1.3 Is It Likely that EnergyIdeas Could Reach Similar Goals in the Future?

Because EnergyIdeas has not met the progress indicators that quantify the magnitude of its impact on the market, we believe that NEEA should consider whether EnergyIdeas *could* meet similar higher goals in future, either by serving its existing markets or by expanding into new ones.

The high levels of awareness and usage among surveyed utility personnel may indicate that there is limited opportunity to provide a greater number of services to this portion of the target market. The limited use of EnergyIdeas' most labor-intensive services by industrial and commercial clients, however, may offer a greater opportunity for EnergyIdeas to meet its customer service and technical assistance goals.

1.4 Who Uses EnergyIdeas?

Utilities make nearly half (43%) of information requests requiring labor-intensive research while consultants and government agencies constitute the second and third largest categories by making 15% and 9% of such information requests respectively.

Seventy-two percent of total inquiries logged in the Customer Management Database come from large (>50,000 consumers) utilities. This closely matches the proportion of consumers served by

those utilities (77% of all northwest consumers), but it means that the utilities that are most likely to have the resources and facilities to research energy efficiency themselves are the largest users of the service.

1.5 Are Target Audiences Aware of EnergyIdeas?

There is a very high level of awareness of EnergyIdeas in its target markets (utilities and their industrial or commercial customers). Utility staff have the highest level of awareness among the groups we surveyed, at 94%. Energy consultants have almost as high a rate, at 93%. Industrial engineers and managers, and building engineers have lower, but still high, rates of awareness, at 65% and 59% respectively. Even architects, whose profession requires them to be aware of many different aspects of building, have a 36% level of awareness. Note that EnergyIdeas' marketing efforts have been specifically directed toward utilities, and that EnergyIdeas has not conducted marketing activities aimed at building professionals outside the utilities – per the direction of NEEA staff.

Awareness of EnergyIdeas in the market is very similar to that of other energy efficiency information sources. All the information sources mentioned in the web survey enjoyed a high level of awareness among energy professionals.

Conversely to the high awareness in the target markets, the NEEA staff we interviewed had what we consider to be a low awareness of the services that EnergyIdeas provides, and mostly had little personal experience with the service. Therefore we conclude that the links between EnergyIdeas and NEEA's commercial and industrial initiatives are weak at the management level, and that NEEA is likely not leveraging EnergyIdeas to support its current initiatives.

1.6 Do Target Audiences Use EnergyIdeas?

EnergyIdeas has the third highest level of usage among the thirteen energy information sources in the web survey after BetterBricks and the Integrated Design Labs, with 42% of respondents having used it. Utility respondents and energy consultants had the highest usage level at 73%. Professionals from the commercial buildings sector and the industrial sector have approximately the same rates of use of EnergyIdeas, at around 20%. Architects use EnergyIdeas less than other energy professionals.

Findings show that these groups use a variety of other energy efficiency information services including local utilities, the Lighting Design Laboratory and the BetterBricks website.

1.7 Are Targeted Audiences Satisfied with EnergyIdeas?

Users express a high degree of satisfaction, especially with the person-to-person services such as “ask our experts” and library research. This was reflected in the open-ended responses to the satisfaction questions in the web survey, which were enthusiastic. It is also reflected in the high *frequency* of use by users. Among comparable information sources, only the Industrial Efficiency Alliance has as high a frequency of use. More frequent users of EnergyIdeas are more satisfied with the service than less frequent users.

1.8 What Are the Outcomes of EnergyIdeas' Activities?

EnergyIdeas' advice is having an impact on projects in the field. Approximately one-third of respondents indicated that information from EnergyIdeas had “affected which options were chosen.” Less than 20% of respondents indicated that “advice from EnergyIdeas changed” their standard practices.

When considered in combination, however, 51% of users reported that in the projects they've worked on, “advice from EnergyIdeas has suggested new energy-efficiency options that hadn't been considered”, *or* that the advice had “affected which options were chosen.” 25% reported that *both* those statements were true. 20% of respondents reported that advice from EnergyIdeas had “changed their standard practices”. There is no directly comparable data that would show outcomes from other, similar information programs.

We conclude that EnergyIdeas is bringing value to the region through its impacts on target markets, by transforming projects and practices. However, we believe that this value is being reduced because nearly half of EnergyIdeas' top-tier users are not utility personnel or industrial/commercial customers of utilities (see 1.4 above). In addition, the number of requests being handled by EnergyIdeas has not increased in the two years since the contract between NEEA and WSU was initiated.

2. EVALUATION OVERVIEW

2.1 Overview of the EnergyIdeas Clearinghouse

The EnergyIdeas Clearinghouse is a front-line service funded by NEEA that allows electric utilities in the Pacific Northwest and their commercial and industrial customers to find answers to questions about energy-efficient technologies and practices. The target audience for technical assistance also includes “[NEEA] staff, sponsored project staff and [NEEA] stakeholders”.

EnergyIdeas provides “technology summaries,” “Factsheets,” and answers to previously-asked questions categorized by subject. Users can also ask new questions and expect an answer in less than eight hours.

As stated in the contract between NEEA and Washington State University, “*The goal of the project is that energy professionals in the Pacific Northwest use EnergyIdeas to improve their knowledge and application of electric energy efficiency practices*”. This statement of the goal of EnergyIdeas is echoed in the 2005-2009 NEEA Strategic Plan which states that “The goal [of EnergyIdeas] is to improve knowledge and application of electric energy efficiency practices.”

Clients can make use of additional services offered by EnergyIdeas, including event listings, educational materials, tailored literature searches and energy calculations, and a variety of other services. The services offered by EnergyIdeas are organized into four “Tiers” of increasing effort, with the higher tiers available only to certain types of client (see Figure 1). Tier 1 involves no staff time (visitors to website, newsletter recipients). Tier 2 involves a few minutes of staff time for simple technical assistance or a referral to another service. Tier 3 involves up to eight hours of staff time for engineering assistance or a library search, and Tier 4 involves more than eight hours of work that usually includes detailed engineering assistance, or the creation of a new resource such as a Product and Technology Review (PTR).

Client type	Tier One			Tier Two		Tier Three		Tier Four	
	Website Visits	Newsbrief E-delivery	Customer Service Touch	Customer Service Assistance	Individualized Resource Referrals	Technical Assistance or Library Research <4 hours	Engineering Assistance or Library Research <8 hours	Product and Technology Reviews	Ultimate Technical or Program Assistance or Library Research >10 hours
Utility staff and Utility Associations	x	x		x	x	x	x	x	x
Alliance staff	x	x		x	x	x	x	x	
Alliance Project staff	x	x		x	x	x	x		
Utility Referred Business	x	x		x	x	x	x		
Business with industrial or commercial questions	x	x		x	x	x			
Regional Energy Information Provider	x	x		x	x	x			
Federal, State, Local Government	x	x		x	x	x			
Educator	x	x		x	x				
Homeowner	x	x	x						
Out of Region	x	x	x						

Figure 1. EnergyIdeas’ Tiers of Service

Electric utilities are a particularly important target group for EnergyIdeas, which provides resources for customer care, marketing, incentives, technology reviews, and links to other utilities. Access to EnergyIdeas is available via a number of media, including a telephone hotline, fax, listservs, and email.

2.2 Evaluation Goals

This evaluation assesses the accomplishments of the EnergyIdeas Clearinghouse over the period of May 2005 to August 2007. This assessment must be seen in the context of NEEA’s Strategic Plan for 2006-2009, which states that “NEEA will need to weigh the value of providing regional information resources [such as EnergyIdeas] compared to the value of directly effecting market changes that result in energy savings or developing new products and services.” Of course, assessing the value is a qualitative exercise.

We reviewed past MPEs and EnergyIdeas’ own internal evaluations to determine to what extent they address this question. There are some areas, such as the overall market impact of EnergyIdeas, that have not been addressed previously and are investigated in this evaluation.

We evaluated the EnergyIdeas project in the context of how it addresses NEEA's market transformation hypothesis (based on the January 7, 2004 Staff Recommendation Memo):

- ♦ **If** information on efficient technologies and best practices is centralized through a regional clearinghouse **then** information is not duplicated through other organizations and utilities thus minimizing development and administrative costs.
- ♦ **If** reliable information on efficient technologies and best practices is readily available and easily accessible **then** energy professionals are more likely to inquire about new practice and technologies.

3. EVALUATION METHODOLOGY

This section gives a broad description of the evaluation methodology; more detailed descriptions of the individual evaluation activities are given in the relevant *methodology* sections below.

The EnergyIdeas Clearinghouse is an established project, with a history of previous evaluations, extensive record-keeping systems, and a contract statement of work¹ that sets out detailed progress indicators that are readily evaluable. However, this evaluation aims to do more than just assess whether EnergyIdeas has met its contractual targets—the goal is also to provide NEEA with a broad understanding of how EnergyIdeas is perceived and used by NEEA staff and by various external user groups. This goal is achieved through a usage review and service assessment of EnergyIdeas.

Therefore our evaluation consists of three parts:

1. Identify which of the contractual progress indicators are relevant to NEEA for this evaluation, and assess whether EnergyIdeas has met those indicators.
2. Interview selected NEEA staff and contractors to its initiatives, whose project areas intersect with EnergyIdeas. These interviews had several purposes:
 - a. To understand the current and potential ways in which EnergyIdeas can provide support for NEEA’s goals via its existing initiatives.
 - b. To learn whether NEEA staff use EnergyIdeas, and whether they’re familiar with the services it offers.
 - c. To gauge staff’s professional assessment of the services provided by EnergyIdeas, and their market impact.
3. Conduct a web survey of energy professionals, in two parts:
 - a. A survey of the population of energy professionals, to assess the level of use of EnergyIdeas in the whole population. This “population at large” sample was structured and selected to be no more or less likely than others in their profession to have interacted with EnergyIdeas, and the survey used multiple reminders in an attempt to avoid self-selection bias. The survey assessed how many of the sample had heard of or used EnergyIdeas, and asked wider questions about their need for energy information and their use of energy information sources.
 - b. A survey of previous users of EnergyIdeas, to ask their opinion of the services provided, and to assess whether those services had had an effect on actual, built projects. This survey also set out to understand their need for energy information and their use of other energy information sources, and was structured to be identical to the survey of the population at large wherever possible. It also used multiple reminders to avoid self-selection bias.

¹ Statement of Work for EnergyIdeas Clearinghouse Contract No. C 10118. NEEA, Portland, OR, May 2005

Because an important goal of this evaluation is to estimate the level of use and awareness of EnergyIdeas in the wider population, we placed a lot of emphasis on reducing several sources of bias in the surveys. These are described in detail in later sections of the report.

3.1 Summary of Evaluation Activities

We conducted six interviews between May 31 and June 19 2007, and offered the web survey through www.surveymonkey.com from July 25 to August 17 2007. Each interview lasted between 20 and 40 minutes, and all six interviews were conducted by the same evaluator. The web survey took between 2 and 10 minutes to complete.

Figure 2 shows a summary of all the evaluation activities, including the number of respondents. For a more detailed discussion of each activity, see the relevant section below.

Population	Sampling Frame	Survey Sample Size	Responses Received
Staff and Contractor Interviews			
NEEA commercial staff and contractors	Agreed between HMG and NEEA management	3	3
NEEA industrial staff and contractors	Agreed between HMG and NEEA management	3	3
Web survey			
Architects	AIA members in Washington and Oregon	216 (OR) 372 (WA) ²	28
HVAC engineers	ASHRAE members in Mid Columbia Chapter	83	
Industrial engineers	Contacts from NEEA Industrial Tracking System (http://www.alliance-tracking.org/)	203	121
Utility program and account staff	All utility staff in the Northwest	151	66
Previous users	EnergyIdeas' Customer Management Database	447	186

Figure 2. Summary of evaluation activities

² AIA lists were not available for Idaho or Montana

4. EVALUATION OF PROGRESS INDICATORS FROM ENERGYIDEAS' CONTRACT

The contract between NEEA and WSU sets out a list of progress indicators for EnergyIdeas. The intent of the progress indicators is to provide a trackable indication of EnergyIdeas' performance to NEEA. As part of this evaluation, we have studied the project documentation to verify EnergyIdeas' performance in terms of these contractual progress indicators.

4.1 Methodology

To address the first priority of this evaluation (*"What value has EnergyIdeas provided to NEEA in terms of its overall goals and projects?"*), we are interested only in progress indicators that are quantitative, and which provide evidence of outcomes; i.e., things that have changed as a result of EnergyIdeas' activities. Figure 3 shows the progress indicators that we assessed in this evaluation and gives a brief description of whether EnergyIdeas has met the goal.

The non-assessed indicators are listed in Appendix G – Progress Indicators that were not Assessed. The reason why we did not assess each one is shown in the table in the appendix. Mostly, it was because they were not quantitative or do not indicate outcomes.

4.2 Quantifiable Progress Indicators

A review of the quantifiable progress indicators in Figure 3 shows that EnergyIdeas has not met most of the progress indicators related to the number of enquiries received and the number of enquiries handled. While the total number of information requests (indicator CS1) and technical assistance requests (TA1) both increased by around 10% per year, they did not increase as much as was called for by the contract (75% and 30% in the first year respectively). The number of service requests that were handled by staff *decreased* by around 10% per year in the two years since the contract began.

There were two exceptions to this pattern. First, the number of subscribers to Energy Newsbriefs increased by 26% per year on average, exceeding the contract goal of 10%. Second, the number of requests for PTRs or utility factsheets (PTR/UF1) jumped by 67% in the first year, exceeding the goal of 50%.

A more detailed discussion of each progress indicator is provided in Appendix E – Detailed Assessment of EnergyIdeas' Attainment of Progress Indicators, along with a table (Figure 43) that shows the sources of information we used to assess the progress indicators.

Progress Indicator		Evaluation Comment
Marketing		
M3	Evidence is provided of utility dissemination of marketing information to commercial- and industrial-sector clients.	Evidence from web survey shows that utility staff refer others to EnergyIdeas >2 times per year on average. No data are available on referrals from the Customer Management Database (CMD)
M5	Energy Newsbriefs are prepared and issued on a weekly basis (48 issues per year); number of subscribers increases by ten percent per year.	EnergyIdeas has exceeded this goal, achieving an average 26% growth in subscribers over the two years since contract inception.
Website		
W1	Information requests through website increase by 100%, to 180, in first year.	EnergyIdeas has not met this goal. 178 website requests were received in the first year, and 165 in the second.
W3	Growth of third-party links (particularly electric utility websites) to the EnergyIdeas website is documented.	EnergyIdeas met this goal by providing information to NEEA. 900 links reported as of March 2007
W6	Automated satisfaction survey is maintained on website; results are assessed and reported to the Alliance.	EnergyIdeas reported that the survey has been available on the website since the beginning of the contract. Only 14 valid surveys have been received since May 2005
Customer Service		
CS1	Total information requests handled by EnergyIdeas increases by approximately 75 percent, to 1028, in first year.	EnergyIdeas has not met this goal. Information requests increased by 24% in the first year and decreased by 12% in the second, for a net increase of 9% over two years.*
CS2	Service requests handled by customer service staff increase by 115 percent, to 660, in first year.	EnergyIdeas has not met this goal. Service requests handled declined by 2% and 17% respectively in the first and second years.*
CS3	The majority of requests are from regional electric utilities or utility referrals.	We believe that EnergyIdeas has met this goal. 40% of requests are from utilities, and we believe that referrals would take this total over 50%.

	Progress Indicator	Evaluation Comment
CS4	Inquiries are responded to in an average of eight working hours.	EnergyIdeas has met this goal. Requests have been responded to in an average of 1.5 hours.
CS5	Each response by mail or email is accompanied by a customer satisfaction survey postcard to be returned to EnergyIdeas. Results are assessed and reported to the Alliance.	EnergyIdeas has met this goal. Though there is no goal for the <i>results</i> of the surveys, they show a high level of user satisfaction comparable with the results of our web survey.
Technical Assistance		
TA1	Technical assistance requests increase by 30 percent, to 350, in first year.	EnergyIdeas has not met this goal. Requests increased by 13% in the first year and declined by 2% in the second year, for a net increase of 11% over two years.*
TA2	Assistance is targeted to regional electric utilities, utility referrals and Alliance stakeholders.	Though this is not a quantitative indicator, we believe that EnergyIdeas has met this goal.
TA3	Requests handled are relevant (i.e., related to electric energy efficiency).	EnergyIdeas has met this goal. We found that 95% of requests are relevant.
TA5	Twenty percent of customers are contacted by telephone three months after receipt of service to follow up on service delivered and efficiency actions taken; results are assessed and reported to the Alliance.	EnergyIdeas has met this goal. We did not review the results of these telephone follow-up calls.
Product and Technology Reviews/Utility Factsheets		
PTR/UF 1	Requests for reviews or utility factsheets increase by 50 percent, to 18, in first year.	EnergyIdeas has met this goal. Requests increased by 67% to 20.
PTR/UF 4	All requesting utilities or Alliance stakeholders and PTR listserv subscribers are contacted three months after PTRs and factsheets are issued to follow up on usefulness of PTRs and factsheets and efficiency actions taken; results are assessed and reported to the Alliance.	EnergyIdeas has met this goal.

Figure 3. Assessment of progress indicators

5. REVIEW OF USAGE FROM CUSTOMER MANAGEMENT DATABASE AND WEBSITE STATISTICS

This review of the usage of the website and the technical services provided by EnergyIdeas provides basic information about the number of times each service has been used during the contract period. We have also parsed the usage of some services by user group to provide more insight. Parsing by user group is not possible or relevant for some of the services.

The data presented in this section was provided to HMG by EnergyIdeas staff during the course of the evaluation, and is not primary data (i.e., the data was summarized before being sent to HMG). In categorizing user groups, we used the user group definitions in EnergyIdeas' database and created a many-to-one mapping of their user groups to the user groups that are used elsewhere in this evaluation.

The data presented in this section cover one of several time periods. Where possible, we have included all data between the beginning of the current contract period (May 1 2005) and the nominal time of the evaluation (August 1 2007). Where possible, we have also shown data by project year (for instance May 1 2005 to April 31 2006), because these are the time periods used for the progress indicators. In the case of the Product and Technology Reviews (PTRs), we have shown data from January 1 2006 because this is the date when the first PTRs were made available on the website.

A schematic of the services provided by EnergyIdeas is shown in Figure 4.

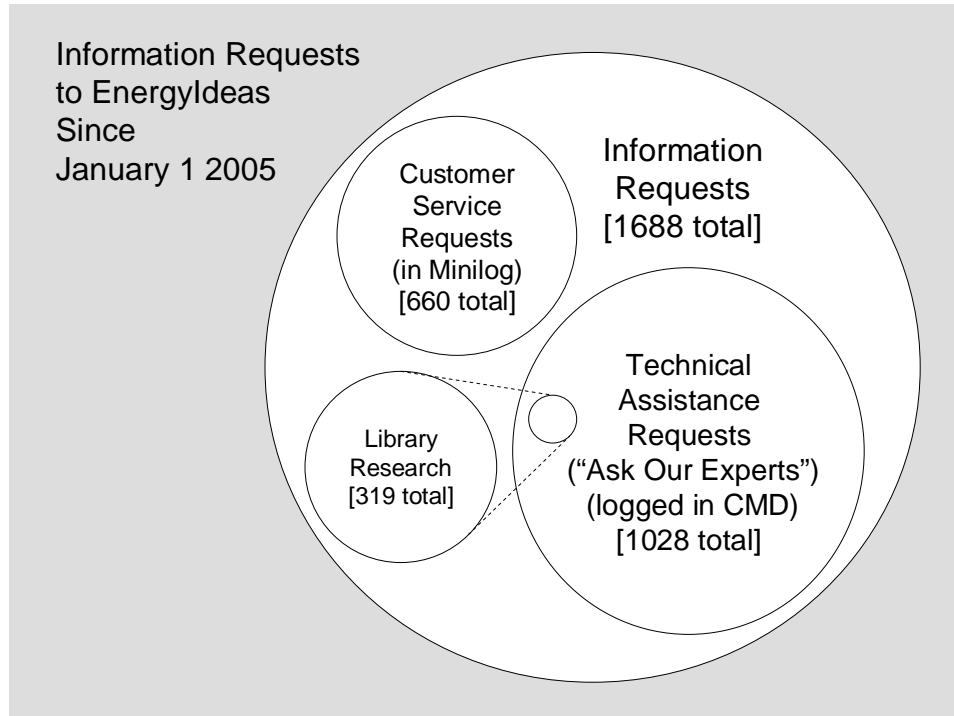


Figure 4. Schematic of EnergyIdeas Information Requests

5.1 Usage by Service

Figure 5 shows the number of times that each of EnergyIdeas' website features and technical services has been used. For each service, the table describes the time period covered (these differ because records are kept in different ways for the various services).

Service	Number of Uses
Energy Newsbriefs	893 subscribers in September 2007, increased from 550 in May 2005
Product & Technology Reviews	14,098 page views from January 2006 to August 2007 (approximately 38 per working day). Note that PTRs were first made available online in January 2006.
Online Resource Database	4881 keyword searches from August 2006 to August 2007 (approximately 20 per working day)
"Ask Our Experts"	428 requests delivered by web form From May 2005 to August 2007 230 were fully logged and 198 mini logged. 26% of the inquiries during this time period came from the website. In total, between web and telephone requests, there were 489 information requests between July 2006 and July 2007 (approximately 2 per working day).
Library research	319 searches from May 2005 to August 2007 (approximately 0.6 per working day). These are included in the 489 information requests mentioned in the prior row.
Events calendar	9,845 page views from May 2005 to August 2007 (approximately 16 per working day)
Utility Resources page	12,087 page views from May 1 2005 to August 1 2007 (approximately 20 per working day)

Figure 5. Summary of usage of EnergyIdeas' website and technical services

5.1.1 Energy Newsbriefs

EnergyIdeas reports that as of September 6 2007 there are 893 subscribers to Energy Newsbriefs. This compares with 550 subscribers at the beginning of the current contract period (May 1 2005).

EnergyIdeas often reports the number of subscribers in its monthly report to NEEA; in 2007, updates of the number of subscribers were sent in February, March, June and August.

EnergyIdeas produced approximately 115 Energy Newsbriefs editions from January 2005 to August 2007, and delivered 33,165 individual messages during that time period.

5.1.2 Product and Technology Reviews

Product and Technology Reviews (PTRs) are available on the EnergyIdeas website as Adobe Acrobat files. They can therefore either be viewed online or downloaded. Figure 6 shows the cumulative number of views of the PTR documents by month since January 2006 (the date when PTRs were first made available online). The PTR web page and the factsheets were viewed 14,098 times during the period shown (from January 2006 to August 2007).

One PTR (FanWall) is not shown, because the very high number of page views in comparison to the other PTRs makes the graph very hard to read. FanWall was viewed 4696 times between January 2006 and August 2007.

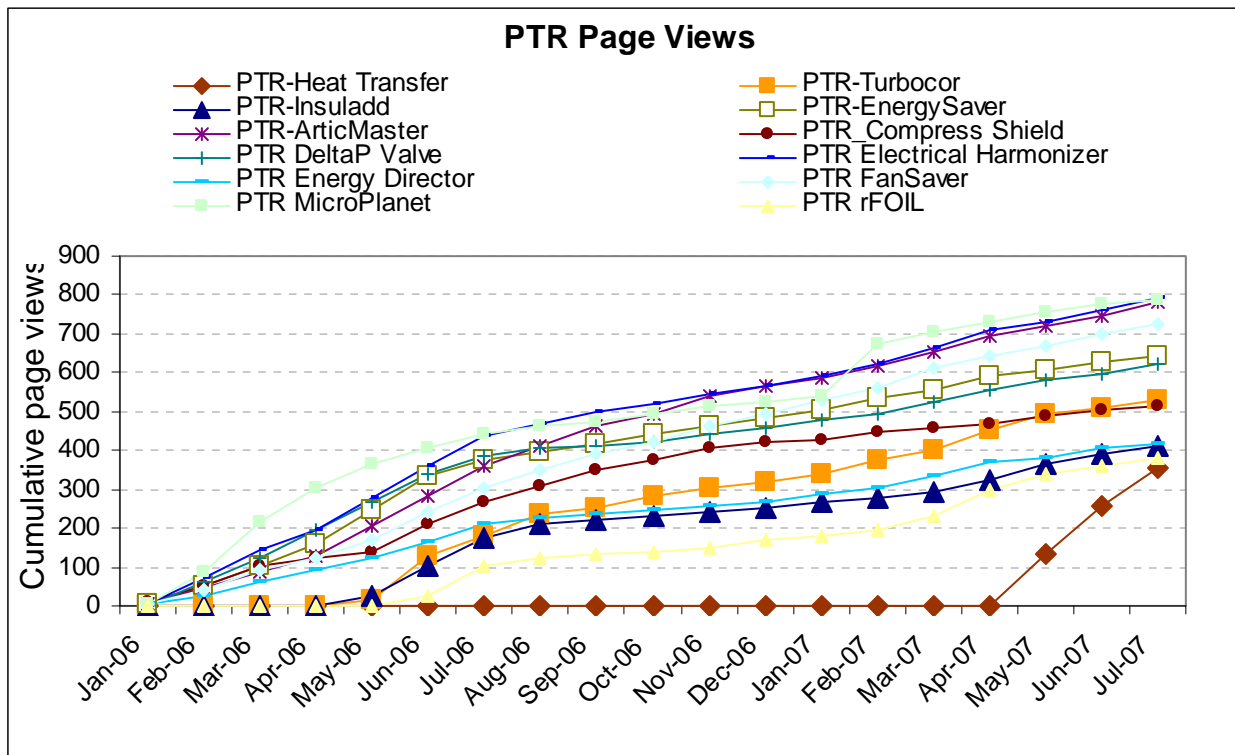


Figure 6. PTR page views

From January 2005-July 2007, EnergyIdeas recorded 87 requests that were identified as PTR-related requests. These range from specific requests that PTR waivers be delivered to manufacturers, to requests for information on the validity of energy saving claims of new products being marketed in the region, to requests for more information about PTR products and services, or requests from manufacturers to review their products.

- ◆ 64 of the 87 requests were from the primary PTR audience (utility staff and stakeholders including BPA, NEEA, Energy Trust or state energy office staff.)
- ◆ 68 of the 87 requests received technical assistance

100 listserv messages were shared on the UtilityPTR listserv from January 2005-August 2007. Approximately 50% of those messages were initiated by EnergyIdeas staff and include notices of new PTR factsheets, regional marketing alerts, requests for information or responses to member requests. 14,075 messages were delivered to members (not counting EnergyIdeas PTR staff).

EnergyIdeas produced 11 PTR factsheets during this contract period and updated 9. 3 new PTRs and 2 additional updates are in progress.

5.1.3 Online Resource Database

EnergyIdeas installed the “Googlemini” keyword search feature on its “search our site” page in August 2006. Between August 2006 and August 2007, 4881 keyword searches were made using this feature (approximately 20 per working day).

EnergyIdeas changed their website search engine, and the structure of pages leading users to searches during the contract period.

5.1.4 Ask our Experts

EnergyIdeas’ website users can fill out forms online to request technical assistance or to contact EnergyIdeas with questions. From April 1 2005 to August 1 2007 there were a total of 428 requests delivered by web form. 230 were fully logged and 198 mini logged. 26% of the 1688 inquiries during this time period came from the website.

In total, between web and telephone requests, there were 489 information requests for between August 2006 and August 2007 (approximately 2 per working day).

5.1.5 Library Research

The Library responds directly to customer requests that are logged into the Customer Management Database (CMD). The library also supports technical staff while they respond to customer requests. The Library conducted research for 319 of the 1035 cases (31%) logged in the CMD between January 2005 and August 2007.

5.1.6 Events Calendar

From May 2005 to July 2007, there were 9,845 page views of the Events Calendar page, or approximately 16 per working day. To find a given calendar item, or to browse the calendar, users usually register several page hits, so this figure is likely much greater than the number of “searches” for event data. EnergyIdeas staff report that there are typically 100 calendar events to view on any given day.

5.1.7 Utility Resources Page

From January 2005 to August 2007 there were 12,188 page views on the main page of Utility Resources. These pages can be reached via alternative routes such as the online search or direct links, so this figure is a lower bound for the number of page views of the Utility Resources Page. The individual items on the page have been viewed as follows:

- ◆ Articles for Energy Communicators has been viewed 1,212 times since it was launched in January 2007.
- ◆ PTR web page has been viewed 2,598 times since it was launched in October 2005.
- ◆ Pacific Northwest Utility links – data not immediately available³
- ◆ Utility Marketing and Outreach – data not immediately available

³ EnergyIdeas’ website tracking software was being updated at the time of the evaluation, so some data are not available.

- ◆ Utility Organizations, Services and Associations – data not immediately available

5.2 Usage by Tier

The “tiers” referenced in the EnergyIdeas monthly reports do not correspond with the tiers referenced in the WSU Proposal for the EnergyIdeas Clearinghouse and in other planning documents. Instead, they correspond to a standard nomenclature used by EnergyIdeas in its call center operations. In conversations with EnergyIdeas staff we have established that these “call center” tiers are used actively as a streaming tool, i.e. they are not simply a post-facto description of the services provided.

Although the initial proposal for the EnergyIdeas Clearinghouse used “tiers” to illustrate the different levels and intensities of service for different audiences, the subsequent Scope of Work and operational plan negotiated with NEEA does not include these tiers. EnergyIdeas does not report its activities using “tier” descriptions in its monthly reports to NEEA

This section of the evaluation references the tiers that are described in the EnergyIdeas Clearinghouse proposal in Figure 1 on page 10, and shown in Figure 1:

- ◆ Tier One: Close to zero EnergyIdeas staff time required. Website visits, Energy Newsbriefs delivery, Customer Service Touch
- ◆ Tier Two: A few minutes of staff time required. Customer service assistance and individualized resource referrals.
- ◆ Tier Three: Less than eight hours of staff time required (maximum four hours for businesses not referred by their utility). Technical assistance or library research.
- ◆ Tier Four: More than eight hours of staff time required. Preparation of a Product and Technology Review; “Ultimate Technical Assistance”.

5.2.1 Total Usage by Tier

Tier One

EnergyIdeas recorded 522,893 Tier One interactions during the year May 2006 to April 2007. For the three types of interaction described below, we have shown the total number of interactions during the contract period, followed by the figure for the second contract year in parentheses.

- ◆ Website page views: 908,554 between May 1 2005 and August 1 2007 (489,478 May 1 2006-April 31 2007)
- ◆ Newsbriefs delivery: [unknown] between May 1 2005 and August 1 2007 (33,165 May 1 2006-April 31 2007)
- ◆ Product and Technology Review delivery: 14,200 between January 1 2006 and August 2007 (5,542 between May 1 2006 and April 31 2007)
- ◆ Customer Service Touch: 670 between May 1 2005 and August 1 2007 (250 May 1 2006-April 31 2007)

Tier Two

There were a total of 181 responses to Tier Two requests for service from May 1 2005 to August 1, 2007 (approximately 0.3 per working day).

Tier Three

There were a total of 719 responses to Tier Three requests for service from May 1 2005 to August 1, 2007 (approximately 1.3 per working day).

As shown in Figure 1, utilities are the predominant users of EnergyIdeas’ labor-intensive Tier 3 services (less than eight hours of staff time required, or four hours for businesses if not referred by their utility). The second most prolific users of this tier of service are consulting firms; EnergyIdeas’ tracking system does not distinguish between different types of consultant (for instance mechanical engineers vs. energy consultants).

Tier 3 Business Type	% of Total	2003 (n=99)	2004 (n=395)	2005 (n=380)	2006 (n=365)
Utility	43%	42%	43%	42%	44%
Consulting firm	15%	16%	15%	14%	14%
Government	9%	8%	8%	11%	9%
Commercial business	5%	2%	7%	4%	5%
Organization	3%	7%	3%	2%	5%
NEEA (general or venture)	3%	0%	2%	3%	5%
Manufacturer	3%	2%	4%	2%	3%
Research/Ed (univ or lab)	2%	1%	1%	4%	1%
State energy office	2%	0%	3%	1%	2%
Other	15%	21%	15%	17%	12%

Figure 7. Information requests by business type by year for Tier 3 Service

Tier Four

There were 74 requests for new PTR topics between January 1 2006 and August 1 2007. There were 20 “Ultimate Technical Assistance Requests” for Utilities/Key Clients during the same period.

5.2.2 Usage by Tier by User Type

This section shows what types of user make use of the different tiers of service. Note that the user group cannot be known for website users, so Tier One services are not parsed by user type. Also, Tier Four services are provided only to utilities and “key clients” (NEEA Staff, BPA, Associations, State Energy Offices), so we have not shown them by user type.

Figure 8 shows that utility staff make the highest proportion of both Tier Two and Tier Three requests, with building engineers⁴ the next most populous group. Industrial engineers have made only one quarter as many requests for Tier Two and Three services as building engineers. The user categories used by EnergyIdeas make it impossible to classify around one third of users into the categories defined by this evaluation; we have shown these as "other". Note that the "other" group shown in this section is therefore not the same as the "other" group for the web survey.

User group	Tier Two requests (n=187)	Tier Three requests (n=719*)
Architects	1%	1%
Building engineers	17%	18%
Industrial engineers and managers	5%	4%
NEEA/WSU staff	4%	3%
Other	33%	34%
Utility staff	39%	40%

* User type was known for 719 of the 1037 Tier Three requests

Figure 8. Requests for services by tier and by user type, during the contract period May 1 2005-August 1 2007

⁴ This category includes consulting engineers, building managers and maintenance staff

User group	Tier Three requests (n=719*)
Government	12%
Commercial Business	5%
Organization	5%
School (K-12, Comm. Col)	3%
BPA Hdq.	2%
State Energy Office	2%
Individual	1%
Media	1%
Product Vendor	1%
School District	1%
Grand Total	34%

Figure 9. Source of “other” requests for Tier 3 service between May 1 2005 and August 1 2007

6. STAFF AND CONTRACTOR INTERVIEWS

As part of the evaluation of NEEA's EnergyIdeas Clearinghouse project, HMG conducted interviews with six NEEA staff and initiative contractors who were chosen by NEEA management as being subject matter experts in their particular fields and target markets. They were not chosen because they had more or less knowledge of or experience with EnergyIdeas than other NEEA staff or contractors.

We conducted these interviews to obtain specific and/or quantifiable answers to questions about the value that EnergyIdeas' services have brought to NEEA and NEEA's projects, in terms of supporting or duplicating project efforts, and about the value of EnergyIdeas to NEEA's market transformation efforts in various market sectors. It should be noted that, according to NEEA staff, there has been no specific instruction that these projects should coordinate with EnergyIdeas. We also wanted to learn whether NEEA staff use EnergyIdeas, and whether they're familiar with the services it offers.

The interview findings were used to develop the web survey described later in this report; i.e., to ensure that the web survey would ask questions that were relevant to the needs expressed by staff. The interviews were conducted during June 2007, and followed a structure agreed upon between HMG and NEEA.

6.1 Respondents

The six respondents were identified by NEEA senior management as being suitable for the interviews, because of their close connections to the markets they serve, and to the relevant projects. They were informed that their responses would be anonymous. Respondents varied by sector and job responsibilities. To preserve anonymity we have not provided specific details of their job responsibilities, but they included:

- ◆ Three respondents involved in NEEA's commercial project, three respondents involved in NEEA's industrial project.
- ◆ Three respondents who provide specific market sector support, two respondents who provide marketing support, one respondent who provides general sector support.
- ◆ Four respondents who were NEEA staff, two who were contractors.

The respondents were guaranteed anonymity in an effort to get candid answers.

Familiarity and use of EnergyIdeas' services were mixed:

- ◆ Three respondents had not personally used EnergyIdeas
- ◆ Two respondents used EnergyIdeas' services over a year ago
- ◆ One respondent used EnergyIdeas' services within the past year
- ◆ One respondent mentioned having promoted EnergyIdeas to NEEA contacts. The respondent volunteered this information - the interviewer did not ask this question specifically).

The relationship between EnergyIdeas and the respondents varied from:

- ◆ Requests for specific technical support
- ◆ Project coordination for marketing efforts
- ◆ Web browsing of the EnergyIdeas website

6.2 Summary of Findings

Based on the six interviews, we have made the following observations, which are discussed further below:

- ◆ The respondents were aware of EnergyIdeas in general, but few had personally used it, and all but one were unaware of the specific services and levels of service provided.
- ◆ Industrial customers are likely seeking in-depth information specific to their project, whereas most commercial customers are seeking general information about technologies and design practices.
- ◆ There may be duplications, or perceived duplications, of service (especially in the commercial building sector) that should be investigated.

While all six respondents were aware that EnergyIdeas provides technical advice to the commercial construction and industrial market sectors, only one (commercial) respondent was familiar with the “tiered” approach by which EnergyIdeas provides its services. Three (commercial) respondents had never personally used EnergyIdeas, while of the remaining three (industrial), only one had used it in the past year. In general, the majority of respondents have a low level of familiarity with EnergyIdeas’ services.

Two respondents expressed strong views about the effectiveness of EnergyIdeas in supporting energy efficiency in the Northwest (one positive from an industrial respondent, one negative from a commercial). The remaining four did not express a view on the effectiveness of EnergyIdeas because they believed they did not have enough objective information on its market impacts.

Respondents were asked whether they believed that EnergyIdeas had had an effect on particular target markets (commercial and industrial) and about its role in supporting NEEA’s market transformation (MT) projects (commercial and industrial). One industrial respondent strongly believed that EnergyIdeas had had a positive effect; one commercial respondent strongly believed it had had almost no effect, and the remaining four said they did not have enough information to be able to answer the question. Their responses to this question closely followed their responses to the general question about market change.

Two of the respondents from the industrial sector said that there is no “conflict, competition or duplication” between EnergyIdeas and other NEEA projects, while the other expressed no view. However, two of the three respondents from the commercial sector said they *did* believe that there is duplication with services such as the Integrated Design Labs and with technical services provided by utilities.

The potential for duplication was evident in the responses to the question “where would you go for information if EnergyIdeas did not exist?” Four of six respondents were able to give an

answer (in three cases, multiple answers⁵). Of the remaining two, one would have conducted research using primary sources, and one gave no answer.

Two of three respondents from the industrial sector said that EnergyIdeas’ main service is detailed technical advice, tailored to users’ requests. Two of three respondents from the commercial building sector said that EnergyIdeas’ main service is to provide general information about energy efficient technologies and practices, implying that detailed technical advice is a less important, secondary function.

6.3 Initial Perspective on EnergyIdeas

The general premise that EnergyIdeas’ main service is to act as an informational energy efficiency resource was agreed upon by all respondents. However, the specifics of how the services are delivered varied. As shown in Figure 10, industrial sector respondents felt that EnergyIdeas’ main service is to deliver answers to specific technical questions, while the commercial sector respondents felt that access to general information about energy efficiency technologies was the main service. These were “unguided” responses; i.e., we did not encourage the interviewees to think about the needs of those outside their own sector.

	Answers to specific technical requests	General information	Both
Industrial sector (n = 3)	2		1
Commercial sector (n = 3)		2	1

Figure 10. What are the main services that EnergyIdeas provides?

Respondents’ assessment of primary benefits to NEEA was asked in terms of the “reasons for funding EnergyIdeas” Their opinions included:

- ◆ To support NEEA’s projects by providing technical expertise (industrial)
- ◆ To disseminate information into the marketplace (commercial)
- ◆ To provide a helpline for utility personnel (commercial)
- ◆ Helps to lighten the load on NEEA project managers [by providing information that they might otherwise be asked for] (commercial)

6.4 Tiered Technical Assistance

Of the respondents, only one was familiar with EnergyIdeas’ four-tiered approach. Two respondents described general awareness of a screening process. The three remaining respondents were unfamiliar with the four-tiered approach. During the interviews we explained

⁵ Answers included: Regional Energy Assessment Center (1), BPA (1), utilities (2), DOE (training programs) (1), internet search engine (2), Integrated Design Laboratory (2), schools or universities (1), government programs (1), DOE website (1), DesignLights (1), NBI (1), PG&E’s Food Service Technology Center (1).

the four-tiered approach in detail, giving examples of what level of service is provided at each tier, and how much staff time is required to provide it. Despite the fact that only one respondent had prior knowledge of the tiered approach, we believe that they are qualified to judge how effective they believe each tier would be in answering market needs in their sector.

The four-tiered approach (see Figure 1) is used to manage and to track the degree of detailed advice provided to each customer. The four tiers are:

- ◆ Tier 1: Visit to website, sending out newsletters (minimal staff time required)
- ◆ Tier 2: Simple technical assistance or a referral to another service (up to 2 hours’ staff time)
- ◆ Tier 3: Engineering assistance or a library search (up to 8 hours’ staff time)
- ◆ Tier 4: Detailed engineering assistance or creation of a new resource such as a product technology review (PTR) (>8 hours’ staff time)

Respondents were asked to rate each tier in terms of its effectiveness in promoting energy efficiency awareness, knowledge and activity using a scale from 1 (least) to 5 (most). The following tables provide a compilation of responses, showing how many respondents gave the scale rating for each Tier.

Rating of effectiveness in promoting energy efficiency						
Tier of service	1	2	3	4	5	Average
1	2	1	1	1	0	2.2
2		1	2	2	0	3.0
3		1	2	2	0	3.2
4	1		1	3	0	3.2

Figure 11. NEEA staff ratings of the effectiveness of tiered services

Note that the generally higher scores given to the higher tiers of service correspond with the answers described in section 6.3; i.e., that the majority of respondents felt that” specific technical and analytical requests” were the most important service of EnergyIdeas.

Because of the low number of responses, it is not possible to draw statistically significant conclusions about NEEA staff’s opinions on the effectiveness of EnergyIdeas, but the responses in the table appear to agree with the answers given to the questions about the effectiveness of EnergyIdeas as a whole; i.e. the respondents believe they do not have enough information to make judgments about the effectiveness of EnergyIdeas in changing the market. The low effectiveness rating given to Tier 1 activities suggests that, even in the absence of market data, staff believe those activities are less effective than the other tiers.

One respondent felt the tiered approach was not an appropriate screening process for the project and thus, felt the rating exercise for the tiered approach was not useful. Instead, the respondent explained a screening process that s/he thought would be better suited for the project. Instead of using the tiered approach, EnergyIdeas would provide different depth of services depending on levels of customer type. The highest level of customer type would be NEEA funders. They

would be given “platinum” level services. The next level of customer would be NEEA project participants who would be given comprehensive services. The last level would be the general public who would be given basic services. For each level, services will be limited. According to the respondent, using this screening process would focus the project to be seen as an enticement to NEEA funders. This system is similar to the current system as described by EnergyIdeas’ “Assistance Matrix”, in which only utility staff are eligible for the highest tier of service, NEEA staff and utility-referred businesses are eligible for the next highest tier, and all other businesses are eligible only for the lowest tier.

7. WEB SURVEY

A web survey was offered online through www.surveymonkey.com from July 25, 2007 until August 17 2007. The intention of the web survey was to obtain an accurate assessment of the levels of usage and awareness of EnergyIdeas among the population of energy professionals, and to obtain an assessment of EnergyIdeas' services from previous users.

Two versions of the web survey were offered, with very slightly different questions, one for known users of EnergyIdeas and the other for people who may or may not have been users. The differences in the questions were simply differences in logic to accommodate the fact that we didn't know whether some people were users. The substance of the questions was identical.

Both surveys used large samples in an attempt to gather statistically significant data, but as discussed later, both are subject to certain forms of bias that limit their significance.

Figure 12⁶ shows how the data from the web surveys was used to create two samples for the analysis phase of the evaluation. The "population at large" sample contains the data from the web survey of energy professionals, while the sample of users is made up from the survey of known users *plus* those respondents from the survey of energy professionals who indicated that they were users. We avoided overlap by staggering the surveys, as described in Appendix F – Detailed Methodology for Web Survey.

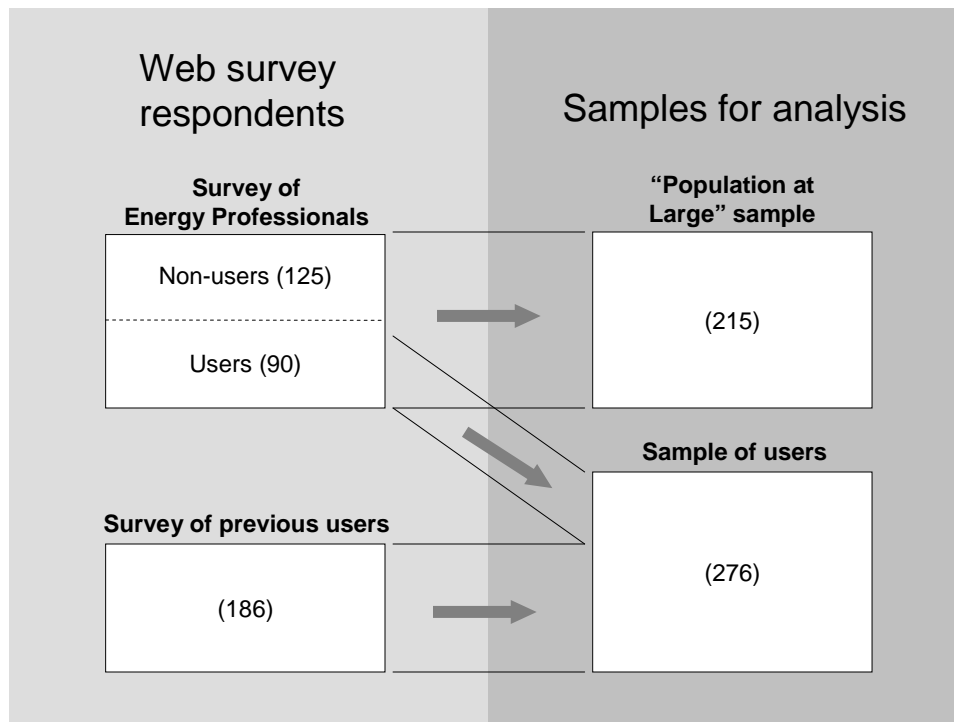


Figure 12. Relationship between web surveys and samples used for analysis

⁶ See Page 9 for source of samples.

7.1 Methodology

We strove to obtain a representative sample and to avoid bias in sampling and in the responses. The response rates of the survey are therefore part of the findings, because the response rates influence how the findings should be seen in terms of their significance. We believe that the sample of previous users of EnergyIdeas is representative of that population due to the high response rate and consequent low self-selection bias. We also believe that the sample of utility staff is close to being unbiased because of the extensive follow-up we performed and the consequent high response rate. However, for architects, building engineers and industrial engineers we believe that there is a significant degree of self-selection bias that may skew the results toward those who have used EnergyIdeas and/or those who have strong opinions about it.

The details of the methodology are provided in Appendix F – Detailed Methodology for Web Survey. The exact text of the survey for energy professionals is reproduced in Appendix B – Web Survey of Energy Professionals.

7.1.1 Response Rates

We received a total of 401 responses to the web survey—186 from the survey of energy professionals and 215 from previous users. For utilities, we have analyzed response rates by utility separately from the response rates from *individuals*, because we believe that each provides an important perspective.

Response Rates from Individuals, by Type

Because we had no way of tracking individual respondents without performing a time-consuming manual match of names, we could not directly track the response rate from each user group. However, the total number of survey respondents who identified *themselves* as being in each group are shown below, to indicate approximate response rates.

Population	Sample size	Number of respondents	Response rate
Architects	588	28	4.8%
Building engineers	83	64	
Industrial engineers	203	17	42%
Energy consultants	-	30	
Other	-	10	
Utility program and account staff	151	66	44%
TOTAL	1025	215	21%

Figure 13. Response rates for web survey

Note that Figure 13 shows the number of *individuals* that responded, not, as in Figure 13, the number of *utilities* that responded.

From conducting a spot-check of entries, we believe that many of the people contacted through NEEA’s Industrial Tracking System identified themselves as building engineers and energy consultants (which, in our categorization, included maintenance staff). Therefore we have shown a combined response rate for these user groups.

Note that the response rate for architects is much lower than for other groups. We believe this is because they were contacted by mail (the letter contained the text of the URL for the web survey). The lower response may also have been because we could not follow up with the architects, or because many of them may have felt that the survey was not relevant to them. However, we believe that a 5% response is typical for a mail survey.

Response Rates from Utilities

The response rates from utilities are shown in Figure 14. Medium-sized utilities were more likely to respond than either small or large utilities, which may have been a consequence of our greater success in finding the right person to speak to at these utilities (see section Appendix F – Detailed Methodology for Web Survey).

Size of utility (number of consumer served)	Number of utilities in NEEA territory	Number of surveys sent to individual utilities	Number of utilities that responded	Response rate
<10,000	95	68	23	34%
10,000-50,000	45	45	31	69%
>50,000	11	11	5	45%
Total	151	133	59	44%

Figure 14. Number of surveys sent to individual utilities within each category

Figure 15 shows the distribution of responses depending on whether the utility had previously used EnergyIdeas (i.e., whether the name of the utility occurred in EnergyIdeas’ Customer Management Database). If the utility *had* used EnergyIdeas, a response was much more likely. This shows clearly the need to reduce self-selection bias in responses.

	Utility had used EnergyIdeas	Utility had not used EnergyIdeas
Respondents	36	23
Non-respondents	11	63
Percentage of utilities in that class that responded	77%	27%

Figure 15. Distribution of respondents between utilities that had and had not previously used EnergyIdeas

7.2 Findings for the Population at Large

As shown in Figure 12, the “population at large” for the analysis was based on the survey of energy professionals. All the analysis in this section is based on the population at large, i.e.

energy professionals who we expect to be no more or less likely than their peers to have used EnergyIdeas. This statement is subject to the statistical caveats set out in detail in Appendix F – Detailed Methodology for Web Survey. In the discussion of the findings, we have referred to the response rates to the survey because they indicate the degree of self-selection that may be associated with the answers.

7.2.1 Awareness of Energy Information Sources

In the web survey we asked the energy professionals whether they were aware of thirteen different energy information sources. To remove bias, the order of presentation of the information sources was varied randomly between surveys. The results below all relate to the “population at large”; i.e., people who were no more likely to be EnergyIdeas users than anyone else in the target population.

Figure 16 shows the rates of awareness of energy information sources among commercial and industrial respondents respectively, compared with the rates of awareness among utility staff. We have not included “other” respondents in these charts because the sample contained only three people in this category.

The information sources are ranked in order of awareness among *utility staff* in both cases, to make comparison easier. Overall, awareness of EnergyIdeas among the sample of energy professionals was the fifth highest of the thirteen information sources in the survey, at 74%. Rates of awareness were generally high, and similar for many information sources; EnergyIdeas ranked a few percent lower than BetterBricks, the Lighting Design Lab, and the Industrial Efficiency Alliance, but higher than the Integrated Design Labs (note that many respondents may not yet be aware of the new “Integrated” Design Labs). It is important to note that the sample of industrial professionals was drawn from NEEA’s own contact list (excluding very frequent users), so those people are likely to have a high degree of awareness of NEEA programs.

	Architects (n=28)	Building engineers (n=64)	Energy Consultants (n=30)	Industrial engineers and managers	Utility staff (n=66)
DOE Industrial Assessment Program	43%	69%	97%	88%	98%
Information from utility	93%	97%	100%	100%	98%
Food Service Technology Center	32%	50%	77%	59%	97%
EnergyIdeas Clearinghouse	36%	59%	93%	65%	94%
BetterBricks	96%	77%	93%	47%	91%
Lighting Design Laboratory	86%	73%	90%	53%	91%
Industrial Efficiency Alliance	32%	66%	90%	100%	91%
NWCCurrent	32%	55%	83%	59%	85%
New Buildings Institute	50%	56%	73%	47%	74%
Integrated Design Lab	68%	61%	73%	53%	74%
E-source	54%	66%	80%	65%	74%
DesignLights	36%	45%	73%	65%	65%
Regional Energy Assessment Center	29%	55%	70%	59%	65%
Energy Center of Wisconsin	32%	52%	67%	47%	62%

Figure 16. Awareness of energy information sources among building professionals

7.2.2 Awareness of EnergyIdeas

Awareness of EnergyIdeas was highest among utility staff (94%) and energy consultants (93%) and lowest among architects (36%). Note that there may have been a high degree of self-selection bias in the sample of architects, so awareness among the whole population of architects is likely to be lower than this.

7.2.3 Use of Energy Information Sources

Figure 17 shows the percentage of people that have used the different energy information sources among commercial and industrial respondents respectively. The information sources are ranked in order of use by *utility staff*, to make comparison easier. EnergyIdeas has been used at least once by a higher percentage of users than most of the other information sources. Only BetterBricks and the Lighting Design Laboratories had been used more frequently. Less than 3% of the respondents had never used any of the information sources listed in the survey.

	Architects (n=28)	Building engineers (n=64)	Energy Consultants (n=30)	Industrial engineers and managers (n= 17)	Utility staff (n=66)
EnergyIdeas Clearinghouse	7%	22%	73%	18%	73%
Information from utility	79%	80%	90%	71%	64%
Lighting Design Laboratory	71%	33%	60%	6%	58%
BetterBricks	86%	41%	60%	6%	52%
NWCurrent	0%	14%	33%	6%	52%
Industrial Efficiency Alliance	0%	30%	57%	65%	47%
E-source	18%	20%	20%	12%	30%
Integrated Design Lab	43%	16%	10%	0%	21%
New Buildings Institute	7%	14%	23%	0%	15%
DesignLights	4%	8%	7%	18%	9%
Regional Energy Assessment Center	7%	9%	7%	12%	5%
Energy Center of Wisconsin	4%	9%	37%	6%	5%
DOE Industrial Assessment Program	14%	19%	47%	47%	2%
Food Service Technology Center	0%	5%	10%	18%	0%

Figure 17. Use of energy information sources by energy professionals

Figure 18 shows that, of all the information sources, EnergyIdeas’ users are among the most frequent seekers of information. Only the Industrial Efficiency Alliance and “information from local utility” had more users who had used the service more than four times per year.

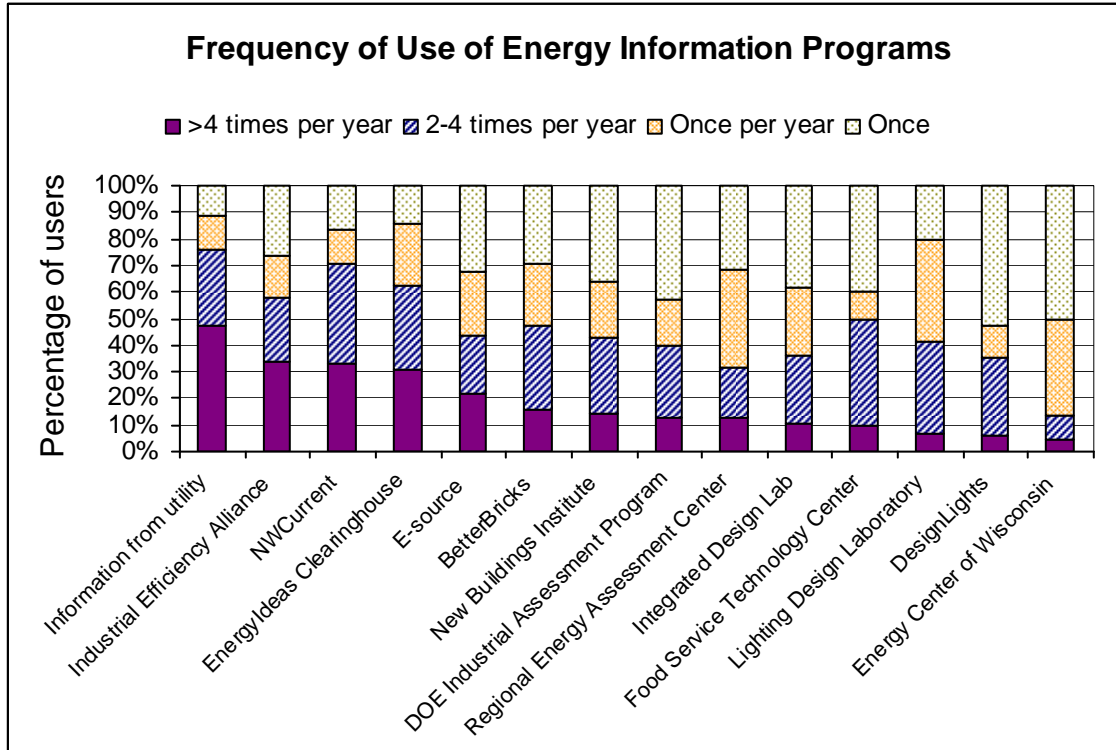


Figure 18. Frequency of use of energy information sources

Other Energy Information Sources

In the web survey, we asked both users and non-users of EnergyIdeas which other information sources or services they have used to obtain information on energy efficiency. 56 different sources were named by 35 individuals (8% of the 412 individuals who took the survey). The most commonly cited sources were the Washington State University Extension Energy Program (seven times), DOE Energy Star program (three times) and NREL (3 times). The full list of sources is reproduced in Appendix H – Other Sources of Energy Information Named by Web Survey Respondents.

7.2.4 Use of EnergyIdeas

For the sample of energy professionals, Figure 19 shows the percentage of each user group that had used EnergyIdeas, and, for convenience, it represents the percent aware of EnergyIdeas, to allow a comparison between these percentages (i.e., of those who were aware of EnergyIdeas, what percentage had used it). Figure 19 shows that 42% of the respondents had used EnergyIdeas at least once. This represents 58% of those aware of EnergyIdeas.

Utility staff and energy consultants were more likely than other user groups to have used EnergyIdeas. Architects were notably less likely to have used EnergyIdeas than other groups. Even of the 36% of architects who were aware of the project, only 19% (7% of all respondents) had used the services, indicating that architects are less likely than other groups to use the project.

These differences between groups should be understood in the context of the sample, i.e. that self-selection and other biases are likely to exist.

User Group	Percentage of respondents aware of EnergyIdeas	Percentage of respondents who have used EnergyIdeas	Users as a percentage of those aware
Architects (n=28)	36%	7%	19%
Building engineers (n=64)	59%	22%	37%
Energy Consultants (n=30)	93%	73%	78%
Industrial engineers and managers (n=17)	65%	18%	28%
Utility staff (n=66)	94%	73%	78%
Other (n=3)	70%	10%	14%
Average	73%	42%	58%

Figure 19. Use of EnergyIdeas

7.3 Findings for the Sample of Users

As shown in Figure 12, the “sample of users” for the analysis was formed by combining the previous users (listed in EnergyIdeas’ Customer Management Database) and the users who were identified in the survey of energy professionals. All the analysis in this section is based on the sample of users.

Figure 21 shows a detailed breakdown of the “energy consultant” category. We looked in more detail at this category to determine how many energy consultants are likely to be in EnergyIdeas’ target audience.

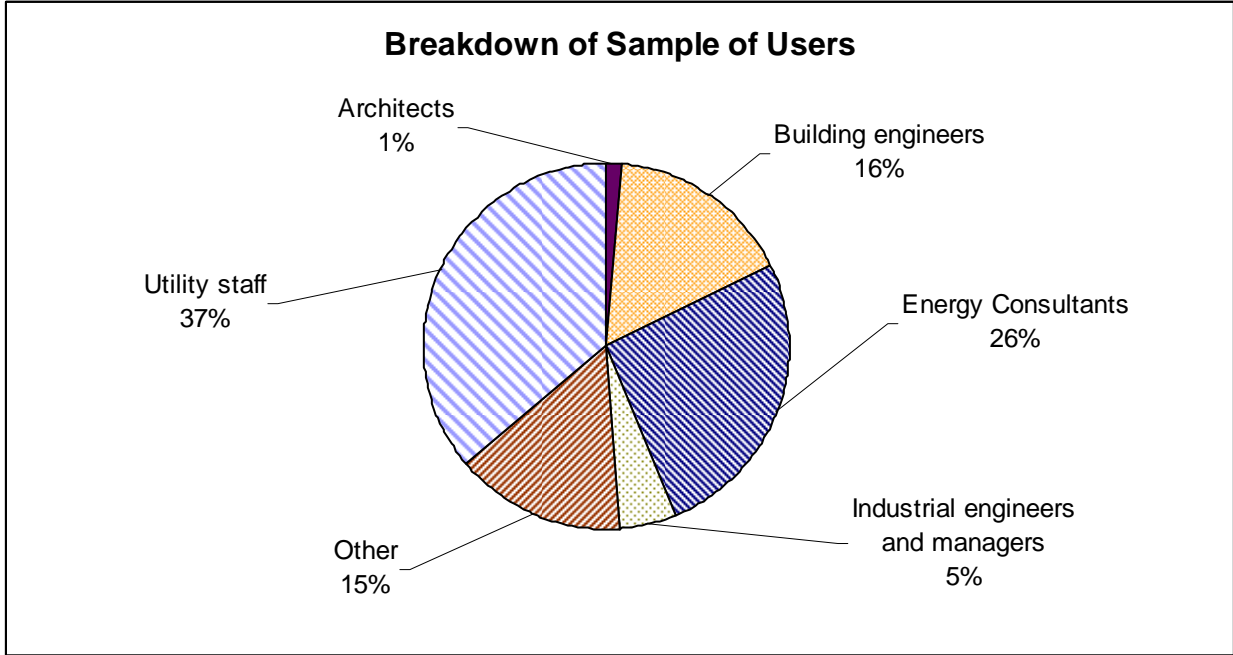


Figure 20. Breakdown of sample of users for analysis

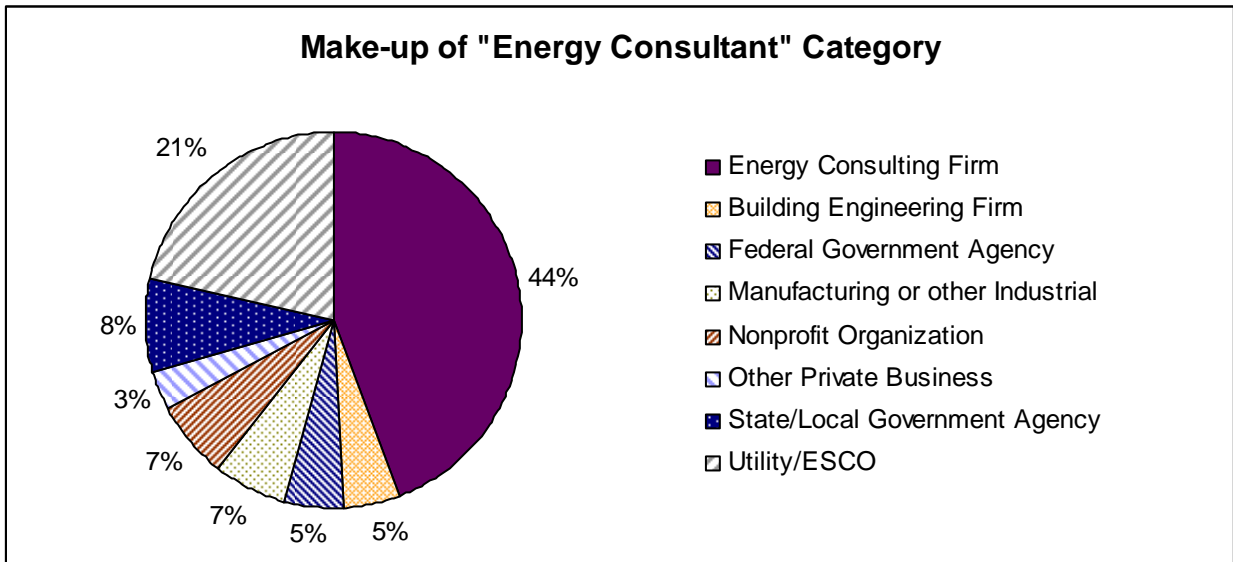


Figure 21. Breakdown of "energy consultant" category

7.3.1 Frequency of Use of EnergyIdeas

Figure 22 shows the frequency of use of EnergyIdeas by different user types. This analysis is based on all users of EnergyIdeas in the web survey; i.e., those in the "population at large" and those in our sample of previous users.

A "use" of EnergyIdeas includes all sources of information including Energy Newsbriefs, PTRs, "Ask Our Experts" etc. The graph shows that users from the industrial sector and from utilities use EnergyIdeas most frequently (with a median of 11-12 times per year), while building

engineers use it least (the three architects used it much less frequently, but are a very small sample). It also shows that some people are using the service very frequently; i.e., several times per month.

We calculated these values by totaling the number of times per year each user said they had used each service⁷.

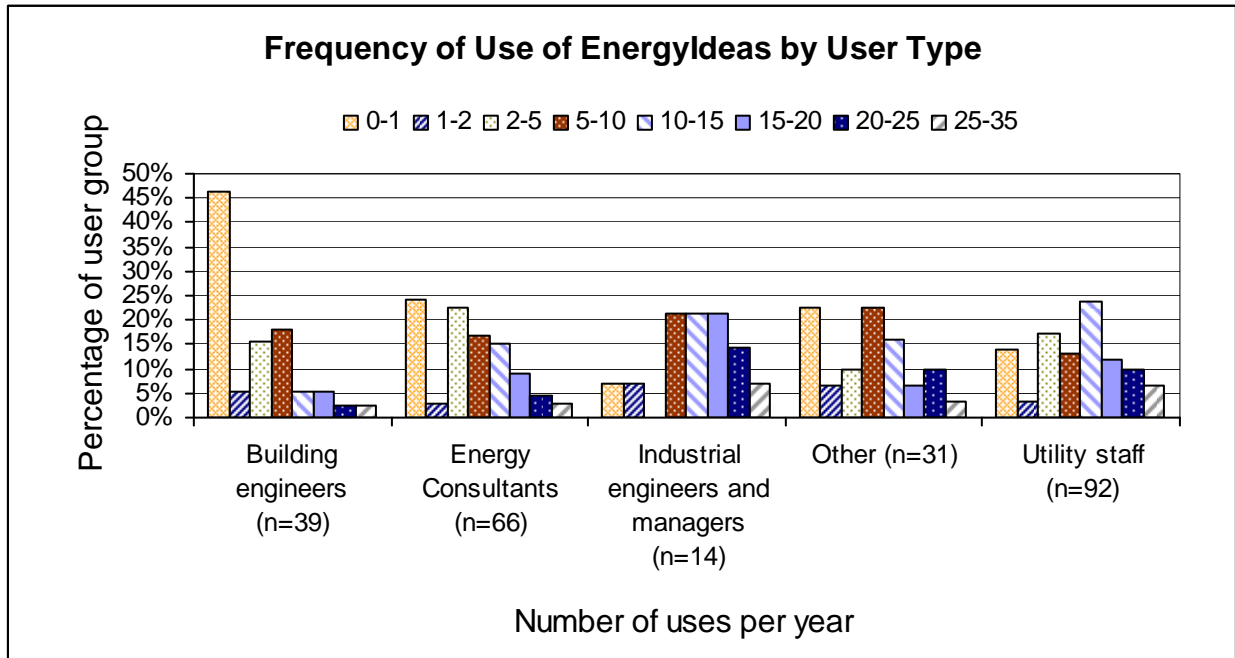


Figure 22. Frequency of use of EnergyIdeas by user type

⁷ We counted “once” as 0.3 times per year, “once a year” as 1, “2-4 times” as 3, and “>4 times” as 5. so the maximum possible frequency of use is 5 times per year multiplied by seven services (i.e. 35 times per year).

7.3.2 Use of Other Energy Information Sources

To understand the range of alternatives available to EnergyIdeas users, we investigated whether EnergyIdeas users have also used other information sources to obtain information, or whether they rely on EnergyIdeas as their sole source. Figure 23 shows that BetterBricks and the Lighting Design Laboratory are used by over two thirds of EnergyIdeas users, and that the Industrial Efficiency Alliance is used by over two thirds of EnergyIdeas industrial users. The data shows that users commonly obtain energy efficiency information from multiple sources.

	Architects (n=4)	Building engineers (n=45)	Energy Consultants (n=72)	Industrial engineers and managers (n=14)	Utility staff (n=100)	Average (n=276)
BetterBricks	50%	79%	64%	33%	69%	67%
DesignLights	50%	14%	5%	67%	13%	13%
Lighting Design Laboratory	50%	57%	68%	33%	79%	71%
DOE Industrial Assessment Program	50%	36%	55%	33%	2%	22%
New Buildings Institute	0%	50%	32%	0%	21%	27%
Regional Energy Assessment Center	0%	21%	9%	33%	6%	10%
Industrial Efficiency Alliance	0%	43%	50%	67%	56%	52%
Integrated Design Lab	100%	21%	14%	0%	29%	25%
NWCurrent	0%	36%	36%	33%	69%	53%
Food Service Technology Center	0%	21%	14%	0%	0%	7%
Information from your local utility	100%	93%	86%	100%	77%	83%
Energy Center of Wisconsin	0%	36%	41%	33%	6%	20%
E-source	50%	57%	27%	67%	42%	42%

Figure 23. Percentage of each type of EnergyIdeas users that also obtain information from other sources

7.3.3 Use of Specific EnergyIdeas Services

We conducted an analysis of how often the users of EnergyIdeas use each of the seven services provided. Figure 24 shows that the Energy Newsbriefs are the most frequently used (perhaps unsurprisingly, because these are emailed weekly to users). The remaining services show remarkably similar frequencies of use. Approximately one third of users were not aware of the Utility Resources page, but this percentage was lower (23%) for utility staff.

The data shows that although few people are using “ask our experts” more than four times per year, a large percentage are using it once or 2-4 times per year, and it has the highest awareness of all seven services.

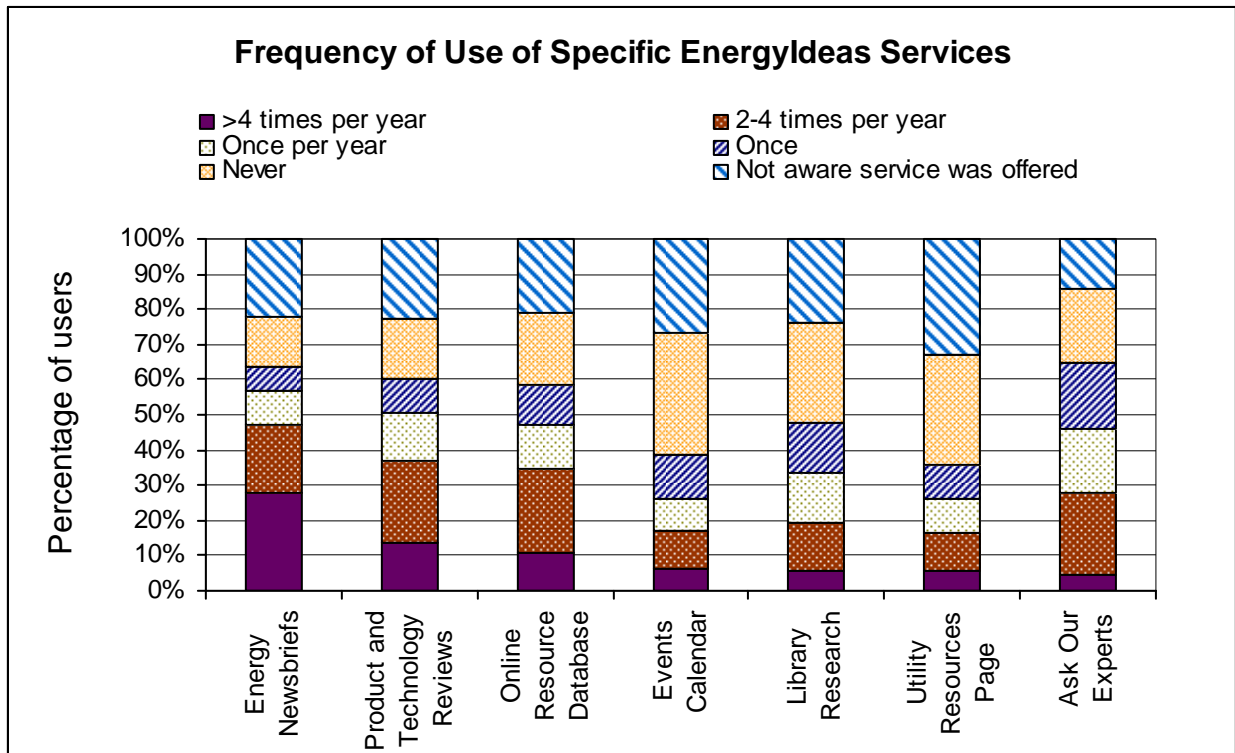


Figure 24. Frequency of use of specific EnergyIdeas services (n=276)

Figure 25 shows the percentage of users who had used each of EnergyIdeas’ services. Architects had the lowest average usage of all the groups, while industrial engineers, utility staff and “other” had the highest. It shows that the time-intensive “ask our experts” service is being used more often by utility staff and energy consultants than by other user groups. Surprisingly, a higher percentage of industrial users than of utility users use the Utility Resources page; we do not know why this is the case..

	Energy Newsbriefs	Product & Technology Reviews	Online Resource Database	“Ask Our Experts”	Library research	Events calendar	Utility Resources page	Average
Architects (n=4)	50%	50%	50%	25%	25%	50%	25%	39%
Building engineers (n=45)	53%	47%	49%	60%	42%	33%	33%	45%
Energy consultants (n=72)	61%	56%	53%	67%	51%	40%	31%	51%
Industrial engineers and managers (n=14)	79%	79%	71%	57%	57%	64%	71%	68%
Other (n=41)	88%	93%	98%	85%	88%	78%	80%	87%
Utility staff (n=100)	78%	75%	72%	73%	57%	50%	52%	65%
Average (n=276)	71%	68%	67%	70%	57%	50%	48%	61%

Figure 25. Percentage of each type of user who use each specific EnergyIdeas service

7.3.4 Service Assessment

Figure 26 shows that the majority of EnergyIdeas users are satisfied or very satisfied with the services provided. It is noteworthy that almost no users expressed dissatisfaction with the service. The “ask our experts” service received the highest overall satisfaction rating, with over 40% of users “very satisfied”. Because of the different nature of the services provided, it may not be valid to compare judgments of satisfaction *across* services.

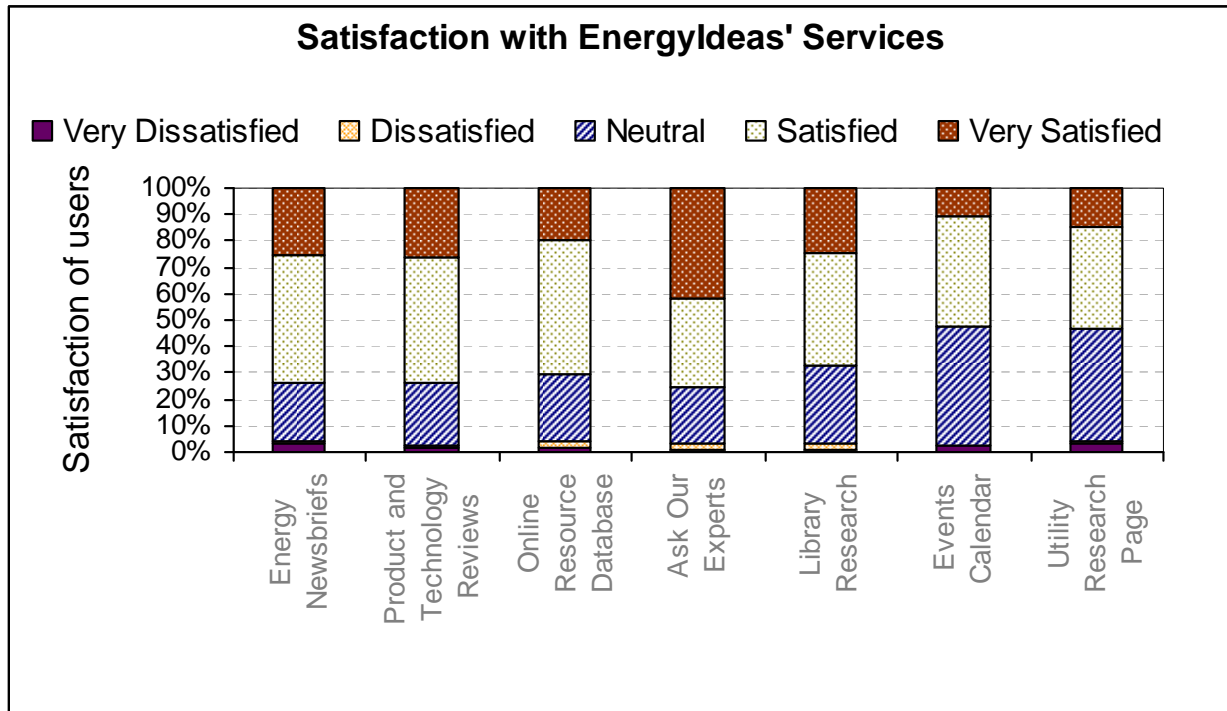


Figure 26. Satisfaction with EnergyIdeas' services (n=276)

Figure 27 shows all the opinions that were given by users on specific services (so the total number of responses is greater than the number of *respondents* because each respondent could give up to seven opinions; i.e., one on each service). It shows that satisfaction is similar across user groups, except for industrial sector respondents who expressed higher dissatisfaction (12%) than other groups, with correspondingly less satisfaction. Architects were more satisfied than others but the small sample makes this not significant.

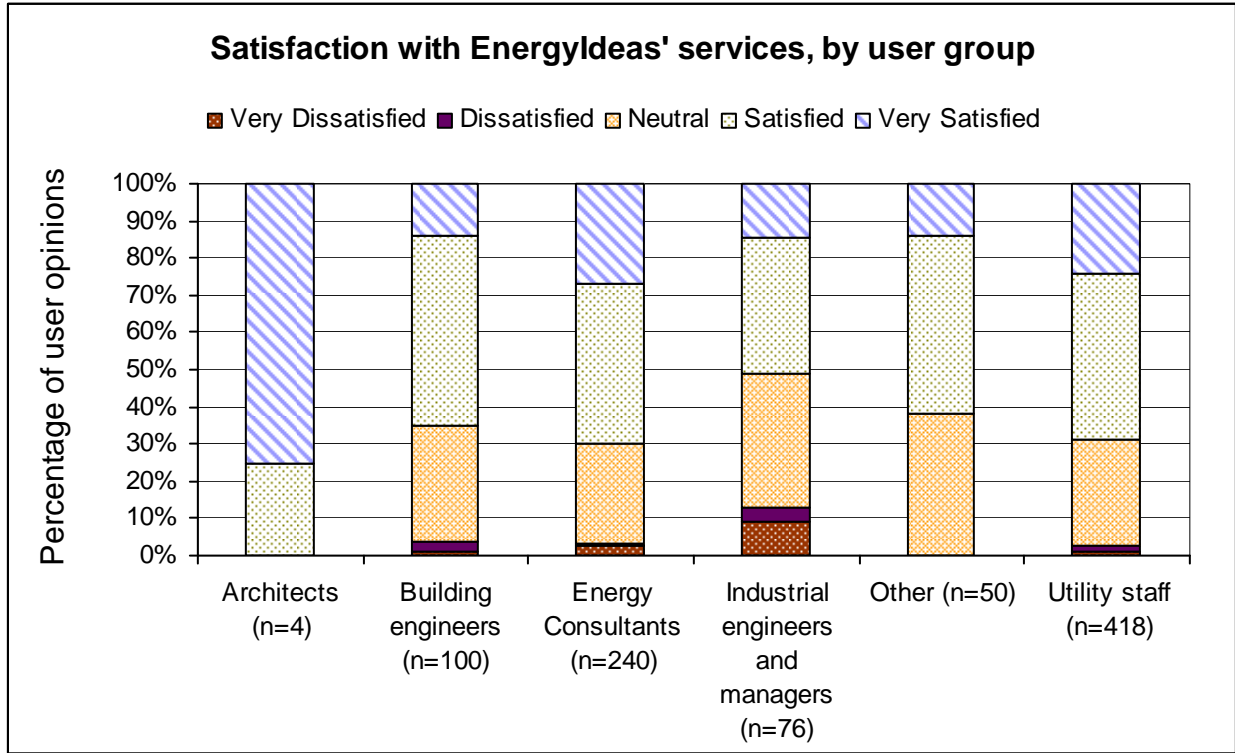


Figure 27. Satisfaction with EnergyIdeas' services, by user group (the n values in this graph show the total number of opinions given, not the number of people giving opinions)

7.3.5 Impact Assessment

Influence on Projects and Practices

Figure 28 and Figure 29 show that 35-40% of users report that advice from EnergyIdeas has suggested new options, or influenced the outcome of projects they have worked on. Figure 30 shows that around 20% of users said that advice from EnergyIdeas had changed their standard practices. This percentage was higher among building engineers and architects, and lower among industrial users and utility staff. It should be noted that the question is not directly relevant to most utility staff.

To assess impacts, we asked three questions that were as specific as possible regarding how the information is used for projects. Figure 28 and Figure 29 show that 35-40% of users report that advice from EnergyIdeas has suggested new options, and a similar percentage report that advice from EnergyIdeas has influenced the outcome of projects they have worked on.

Figure 31 shows a cross-tabulation between two of the impact questions (“Has EnergyIdeas suggested new options” and “Has EnergyIdeas influenced which options were chosen”). It shows that the majority of respondents either answered “yes” to both questions or “no” to both questions, though a significant minority chose one but not the other. This suggests that the respondents were reading questions carefully rather than just “clicking through”.

Figure 30 shows that 20% of respondents reported that advice from EnergyIdeas had “changed their standard practices”. For some respondents, this would not have been a relevant question because they do not have standard practices, so this is a conservative figure.

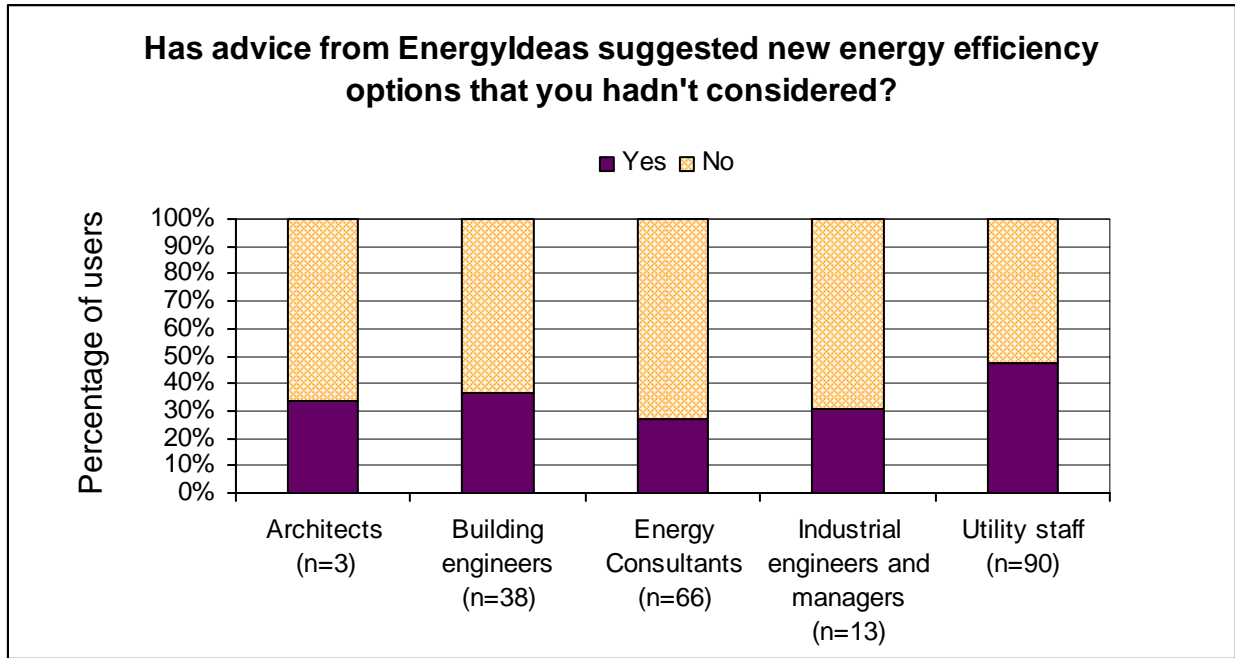


Figure 28. Has advice from EnergyIdeas suggested new energy efficiency options that you hadn't considered?

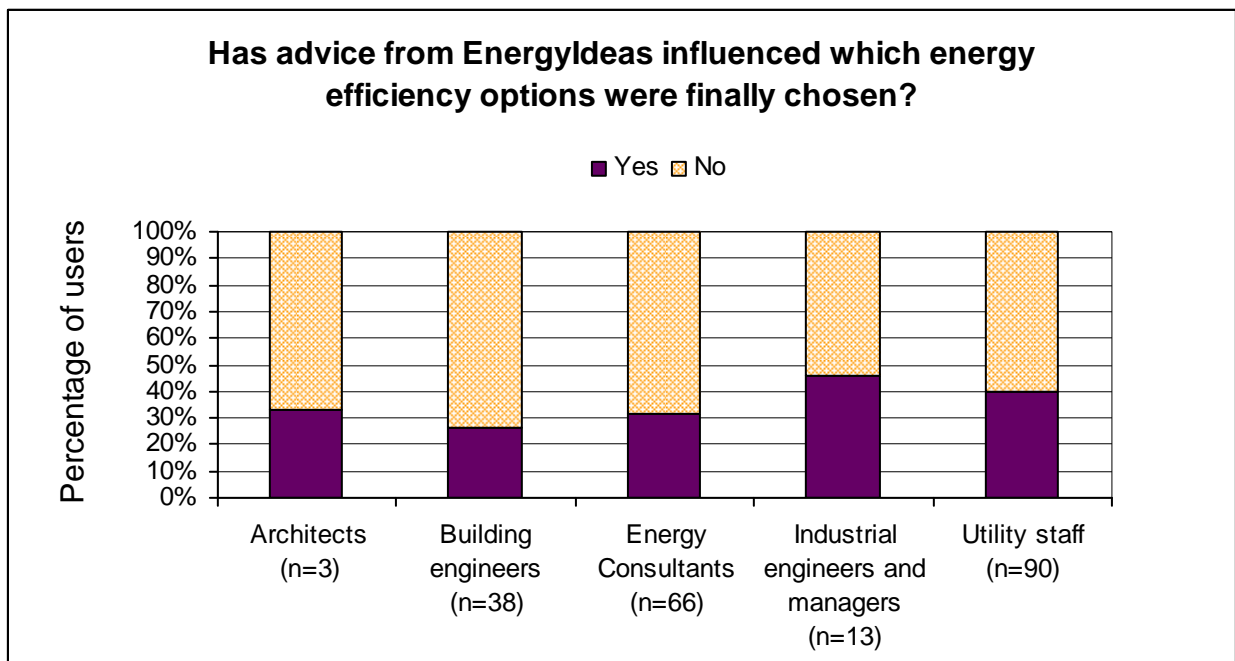


Figure 29. Has advice from EnergyIdeas influenced which energy efficiency options were finally chosen?

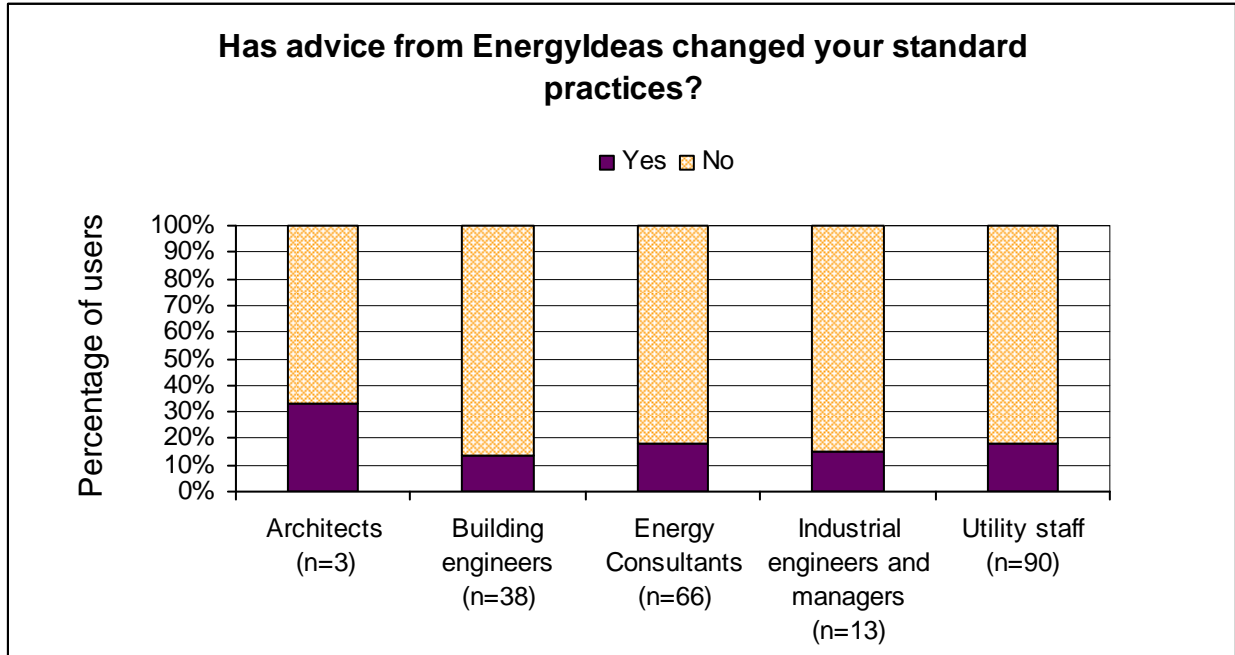


Figure 30. Has advice from EnergyIdeas changed your standard practices?

		In the projects you've worked on, has advice from EnergyIdeas influenced which energy efficiency options were finally chosen?		
		No	Yes	Total
In the projects you've worked on, has advice from EnergyIdeas suggested new energy efficiency options that you hadn't considered?	No	119	35	154
	Yes	27	61	88
	Total	146	96	242

Figure 31. Cross-tabulation of EnergyIdeas' impacts

Referrals

Figure 32 shows that 67% of EnergyIdeas' users refer others to the service at least once per year. Note that only those who said they worked for a utility were asked this question, so the answer cannot be broken down by user type.

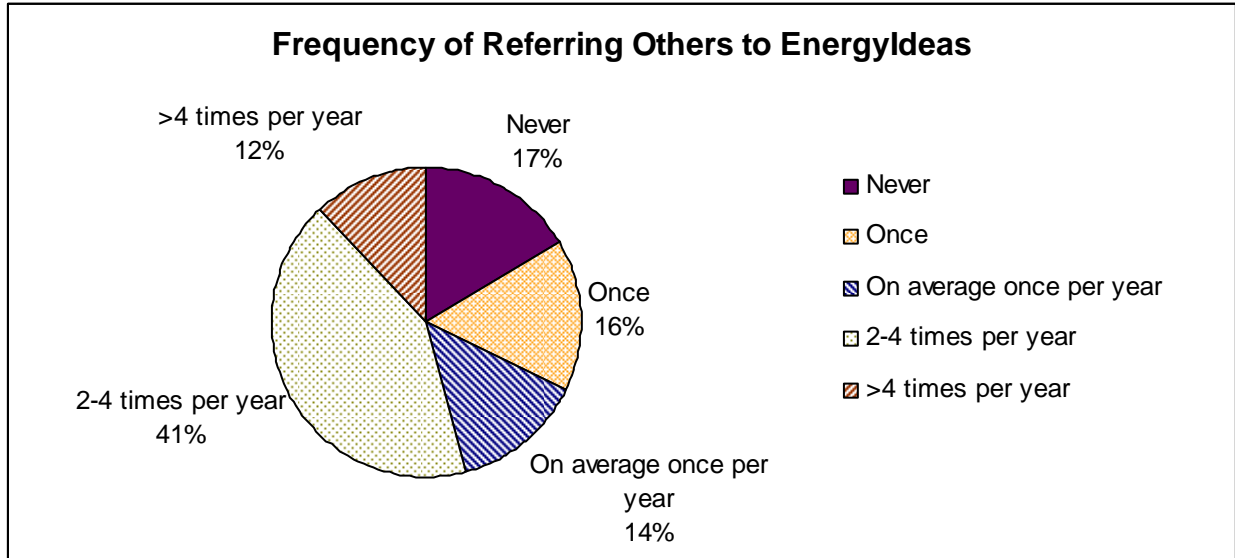


Figure 32. Frequency of referring others to EnergyIdeas (n=276)

7.3.6 Willingness to Pay an Annual Subscription

We asked users “How much would your organization be willing to pay annually to utilize the services provided by EnergyIdeas Clearinghouse?” They were asked to choose one of the five options shown in Figure 33.

Figure 33 shows that around half the respondents said that their organization would not pay to subscribe to EnergyIdeas, though, logically, their answers may have been influenced by the belief that if they answered “no” then EnergyIdeas might be less likely to charge for the service.

The averaged response (including those who would pay nothing) was \$96, and there was a great deal of similarity in the responses from the different user groups. These two facts may indicate that many respondents were influenced by the range of available responses to choose an option in the middle of the range, and that perhaps an open-ended question would have returned a different result .

Thirty-nine percent of respondents said they would be willing to pay \$100 or more; 52% would be willing to pay \$50 or more. Utility staff expressed the highest willingness for their organization to pay for the service (average \$126).

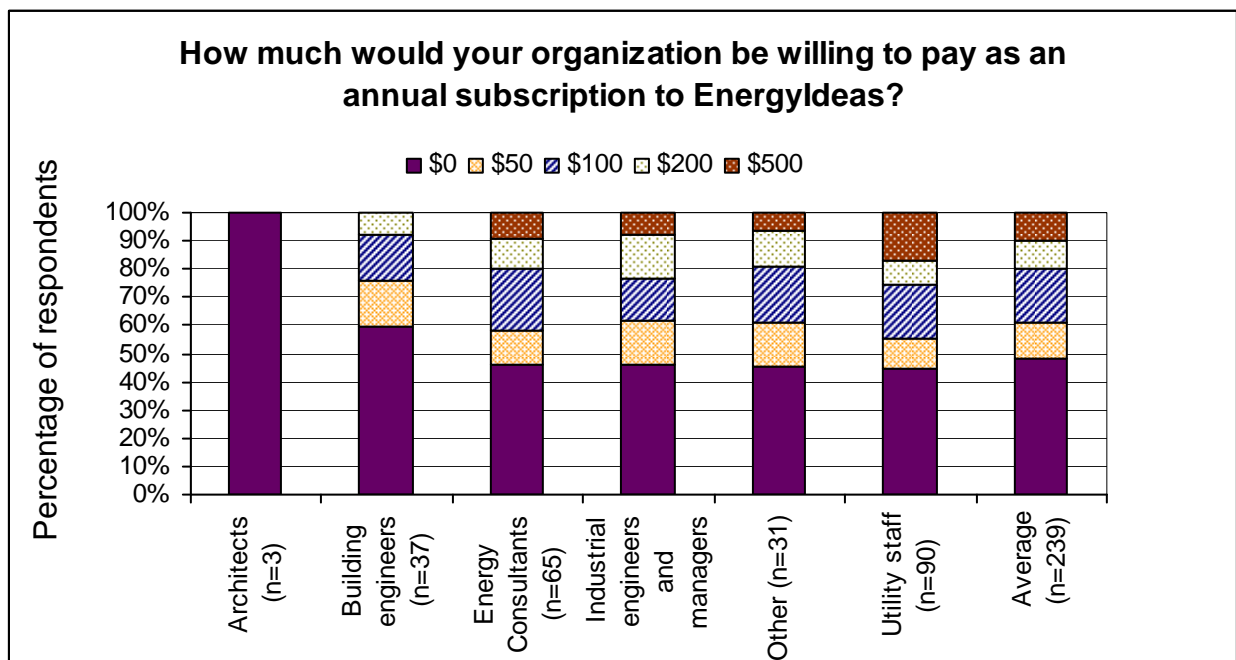


Figure 33 How much would your organization be willing to pay as an annual subscription to EnergyIdeas?

7.3.7 Respondents’ Recommendations and General Criticism

We asked users to provide open-ended recommendations and criticisms of EnergyIdeas. There were half as many criticisms as there were recommendations for improvement (9.8% vs. 18% of respondents). We took the responses and categorized them by topic.

As shown in Figure 34, by far the most common recommended improvement was that EnergyIdeas should conduct more “outreach”, i.e. that more potential users should be made aware of the service. This reflects the enthusiasm for EnergyIdeas among frequent users that is evident from the findings presented earlier.

Recommended Improvement	Number of responses	Percentage of users in survey
More outreach	17	6.2%
Change focus of existing services	9	3.3%
Expand range of services	6	2.2%
More detail in response	5	1.8%
Changes to the website	5	1.8%
Faster response	2	0.7%
Other	7	2.5%
Total	51	18%

Figure 34. Recommendations for improvements to EnergyIdeas

Criticisms were equally divided between several categories of response, as shown in Figure 35. One issue that arose commonly in both the criticisms and recommendations was providing information about alternative energy, which we categorized under “expand range of services” and “range of services not wide enough.”

Criticism	Number of responses	Percentage of users in survey
Speed of response was too slow	6	2.2%
Insufficient level of detail was provided	5	1.8%
Inaccurate information provided	4	1.4%
Range of services not wide enough	4	1.4%
Criticism of the website	4	1.4%
Other	4	1.4%
Total	27	9.8%

Figure 35. Criticisms of EnergyIdeas

8. CONCLUSIONS

The goal of this evaluation is to determine *what value EnergyIdeas has provided to NEEA in terms of its overall goals and projects*. Because the value of EnergyIdeas cannot be measured in terms of achieved energy savings, this evaluation focuses on the following questions:

- ◆ Who uses EnergyIdeas?
- ◆ Are the target audiences aware of EnergyIdeas?
- ◆ Do the target audiences use EnergyIdeas?
- ◆ Are the targeted audiences satisfied with EnergyIdeas?
- ◆ Do the target audiences actually employ the information they get from EnergyIdeas?
- ◆ What value does NEEA derive from providing information to these audiences?

In assessing the awareness and use of EnergyIdeas, we have used other information sources for comparison, but we do not have the luxury of similar in-depth information on other information source offerings. We don't know whether, for instance, BetterBricks enjoys as high a rate of satisfaction or referrals as EnergyIdeas.

8.1 What Market Progress Goals has EnergyIdeas Met?

From the list of “quantifiable” progress indicators (see section 4.2 for the complete list), the evaluation determined that EnergyIdeas has met or exceed eleven (11) progress indicators, as listed below:

- ◆ Marketing Goals
 - *Energy Newsbriefs are prepared and issued on a weekly basis (48 issues per year); number of subscribers increases by ten percent per year.*
- ◆ Website Goals
 - *Growth of third-party links (particularly electric utility websites) to the EnergyIdeas website is documented.*
 - *Automated satisfaction survey is maintained on website; results are assessed and reported to the Alliance.*
- ◆ Customer Services Goals
 - *The majority of requests are from regional electric utilities or utility referrals.*
 - *Inquiries are responded to in an average of eight working hours.*
 - *Each response by mail or email is accompanied by a customer satisfaction survey postcard to be returned to EnergyIdeas. Results are assessed and reported to the Alliance.*
- ◆ Technical assistance Goals
 - *Assistance is targeted to regional electric utilities, utility referrals and Alliance stakeholders.*

- *Requests handled are relevant (i.e., related to electric energy efficiency).*
- *Twenty percent of customers are contacted by telephone three months after receipt of service results are assessed and reported to the Alliance.*
- ◆ **Product and Technology Reviews/Utility Factsheet Goals**
 - *Requests for reviews or utility factsheets increase by 50 percent, to 18, in first year.*
 - *All requesting utilities or Alliance stakeholders and PTR listserv subscribers are contacted results are assessed and reported to the Alliance.*

Note that these are mainly *process* and *output* indicators rather than measures of the impact on the market, i.e. they are indicators of the quality and relevance of the service, rather than indicators of the magnitude of the effect on the market.

8.2 What Market Progress Goals has EnergyIdeas Not Met?

EnergyIdeas has not met four (4) progress indicators, as listed below. Three of these four indicators quantify the magnitude of EnergyIdeas' effect on the market (as opposed to the quality or relevance of the service). Although EnergyIdeas did not meet these progress indicators, the number of requests received has increased during the contract period. The following progress indicators were not met:

- ◆ *Information requests through website increase by 100%, to 180, in first year.* EnergyIdeas very nearly met this goal with 178 website requests were received in the first year, and 165 in the second.
- ◆ *Total information requests handled by EnergyIdeas increases by approximately 75 percent, to 1028, in first year.* Instead, it handled 729 requests during the period and only 639 in the subsequent year. This is 29% and 37% less than goal respectively.
- ◆ *Service requests handled by customer service staff increase by 115%, to 660, in first year.* Service requests handled declined by 2% and 17% respectively in the first and second years.
- ◆ *Technical assistance requests increase by 30%, to 350, in first year.* EnergyIdeas handled 304 such requests in 2005/2006 and 229 in 2006/2007. This is 13% less than goal.

8.3 Is it Likely that EnergyIdeas could Reach Similar Goals in the Future?

Because EnergyIdeas has not met the progress indicators that quantify the magnitude of its impact on the market, we believe that NEEA should consider whether EnergyIdeas *could* meet similar higher goals in future, either by serving its existing markets or by expanding into new ones.

The high rate of use of EnergyIdeas among larger utilities (see Figure 45), the high rates of awareness and use of the service by individual utility staff (see section 7.2), and their high rates of referral to others suggest that the use of EnergyIdeas by large utilities has likely reached its maximum extent.

The lower rates of use among the smaller utilities suggest that an untapped market for EnergyIdeas' services may exist there. However, utilities serving less than 50,000 consumers serve only 23% of consumers in the Northwest, and probably a smaller share of commercial and industrial users, so the size of this untapped utility market is probably small.

At present, EnergyIdeas deals with only two (2) requests for technical assistance per working day (see section 5.1.4), and only 23% of those requests come directly from building engineers, or industrial engineers and managers, as opposed to utility staff (see Figure 8). This means that, from the entire commercial and industrial sector in the Northwest, only 2 or 3 requests for technical assistance are being submitted *per week*. Twenty percent of the commercial and industrial sector respondents to the web survey had used EnergyIdeas, however, this number is likely to be overestimated, which means that at least 80% of the target population has not yet used the service. So there is clearly the potential for the commercial and industrial sectors to use EnergyIdeas substantially more frequently than they do at present. The absolute number of such potential users greatly exceeds the number of utility staff, so they represent a much larger potential market. The high satisfaction with EnergyIdeas among existing users could be leveraged to attract more users to the service, and an increased effort on the part of NEEA to market EnergyIdeas through its other projects would likely yield an increased number of users among energy professionals.

A complementary approach to reaching higher goals for EnergyIdeas would be to convert people who are currently infrequent users into frequent users. Even a very small number of frequent users would have a significant effect on the number of requests for information. This approach is subject to the caveat about frequent users discussed in section 8.4.

8.4 Who Uses EnergyIdeas?

EnergyIdeas is predicated on the idea that centralizing the provision of energy efficiency information will reduce the overall cost of providing that information, and will make energy professionals more likely to seek it. This evaluation cannot test either of those two hypotheses directly, but it sheds light on whether the types of people *seeking* that energy information are the right ones, in terms of providing value to NEEA, i.e. whether the actual audiences are the targeted audiences of this project?

Frequent Users

There are a small number of frequent users who are taking up a large amount of EnergyIdeas' staff time. Fourteen percent (14%) of users use the expensive "ask our experts" and/or "library research" services at least 2-4 times per year, accounting for 48% of the enquiries to those services. It appears that these frequent users are in the target audience (see Figure 36) and they are much more likely than other users to say that EnergyIdeas has suggested new options for their projects (57% vs. 36%), that it has influenced which options were chosen (62% vs. 40%) and that it has changed their design practices (38% vs. 20%).

Therefore, despite the cost of providing service to these users, EnergyIdeas may be delivering a lot of value to NEEA by doing so, because these users believe that the advice they're receiving has had a significant effect on projects and practices.

Figure 36 shows that the group of self-reported frequent users includes more building engineers and more industrial engineers and managers than the wider population of users. Frequent users were only marginally more willing to pay for the service than the wider population (\$102 vs. \$96). A more detailed identification of these users and whether their use of EnergyIdeas is legitimate, may be warranted.

User group	Percentage of all users (n=276)	Percentage of Frequent users (n=39)
Architects	1%	0%
Building engineers	16%	38%
Energy consultants	26%	20%
Industrial engineers and managers	5%	8%
Other	15%	6%
Utility staff	36%	29%

Figure 36. Make-up of “frequent users” group compared to the sample of users

To summarize, we have identified a market segment of frequent users of EnergyIdeas’ services that make good use of the information offered by the Clearinghouse. Further, one characteristic of this segment is that its members would be willing to pay a fee for access to the information and services currently offered by the Clearinghouse, though the amount of the fee in the survey question is significantly less than the cost of providing the service.

Utility Staff

Utility staff make up the majority of users, are the most frequent users, refer others to the service, and indicate they would be willing to pay for the service as an annual subscription (\$126 on average) than other users. These results lead us to conclude that EnergyIdeas’ project logic accurately describes the flow of information that is actually occurring.

Whether EnergyIdeas is delivering *value* to NEEA through utility staff depends on whether they are passing information to their clients *more effectively* than they would if EnergyIdeas were not there. In the case of larger utilities that have energy efficiency experts on staff, this is likely not the case because those utilities would be able to provide that information using in-house resources. However, in the case of small (<10,000 consumers) and mid-size (10-50,000) utilities, it is almost certain that they do not have energy efficiency expertise in house (see Appendix F – Detailed Methodology for Web Survey for a discussion of our attempts to identify the correct survey respondent at utilities of different sizes). As shown in Figure 45 (in Appendix F – Detailed Methodology for Web Survey) small and especially mid-size utilities are making use of EnergyIdeas.

However, 72% of the enquiries logged in the Customer Management Database come from large (>50,000) utilities. This means that the utilities that are most likely to have the resources and facilities to research energy efficiency are the largest users of the service. Although this does not

indicate duplication per se, it does beg the question of whether the EnergyIdeas' services are uniquely valuable to the 11 largest utilities in the region.

Energy Consultants

The project logic supposes that the information from EnergyIdeas is provided to “energy professionals” who would otherwise have no means of obtaining it except by less reliable and more time-consuming means such as their own internet research.

However, in the case of energy consultants who sell their energy expertise to end-users, EnergyIdeas may be providing, for free, a service that those consultants should be providing themselves. NEEA's project manager for EnergyIdeas stated that energy consultants are not in the target audience as discussed in EnergyIdeas' project logic, but they make up a significant portion of users and thus NEEA should resolve the question of whether and how EnergyIdeas should provide service to them. This should be part of a wider revision of the project logic.

Energy consultants make up 22% of EnergyIdeas' users, according to our survey of previous users. It is difficult to estimate what percentage of EnergyIdeas' resources are allocated to energy consultants, but they are among the least frequent users of EnergyIdeas overall (see Figure 22), though they are among the most likely to have used the expensive “ask our experts” service (see Figure 25).

Note, however, that not all of those who categorized themselves as “energy consultants” are people who sell their energy expertise to end-users. As shown in Figure 21, many of those who categorized themselves as energy consultants work for utilities, state agencies or non-profits (likely including NEEA), and so are not selling their professional services. True “energy consultants” therefore make up around 10% (44% of 22%) of EnergyIdeas' users, according to the web survey.

8.5 Are Target Audiences Aware Of EnergyIdeas?

- ♦ As a brand, EnergyIdeas has a high level of recognition (74% of energy professionals were aware of the service) which is very similar to other information sources. All the energy information sources mentioned in the web survey enjoyed a high level of awareness among energy professionals.
- ♦ Architects appear to be less aware of EnergyIdeas than other energy professionals and less aware of EnergyIdeas than they are of other energy information sources. Architects are involved with all aspects of building, not just energy, which may account for their lower awareness of a website focused solely on energy efficiency. Note also that EnergyIdeas does not market itself directly to architects and consulting engineers, to avoid duplication of effort with the Integrated Design Labs.

8.6 Do Target Audiences Use EnergyIdeas?

- ♦ EnergyIdeas has the third highest level of usage among the thirteen energy information sources in the web survey after BetterBricks and the Integrated Design Labs, with 42% of respondents having used it. Utility respondents and energy consultants had the highest usage level at 73%.

- ◆ EnergyIdeas is primarily servicing utility staff, as called for in WSU’s contract with NEEA. Around half of the enquiries logged on EnergyIdeas’ Customer Management Database come from utility staff. Also, utility staff have the highest level of awareness and use of the service among all the energy professionals we surveyed.
- ◆ Professionals from the commercial buildings sector and the industrial sector have approximately the same rates of awareness and use of EnergyIdeas.
- ◆ Architects appear to use EnergyIdeas less than other energy professionals do, and to make less use of EnergyIdeas than they do of other energy information sources. Architects are involved with all aspects of building, not just energy, which may account for their lower rates of use.
- ◆ EnergyIdeas has *not* met 4 of the 5 progress indicators that relate to the number of customers served. These include the goals for the number of requests made, and the number handled by staff, although it *has* met almost all the process goals, such as the reporting requirements, and follow-up with users. Ten progress indicators were not assessed because they were not quantitative or measurable..
- ◆ Despite not meeting the progress goals related to number of requests, the total number of requests received has increased by approximately 10% per year, suggesting that EnergyIdeas’ marketing and/or word-of-mouth referrals are generating more desire for the service. However, during the same period, the number of requests handled by technical staff has fallen by approximately 10% per year.
- ◆ Building engineers use a narrower range of EnergyIdeas’ services than industrial engineers and utility staff. Building engineers make most use of “ask our experts” and Energy Newsbriefs, whereas industrial engineers make most use of the PTRs, the online resource database, and the Utility Resources page.

8.7 Are Targeted Audiences Satisfied with EnergyIdeas?

Users express a high degree of satisfaction, especially with the person-to-person services such as “ask our experts” and library research. This was reflected in the open-ended responses to the satisfaction questions, which were enthusiastic. It is also reflected in the high frequency of use by users; among comparable information sources, only the Industrial Efficiency Alliance has as high a frequency of use among its users. More frequent users of EnergyIdeas are more satisfied with the service than less frequent users.

8.8 What are the Outcomes of EnergyIdeas’ Activities?

EnergyIdeas’ advice is having an impact on projects in the field. Approximately one-third of respondents indicated that information from EIC had “affected which options were chosen.” Less than 20% of respondents indicated that “advice from EnergyIdeas changed” their standard practices.”

When considered in combination, however fifty-one percent (51%) of users reported that in the projects they’ve worked on, “advice from EnergyIdeas has suggested new energy-efficiency options that hadn’t been considered”, *or* that the advice had “affected which options were chosen.” Twenty five percent (25%) reported that *both* those statements were true. Twenty

percent (20%) of respondents reported that advice from EnergyIdeas had “changed their standard practices”.

We conclude that EnergyIdeas is bringing value to the region through its impacts on target markets, by transforming projects and practices. However, we believe that this value is being reduced because EnergyIdeas is not being used by the right people (see above), and has not met the contract goals. Additionally, the number of requests being handled by EnergyIdeas has not increased in the two years since the contract between NEEA and WSU was initiated.

APPENDIX A – NEEA STAFF TELEPHONE INTERVIEW GUIDE

Instructions to Interviewer

The purpose of these interviews is to get specific and/or quantifiable answers to questions about the value that EnergyIdeas' services have brought to NEEA and NEEA's programs. They may also respond with their views on the value of EnergyIdeas to market transformation in the Northwest *as a whole*, in which case we will record that response as well.

These interviews are intended to help HMG evaluators better understand the relationship between EnergyIdeas and NEEA's programs, so we can design an effective email/web survey for the second part of the evaluation. The interviews will also give NEEA staff an opportunity to give their frank opinions, anonymously, to the evaluators.

We will attach more value to responses that address specific benefits, rather than responses that are generalized views of the overall value of EnergyIdeas. These questions are designed to help the respondents think through the services offered by EnergyIdeas in a systematic way, so the questions include specific references to individual services.

Some of the questions are open-ended, and some ask for a response on a simple scale. This is an interview guide and not a survey, so the interviewer should explore additional relevant topic threads that interviewees may bring up, if it appears that doing so will help us better answer the primary questions.

Draft Interview Guide

Hello, this is _____ from the Heschong Mahone Group. I'm calling to ask you some questions about the EnergyIdeas Clearinghouse.

We're conducting research for NEEA, trying to evaluate the effectiveness of EnergyIdeas in supporting utility program/projects and other energy-efficiency activities in the Northwest.

I'd like to ask you a few questions, which should take 15-20 minutes, is now a good time? If not, when should I call you back?

The answers you give may be used in the evaluation report we submit to NEEA, but your answers will be anonymous, and your name will not be included in the report.

Personal Details

First I'd like to confirm some details about you:

4. What is your job title?
5. What does your job typically involve?
6. In what ways have you used EnergyIdeas' services / worked with EnergyIdeas, and for how long?

Initial Perspective on EnergyIdeas

[These questions are “unprompted” i.e. we haven’t yet talked through any of the EnergyIdeas’ services.]

7. What do you think are the main services that EnergyIdeas provides?
8. Why does NEEA help to fund EnergyIdeas?

Specific Services

EnergyIdeas offers users a variety of ways to access its services. Some promote emerging technologies and some provide advice on existing technologies. How would you rate each service in terms of its **effectiveness in promoting energy efficiency awareness, knowledge and activity**? Please rate each service using a scale from 1 to 5 (5 is most effective), and add any explanation you feel is necessary.

[If respondent is not familiar with the service, record that]

9. Energy Newsbriefs
10. Product & Technology Reviews
11. Online Resource Database
12. “Ask Our Experts” technical assistance services
13. Factsheets
14. Library Research
15. Events Calendar
16. Utility Resources Page

Tiered Technical Assistance

17. EnergyIdeas provides technical assistance using a four-tiered approach. Are you familiar with this approach? [if necessary, explain using the descriptions below]

Each tier of service is a trade-off between the breadth of service in terms of the number of customers served, and the depth of service in terms of technical detail. How would you rate each tier in terms of its effectiveness in promoting energy efficiency awareness, knowledge and activity? Please rate each tier using a scale from 1 to 5, and add any explanation you feel is necessary.

18. Tier 1 visit to website, sending out newsletters (minimal staff time required)
19. Tier 2 simple technical assistance or a referral to another service (up to 2 hours’ staff time)
20. Tier 3 engineering assistance or a library search (up to 8 hours’ staff time)
21. Tier 4 detailed engineering assistance or creation of a new resource such as a product technology review (PTR) (>8 hours’ staff time)

Service Attributes

EnergyIdeas attempts to provide information that is fast, accurate, objective and comprehensive. Due to budget constraints there may be tradeoffs between these attributes. We'd like to know which you think are most important. Please rate each attribute using a scale from 1 to 5, and add any explanation you feel is necessary.

22. Response Time (sooner vs. later)
23. Accuracy (% accuracy of engineering calculations) of numeric response or referral to other resources
24. Objectivity of response (freedom from manufacturer bias or other bias)
25. Comprehensiveness of response (additional advice beyond the confines of the question, for instance alternative approaches or additional savings opportunities)

Target Sectors

We'd like to know how *effective* you think EnergyIdeas has been in reaching customers and promoting energy efficiency in its target markets. For those questions you feel confident answering, please give a response on a scale from 1 to 5, and add any explanation you feel is necessary.

26. Do you think that EnergyIdeas is effectively supporting NEEA's commercial building market transformation programs?
27. Do you think that EnergyIdeas is effectively supporting building designers, developers and managers?
28. Do you think the EnergyIdeas is effectively supporting NEEA's industrial market transformation programs?
29. Do you think that EnergyIdeas is effectively promoting energy efficiency in industrial processes and industrial buildings?
30. Do you think EnergyIdeas is effectively supporting energy efficiency in the Northwest as a whole?
31. Are you aware of conflicts, competition or duplication between EnergyIdeas and other NEEA-sponsored programs, or between EnergyIdeas and utility-sponsored programs?
32. Do you personally use EnergyIdeas as a resource? If so, how often do you use it, and for what?
33. If EnergyIdeas didn't exist, where would you go for information?

APPENDIX B – WEB SURVEY OF ENERGY PROFESSIONALS

This section shows the web survey that was presented to energy professionals, i.e. people who have been selected for the survey because they are in EnergyIdeas’ main target groups, rather than because they are known to be previous users. The survey for previous users followed the same format, but some of the questions were dropped because they were not relevant. No additional questions were asked in the survey of previous users.

WELCOME!

On behalf of utilities and rate payers in Washington, Oregon, Idaho and Montana, the Northwest Energy Efficiency Alliance (NEEA) would like to ask you about your needs for information regarding energy efficiency.

NEEA is dedicated to providing energy efficiency information in a cost effective manner and would like your help to find out what type of information you want and how it is easiest for you to receive it.

Your response will be kept in strictest confidence but the results of this survey will shape some of the web-based delivery systems that are currently offered in our region.

The survey will take 10 minutes or less.

YOUR THOUGHTFUL RESPONSES ARE APPRECIATED!!!

1. Please enter your contact information:

We will not contact you except if you earn a gift card by referring others to the survey. We will not pass your contact details to others.

Name: _____

Company: _____

Email: _____

2. If anyone referred you to take this survey, please let us know his/her name:

Name: _____

Professional Information

3. My position is best described as:

- Architect
- Construction Project Manager
- Building Engineer
- Building Manager
- Industrial Process Engineer or Manager
- Business Manager
- Mechanical Design Engineer

- Electrical Design Engineer
- Lighting Designer
- Energy Consultant
- Utility Account Representative
- Utility Program Manager
- Other (please specify) _____

4. Years of experience in this or similar positions:

5. My profession or educational background:

- Architect
- Electrical Engineer
- Mechanical Engineer
- Other Engineer
- Construction Trade
- Other (please specify)

6. My organization is (please check one):

- Utility/ESCO
- State/Local Government Agency
- Federal Government Agency
- Nonprofit Organization
- Energy Consulting Firm
- Architectural Firm
- Building Engineering Firm
- Other Private Business
- Manufacturing or other Industrial Firm (please describe below)

Utility Referrals

[Note: Respondents were asked question 7 only if they checked "Utility/ESCO" in response to question 6.]

7. How often have you referred your clients to the EnergyIdeas Clearinghouse, or given them information about the Clearinghouse?

- Never
- Once
- On average once per year
- 2-4 times per year
- >4 times per year

Energy Information Resources

8. Have you obtained information from any of the following organizations, programs, or services?

	Not aware service was offered	Never	Once	Once per year	2-4 times per year	>4 times per year
Information from your local utility						
BetterBricks						
Industrial Efficiency Alliance						
EnergyIdeas Clearinghouse						
Energy Center of Wisconsin						
Integrated Design Lab						
E-source						
NWCCurrent						
Food Service Technology Center						
DesignLights						
Lighting Design Laboratory						
New Buildings Institute						
Regional Energy Assessment Center						
DOE Industrial Assessment Program						
Other (please specify organization and frequency of use)						

Energy Efficiency Advice

10. What types of energy efficiency advice have you needed, or do you expect to need in your professional work? (check all that apply)

- General information about a specific technology or design practice
- General advice on integrated efficient designs
- Energy modeling of a building or process
- Highly detailed advice specific to your building or application

11. Where would you prefer to find advice on specific technical questions about energy efficiency? (check all that apply)

- A telephone or email hotline
- An efficiency expert within your own organization
- An energy consultant
- An efficiency expert in another organization
- A utility program manager
- A utility account representative
- An online resource
- Other (please specify)

12. Are you familiar with the EnergyIdeas Clearinghouse program (www.energyideas.org)?

- Yes
- No

13. How did you learn about the EnergyIdeas Clearinghouse (choose only one)

- Utility office/staff
- NEEA office/staff
- Friend/colleague
- Internet search
- Other (please specify)

EnergyIdeas' Services

14. Of the services offered by the EnergyIdeas Clearinghouse, please indicate how often you use each one: (for more info click the links provided)

	Not aware service was offered	Never	Once	Once per year	2-4 times per year	>4 times per year
Energy Newsbriefs (newsletter)						
Product & Technology Reviews						
Online Resource Database						
"Ask Our Experts" telephone or email assistance						
Library research						
Events calendar						
Utility Resources page						

15. How satisfied have you been with the service provided? (for more info click the links provided)

	Never used	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Energy Newsbriefs (newsletter)						
Product & Technology Reviews						
Online Resource Database						
"Ask Our Experts" telephone or email assistance						
Library research						
Events calendar						
Utility Resources page						

16. Please rank attributes in order (1-4) of importance in terms of promoting energy efficiency:

(1= most important, 4= least important, ONLY ONE ATTRIBUTE PER NUMBER)

	1	2	3	4
Objectivity (freedom from bias)				
Accuracy of technical response				
Comprehensiveness (additional advice beyond the confines of the question)				
Speed of response				

Individual Project Experience

17. In the projects you've worked on, has advice from EnergyIdeas suggested new energy efficiency options that you hadn't considered?

- Yes
- No

(please explain further below)

18. In the projects you've worked on, has advice from EnergyIdeas influenced which energy efficiency options were finally chosen?

- Yes
- No

(please explain further below)

19. Has advice from EnergyIdeas changed your standard practices?

- Yes
- No

(please explain further below)

Criticism and Recommendations

20. If you were dissatisfied with any of the services provided by the EnergyIdeas Clearinghouse, please explain why:

21. Do you have any recommendations to improve the EnergyIdeas Clearinghouse? Please comment below:

8.9 Funding for EnergyIdeas

22. How much would your organization be willing to pay annually to utilize the services provided by EnergyIdeas Clearinghouse?

- \$0
- \$50
- \$100
- \$200
- \$500

Survey Complete!

THANK YOU!! YOUR PARTICIPATION IS APPRECIATED.

If you refer someone else to take this survey, you can earn a \$10 gift card from one of the following vendors:

- Powell's books
- REI
- Starbucks

To earn your gift card, the person you refer must:

- a) have a need for electrical energy efficient advice
- b) identify you when he or she takes the survey

There is a limit of 3 gift cards per person.

APPENDIX C – PATTERN OF AWARENESS OF ENERGY PROGRAMS

This appendix shows the “expected” awareness of EnergyIdeas compared with the actual awareness, for each group. This comparison shows how certain user groups differ from the norm in terms of their awareness. In general, awareness of EnergyIdeas among each group was comparable with what would be expected, given the average awareness of other information sources among those groups. This was true except in the case of architects, who seemed to have a markedly lower level of awareness of EnergyIdeas than would be expected relative to other information sources. Architects were more aware of BetterBricks, the Lighting Design Lab, and the Integrated Design Labs, and less aware of almost all the other information sources. Industrial engineers were more aware of the two industrial information sources, and less aware of BetterBricks and the Lighting Design Lab.

“Expected awareness” is a mathematical construction⁸ calculated from the average level of awareness among that user group, and the average level of awareness of EnergyIdeas relative to other information sources. For example, the 54% expected awareness among architects was calculated by starting with the average awareness of architects about *all* information sources (51%) and modifying it by the average awareness of EnergyIdeas (73%) compared with all other information sources (69%). $51\% * (73\% / 69\%) = 54\%$.

The difference between the expected and actual values was statistically significant for the architects, energy consultants and utility staff (using binomial distribution). Note that the use of statistical significance in this context is only indicative, due to the likely presence of self-selection and other biases in the sample.

⁸ We used the same statistical method as would be used in a chi-squared analysis. To work out the expected value we took the average for that user group, multiplied it by the average for that program, and divided by the average for all programs.

User Group	Percentage of respondents aware of EnergyIdeas Clearinghouse	Percentage expected to be aware, based on comparison with other sources in survey	Statistical significance of difference between actual and expected awareness
Architects (n=28)	36%	54%	Significant, p<0.02
Building engineers (n=64)	59%	66%	Not significant
Energy Consultants (n=30)	93%	88%	Significant, p.<0.1
Industrial engineers and managers (n=17)	65%	68%	Not significant
Utility staff (n=66)	94%	88%	Significant, p<0.05
Other (n=3)	70%	71%	Not significant
Average	73%	73%	

Figure 37. Awareness of EnergyIdeas

Percentage of user group aware of energy program:	BetterBricks	DesignLights	Lighting Design Laboratory	EnergyIdeas Clearinghouse	DOE Industrial Assessment Program	New Buildings Institute	Regional Energy Assessment Center	Industrial Efficiency Alliance	Integrated Design Lab	NWCurrent	Food Service Technology Center	Information from utility	Energy Center of Wisconsin	E-source
Architects	96%	36%	86%	36%	43%	50%	29%	32%	68%	32%	32%	93%	32%	54%
Building engineers	77%	45%	73%	59%	69%	56%	55%	66%	61%	55%	50%	97%	52%	66%
Energy consultants	93%	73%	90%	93%	97%	73%	70%	90%	73%	83%	77%	100%	67%	80%
Industrial engineers and managers	47%	65%	53%	65%	88%	47%	59%	100%	53%	59%	59%	100%	47%	65%
Utility staff	91%	65%	91%	94%	98%	74%	65%	91%	74%	85%	97%	98%	62%	74%
Other	60%	60%	60%	70%	80%	70%	80%	80%	50%	60%	80%	70%	60%	60%
Average	83%	56%	80%	73%	80%	63%	58%	76%	67%	66%	68%	96%	54%	68%

Expected awareness

Architects	62%	42%	60%	54%	60%	47%	43%	57%	50%	49%	51%	72%	41%	51%
Building engineers	76%	52%	74%	66%	74%	58%	53%	69%	61%	60%	62%	88%	50%	63%
Energy consultants	100%	68%	97%	88%	97%	76%	70%	92%	80%	79%	82%	100%	66%	83%
Industrial engineers and managers	78%	53%	76%	68%	76%	60%	55%	71%	63%	62%	64%	91%	51%	64%
Utility staff	100%	68%	97%	88%	97%	76%	70%	92%	80%	79%	82%	100%	66%	83%
Other	81%	55%	79%	71%	79%	62%	57%	74%	65%	64%	66%	94%	53%	67%

Actual awareness as a percentage of expected awareness	BetterBricks	DesignLights	Lighting Design Laboratory	EnergyIdeas Clearinghouse	DOE Industrial Assessment Program	New Buildings Institute	Energy Assessment Center	Industrial Efficiency Alliance	Integrated Design Lab	NWCurrent	Food Service Technology Center	Information from utility	Energy Center of Wisconsin	E-source
Architects	156%	85%	143%	66%	71%	106%	66%	57%	137%	66%	63%	129%	79%	105%
Building engineers	101%	88%	100%	89%	93%	97%	103%	95%	100%	91%	80%	110%	103%	105%
Energy consultants	93%	108%	93%	107%	99%	96%	100%	98%	91%	105%	93%	100%	101%	97%
Industrial engineers and managers	60%	122%	70%	95%	116%	79%	107%	140%	84%	95%	92%	110%	92%	100%
Utility staff	91%	96%	94%	107%	101%	97%	93%	99%	92%	107%	118%	98%	94%	90%
Other	74%	109%	76%	99%	102%	113%	141%	108%	77%	94%	120%	74%	113%	90%

APPENDIX D – PATTERN OF USE OF ENERGY PROGRAMS

Percentage of user group that have used energy program:	BetterBricks	DesignLights	Lighting Design Laboratory	EnergyIdeas Clearinghouse	DOE Industrial Assessment Program	New Buildings Institute	Regional Energy Assessment Center	Industrial Efficiency Alliance	Integrated Design Lab	NWCurrent	Food Service Technology Center	Information from utility	Energy Center of Wisconsin	E-source
Architects	86%	4%	71%	7%	14%	7%	7%	0%	43%	0%	0%	79%	4%	18%
Building engineers	41%	8%	33%	22%	19%	14%	9%	30%	16%	14%	5%	80%	9%	20%
Energy consultants	60%	7%	60%	73%	47%	23%	7%	57%	10%	33%	10%	90%	37%	20%
Industrial engineers and managers	6%	18%	6%	18%	47%	0%	12%	65%	0%	6%	18%	71%	6%	12%
Utility staff	52%	9%	58%	73%	2%	15%	5%	47%	21%	52%	0%	64%	5%	30%
Other	0%	0%	10%	10%	10%	0%	10%	10%	10%	20%	10%	30%	0%	0%
Average	48%	8%	46%	42%	19%	13%	7%	37%	19%	26%	5%	73%	10%	21%
Expected awareness														
Architects	48%	8%	46%	42%	19%	13%	7%	37%	19%	26%	5%	73%	10%	22%
Building engineers	45%	7%	44%	40%	18%	12%	7%	35%	18%	25%	4%	69%	10%	20%
Energy consultants	76%	13%	73%	66%	29%	21%	12%	58%	29%	41%	7%	100%	16%	34%
Industrial engineers and managers	40%	7%	39%	35%	16%	11%	6%	31%	16%	22%	4%	61%	9%	18%
Utility staff	61%	10%	59%	53%	24%	17%	9%	47%	24%	33%	6%	93%	13%	27%
Other	17%	3%	16%	15%	7%	5%	3%	13%	7%	9%	2%	26%	4%	8%

Actual awareness as a percentage of expected awareness	BetterBricks	DesignLights	Lighting Design Laboratory	EnergyIdeas Clearinghouse	DOE Industrial Assessment Program	New Buildings Institute	Energy Assessment Center	Industrial Efficiency Alliance	Integrated Design Lab	NWCurrent	Food Service Technology Center	Information from utility	Energy Center of Wisconsin	E-source
Architects	178%	45%	154%	17%	76%	55%	95%	0%	229%	0%	0%	107%	35%	83%
Building engineers	90%	105%	75%	55%	107%	114%	133%	86%	89%	57%	107%	115%	97%	100%
Energy consultants	79%	53%	82%	111%	159%	113%	57%	98%	34%	81%	136%	90%	227%	59%
Industrial engineers and managers	15%	267%	15%	50%	302%	0%	189%	210%	0%	27%	453%	115%	69%	66%
Utility staff	84%	90%	98%	136%	6%	91%	48%	100%	89%	155%	0%	68%	35%	111%
Other	0%	0%	61%	67%	151%	0%	378%	77%	151%	216%	604%	115%	0%	0%

APPENDIX E – DETAILED ASSESSMENT OF ENERGYIDEAS’ ATTAINMENT OF PROGRESS INDICATORS

Evidence of Utility Dissemination of Marketing Information (M3)

Evidence is provided of utility dissemination of marketing information to commercial- and industrial-sector clients.

The data in the Customer Management Database (CMD) does not indicate whether utility staff has been disseminating marketing information to their clients, but it does record how people said they found out about EnergyIdeas. This is indirect evidence for whether the utilities have been disseminating information.

According to the CMD, 7% of first-time inquiries by telephone or email were referred by utilities. 36% of people who submitted inquiries described themselves as “repeat users” so the CMD data did not indicate how they were *first* referred to EnergyIdeas.

The monthly reports from EnergyIdeas to NEEA mention specific examples of references made to EnergyIdeas by utilities, in their newsletters and websites. However, these are not recorded systematically.

Energy Newsbriefs Subscribers Increase by 10% Per Year (M5)

Energy Newsbriefs are prepared and issued on a weekly basis (48 issues per year); number of subscribers increases by ten percent per year.

The following table provides the subscriber counts tallied by WSU in the “pystats05-08.ppt” file and the average annual growth percentage since the contract start date. The first year (May 1 2005 – April 31 2006) tallied a 36% increase in subscribers. The second year (May 1 2006 – April 31 2007) tallied a 17% increase in subscribers

Program year ending	Number of Subscribers	Growth Percentage
May 2005	527	Contract start date
May 2006	716	36%
May 2007	838	17%

Figure 38: Number of Energy Newsbriefs subscribers per year

Information Requests Through the Website Increase by 100%, to 180, in First Year (W1)

Information requests through website increase by 100%, to 180, in first year.

EnergyIdeas has not met this goal. 178 website requests were received in the first year, and 165 in the second..

Growth of Third-Party Links to Website is Documented (W3)

Growth of third-party links (particularly electric utility websites) to the EnergyIdeas website is documented.

Documentation of third-party links is provided in the EnergyIdeas monthly reports. The March 2007 report lists 900 third-party links to the website based on a Google web search.

Automated Satisfaction Survey on Website (W6)

This progress indicator called for an automated survey to be maintained on the site, and for the results to be reported.

Staff confirmed that the survey has been available since its inception. Response to the survey has been minimal, recording only 14 valid entries since May 2005.

Total Information Requests Increase by 75%, to 1028, in First Year (CS1)

Total information requests handled by EnergyIdeas increases by approximately 75 percent, to 1028, in first year.

“Information requests” includes all cases logged in the Customer Management Database (CMD). Most of these requests are categorized as technical requests, but some are simple in nature (e.g. referrals to other programs) and so are not categorized as technical requests.

The combined information requests for the first year tallied 427 requests in CMD from May 1 2005 through April 31 2006, and 302 requests from the “May 2005-Apr 2006Minilog.doc” file for a total of 729 (a year-on-year increase of 24%) The combined information requests for the second year tallied 389 requests in CMD May 1 2006 through April 31 2007 and 250 requests from the “May 2006-Apr 2007Minilog.doc” file for a total of 639 (a year-on-year decrease of 12%).

Program year ending	CMD Information Requests	Minilog Information Requests	Total Information Requests	Annual Increase %
Baseline			586	
May 2006	427	302	729	24%
May 2007	389	250	639	-12%

Figure 39: Total information requests per year

Service Requests Handled By Staff Increase by 115% in First Year (CS2)

Service requests handled by customer service staff increase by 115 percent, to 660, in first year.

Services requests are requests handled solely by Customer Service staff in 15 minutes or less and are tracked in the Minilog. The service requests included 302 requests from the “May 2005-Apr 2006Minilog.doc” file and 250 requests from the “May 2006-Apr 2007Minilog.doc” file.

Program year ending	Minilog Requests	Annual Increase %
Baseline	307	
May 2006	302	-2%
May 2007	250	-17%

Figure 40: Total service requests per year

Majority of Requests are from Regional Electric Utilities or Utility Referrals (CS3)

The majority of requests are from regional electric utilities or utility referrals.

As shown in the following table, over 40% of cases in the CMD noted “Utility” in the “BusinessType” field. This was the largest category for responses from all years. Note that Figure 41 shows the calendar year not the program year.

Business Type	% of Total	2003 (n=99)	2004 (n=395)	2005 (n=380)	2006 (n=365)
Utility	43%	42%	43%	42%	44%
Consulting firm	15%	16%	15%	14%	14%
Government	9%	8%	8%	11%	9%
Commercial business	5%	2%	7%	4%	5%
Organization	3%	7%	3%	2%	5%
NEEA (general or venture)	3%	0%	2%	3%	5%
Manufacturer	3%	2%	4%	2%	3%
Research/Ed (univ or lab)	2%	1%	1%	4%	1%
State energy office	2%	0%	3%	1%	2%
Other	15%	21%	15%	17%	12%

Figure 41. Information requests by business type by year

Inquiries Are Responded to in an Average of Eight Working Hours (CS4)

Inquiries are responded to in an average of eight working hours.

Based on information in the CMD, the average difference between “RequestDate” and “Contact Date” was 1.5 hours, considerably less than the eight hours timeframe in the progress indicator.

Each Response is Accompanied by a Customer Satisfaction Survey Postcard (CS5)

Each response by mail or email is accompanied by a customer satisfaction survey postcard to be returned to EnergyIdeas. Results are assessed and reported to the Alliance.

Based on EnergyIdeas staff responses, it is their policy to include a response feedback request with each response. The CMD case response narratives include this request. If the response is emailed, EnergyIdeas asks them to do the online survey. If a customer receives a hard copy, EnergyIdeas send them a postcard to return. They have the same questions. The CMD includes a field called Verified, that the customer service staff use to show when a case was mailed.

Technical Assistance Requests Increase by 30%, to 350, in First Year (TA1)

Technical assistance requests increase by 30 percent, to 350, in first year.

Based on the CMD, there were 304 cases from May 1 2005 to April 31 2006 that was checked “True” for the “GetTechAsst “ field. These cases are the ones where EnergyIdeas provided engineering or library assistance, i.e. they are a subset of all the CMD requests. This is a 13% increase but less than the 350 progress indicator goal.

Program year ending	Technical Assistance Requests	Annual Increase %
Baseline	270	
May 2006	304	13%
May 2007	299	-2%

Figure 42: Total technical assistance requests per year

Assistance is Targeted to Regional Electric Utilities, Utility Referrals and Alliance Stakeholders (TA2)

Assistance is targeted to regional electric utilities, utility referrals and Alliance stakeholders.

As shown in Figure 41, over 40% of cases in the CMD noted “Utility” in the “BusinessType” field. This was the largest category for responses from all years. The CMD does not record which enquiries were “utility referrals” or NEEA stakeholders, though “state energy offices” and “government” probably fall into this category.

Requests Handled are Relevant (TA3)

Requests handled are relevant (i.e., related to electric energy efficiency).

Reviewing the “MajorMinorTopic” field in the CMD between January 1 2005 and August 1 2007, there were 53 cases (5% of the total) which did not appear to be relevant cases for the Clearinghouse. The following table lists the non-relevant topics.

MajorMinor Topic	Number of Cases
Appliances -- Residential	10
Building Design -- Zero Energy Homes	1
Energy Use -- Residential Calculation	2
Organizations/Programs -- BC Hydro	1
Power Production -- Cogeneration	1
Renewable Resources -- (General/Other)	12
Renewable Resources -- Geothermal	1
Renewable Resources -- Hydro	6
Renewable Resources -- Photovoltaic	10
Renewable Resources -- Solar Thermal	2
Renewable Resources -- Wind	2
Renewable Resources -- Wood	1
Transportation -- (General/Other)	2
Transportation -- Alternate Fuels	1
Utility -- Green Power	1

In addition, the entries for several cases were categorized in general terms that did not provide enough information to determine its relevancy to the Clearinghouse.

20% of Customers are Contacted by Telephone Three Months After Receipt Of Service (TA5)

Twenty percent of customers are contacted by telephone three months after receipt of service to follow up on service delivered and efficiency actions taken; results are assessed and reported to the Alliance.

Documentation of customer follow-up contact is provided in the EnergyIdeas Clearinghouse quarterly report, detailing each contact and summary of telephone responses.

Requests For PTRs or UFs Increase by 50%, to 18, in First Year (PTR/UF1)

Requests for reviews or utility factsheets increase by 50 percent, to 18, in first year.

Searching for “PTR” in the CMD as a keyword, 20 cases (67% from baseline of 12) from May 1 2005 to April 30 2006 were tallied.

All Requestors and PTR Listserv Subscribers are Contacted Three Months After Issuance (PTR/UF3)

All Requestors and PTR Listserv Subscribers are Contacted Three Months After Issuance

EnergyIdeas posts announcements of new PTR factsheets on the PTR listserv within a few days of being posted. EnergyIdeas has completed 13 PTRs. The requesters and CMD case number, and notified dates are included in the “PTR Request Notification” file.

Full Title	Date	Filename	Author
EnergyIdeas Clearinghouse Product and Technology Review Survey Summary October 2006	October 2006	06PTRSurveySummary.doc	Linda Witham, WSU
Results: Product and Technology Review Survey	October 2006	10-9-06-Summary_Spreadsheet.xls	Linda Witham, WSU
Case Summary Report October 2003-September 2006	September 2006	Case Summary ReportOct03-Sep06.doc	WSU
Energy Ideas Clearinghouse Evaluation Review	November 2005	Evaluation Review.doc	Rick Kunkle, WSU
EnergyIdeas Clearinghouse Technical Case Follow Up, January-December 2006	December 2006	Impacts-User Feedback_2006.doc	WSU
MiniLog Search Results - Summary Report, October 2003-September 2006	September 2006	MinilogOct03-Sep06.doc	WSU
Untitled: Statistics for Hotline, Listserv and Website	August 2007	pystats05-08.ppt	WSU
Untitled: Website Statistics January 2005 to September 2007	August 2007	HMGWebStats-Sep07.xls	WSU
EnergyIdeas Clearinghouse Energy Newsbriefs Survey Summary April-June 2006	August 2006	SurveySummary8-21-06.doc	Linda Witham, WSU
EnergyIdeas Clearinghouse Market Progress Evaluation Report, No.5	December 2003	121.pdf	Quantec, LLC
EnergyIdeas Clearinghouse Market Progress Evaluation Reports	Various	EnergyIdeas_MMMYY_Report_ExhibitC.doc	Linda Witham, WSU
Untitled: Data extracted from Case Management Database	August 2007	CMD8-1-2007.xls	WSU

Figure 43. Sources of information for assessment of progress indicators

APPENDIX F – DETAILED METHODOLOGY FOR WEB SURVEY

This section of the report sets out the methodology of the surveys, and includes in each step a consideration of how the chosen methodology influences the degree of bias in the findings.

There was one issue of interest that we decided to partially exclude from the web survey, and that was the potential for duplication of services between EnergyIdeas and other NEEA programs. We felt that this was a factual question best addressed by NEEA, i.e. that duplications either do or don't in fact exist, and that this additional question would take up time in the web survey that might compromise the quality of answers to other questions.

Self-Selection

Self-selection occurs at two levels. First, at the sampling frame level, almost any sampling frame induces a bias because individuals include or exclude themselves from the frame for various reasons. For instance in our survey of mechanical engineers we used ASHRAE members as the sampling frame, but engineers who choose to become ASHRAE members may be more active and thus more likely to have used EnergyIdeas than their peers.

A second source of self-selection bias is that some respondents choose to respond to the survey whereas others don't. Respondents may be those who have particularly strong opinions one way or the other, or they may be people with more time on their hands. To reduce strength-of-opinion bias, the email and mail invitations did not identify the EnergyIdeas Clearinghouse by name, and to reduce self-selection based on other factors we sent multiple follow-up emails whenever possible, to encourage respondents to take the survey before the end of the survey period.

Order of Questions

Part of the intention of the web survey was to gather unbiased information about which energy information and design advice services respondents had heard about or previously used. Therefore we asked questions about these services *before* we mentioned EnergyIdeas by name⁹.

The questions about what other services the respondent had heard of or used presented a problem in terms of gathering unbiased results, because we felt that respondents would be more likely to “click through” the later entries (i.e., just click the same response multiple times without reading the question). To remove this bias we varied the order of presentation in all questions that included lists. This was an automatic feature in SurveyMonkey.

⁹ There was one question in the survey that was only asked if the respondent checked “utility/ESCO” in response to the question “My organization is:”. This additional question asked how frequently the respondent referred people to EnergyIdeas. We achieved this by using the “skip logic” feature in SurveyMonkey that varies the order of presentation of the questions. Therefore the order of the questions shown in Appendix B – Web Survey of Energy Professionals is not necessarily the order in which questions were actually asked.

Beta Testing of Web Survey

We conducted a formal test of the draft web survey on six willing HMG staff. This confirmed that the survey took less than ten minutes even if the respondent answered all the questions. We asked staff to pretend to be different kinds of users (architects, engineers, utility program staff etc.) to ensure that all of the questions were relevant and unambiguous from each point of view.

Sampling Frames and Sampling Methods

Sampling Frames

A sampling frame is a procedure for creating a pool of accessible respondents from which the sample is to be drawn. The sampling frame must be representative of the broader population of interest. The selection of a sampling frame is a question outside the scope of statistical theory, and relies of the judgment of the surveyor based on knowledge of the particular matter being studied.

Figure 44 shows the populations, sampling frames and sampling methods used in the web survey, but note that the populations themselves are only subsets of the *entire* population of people who may have a need for energy efficiency information in the Northwest. The survey is predicated on the populations shown in Figure 44 being the main ones of interest to NEEA.

For architects we chose as our sampling frame a database of AIA members in Washington and Oregon state (lists were not available for Idaho or Montana). We consider this to be an unbiased sample because the majority of architects are members of the AIA. However, one potential source of bias is that architects may remain AIA members after they retire, so the sample may overrepresent older architects who may be less likely to be knowledgeable about energy efficiency, which is a comparatively recent issue.

For HVAC engineers we chose a similar sampling frame—a database of ASHRAE members. Unfortunately, three of the ASHRAE chapters we contacted were not willing to circulate the survey, so only one chapter (Mid Columbia) was included. We expect that the same potential for bias exists in the ASHRAE sample as the AIA sample.

For industrial engineers we attempted to find lists from the IEEE Industrial Applications Society, from the Association of Washington Business, and from various user lists. However, both those institutions declined and we felt that the user lists were too specific to individual industries and would therefore be highly skewed. Instead we used NEEA's list of contacts from the Industrial Tracking System. Clearly, this sample carries a heavy bias because those people have had contact with NEEA to varying degrees. We tried to minimize this bias, as explained below under Appendix F – Detailed Methodology for Web Survey.

Population	Sampling Frame	Method for Drawing Sample	Sample Size
Architects	AIA members in Washington and Oregon	Cyclical sample from list, weighted by state population	216 (OR) 372 (WA) ¹⁰
HVAC engineers	ASHRAE members in Mid Columbia Chapter	All chapter members	83
Industrial engineers	Contacts from NEEA Industrial Tracking System (http://www.alliance-tracking.org/)	All contacts rated by NEEA as 1-4 out of 5 for their frequency of contact with NEEA	203
Utility program and account staff	All utility staff in the Northwest	Cyclical sample from list, stratified by utility size	151
Previous users	EnergyIdeas' Customer Management Database	Last 500 unique users, sorted by date of most recent enquiry, excluding users without email address	447

Figure 44. Populations, sampling frames and sampling methods for web survey

Sampling Methods

For the utilities, we compiled an initial list of utilities from information provided by the Energy Information Administration. We were concerned only with utilities that were located in Oregon, Washington, Montana, and Idaho. From the EnergyIdeas Clearinghouse, we received how many times each utility had contacted EnergyIdeas. If NEEA's EnergyIdeas list did not record a utility from the EIA list as having previously contacted them, we assumed their number of enquiries to EnergyIdeas was zero.

We wanted to create a sample that would include representative proportions of utilities that were more and less active in terms of their number of enquiries to EnergyIdeas. One possibility for creating a sample would have been to rank all the utilities by the number of enquiries, and then take a cyclic sample, for instance contact every fourth utility on the list. However, there were two classes of utility that we were particularly concerned to hear from—the larger but less active utilities and the smaller but more active utilities. To ensure that we included these utilities in our sample, we stratified the sample by the size of the utility in terms of customers served.

Therefore, we divided them into 3 categories: <10,000 consumers, 10,000-50,000 consumers, and >50,000 consumers. Within the three categories, we ranked the utilities by the number of enquiries to EnergyIdeas. We formed further samples by cyclically numbering each utility 1-4. The end result was four samples (of approximately 37 utilities/sample) each evenly representing a random slice of utilities of varying size and frequency of contact with EnergyIdeas.

¹⁰ AIA lists were not available for Idaho or Montana

An alternative would have been random sampling, but that may have given us, by chance, a very skewed sample due to the fact that approximately 10% of the utilities were responsible for 70% of the enquiries to EnergyIdeas.

During this process, we realized that the size of the utility closely corresponded to whether or not it had made any enquiries to EnergyIdeas. The larger the number of consumers served by the utility, the more likely it was to have made an enquiry.

	Percentage of utilities in size class	Percentage of utilities in size class that have made no enquiries to EnergyIdeas	Percentage of utilities in size class that have made one or more Enquiries to EnergyIdeas
>50,000 consumers	7%	0%	100%
10,000-50,000 consumers	27%	22%	78%
<10,000 consumers	65%	80%	20%
Average among all utilities		58%	42%

Figure 45. Enquiries to EnergyIdeas vs. the size of the utility.

Figure 45 shows that 42% of all Northwest utilities have made one or more enquiries to EnergyIdeas. It also shows that larger utilities are much more likely to have made an enquiry and that smaller are much less likely. Note that because the number of enquiries is a discrete rather than a continuous variable, this pattern is to some degree expected, but it is mathematically difficult to say whether the actual data shows more of a correlation with size than would be expected. A mathematical model of the expected relationship would require assumptions to be made about the factors that lead utilities to make enquiries, and so would be highly subjective.

To create the cyclical samples from the list of WA and OR architects, we balanced the numbers from the two states in proportion to each state’s total population, and then took cyclical samples from an alphabetized list. We did not stratify by location within the state.

To minimize the bias in the sample of industrial engineers (from NEEA’s ITS database) we worked with our NEEA project manager to screen out those companies that had had extensive dealings with NEEA or with EnergyIdeas. This excluded almost 30% of the sample.

For previous users of EnergyIdeas we simply took the last 500 unique users and screened out those who had not provided an email address. We did not stratify by the number of previous enquiries the person had made.

Chronological Order of Surveys

The evaluation methodology calls for us to survey EnergyIdeas users *and* an unbiased sample of the “population at large” of energy professionals. There is a degree of overlap between these two samples, as shown in Figure 46. Because we could not survey the same person twice, we conducted the survey of energy professionals *before* the survey of previous users. Doing this in reverse would have seriously compromised the web survey of energy professionals by removing many of the people who had previously used the service.

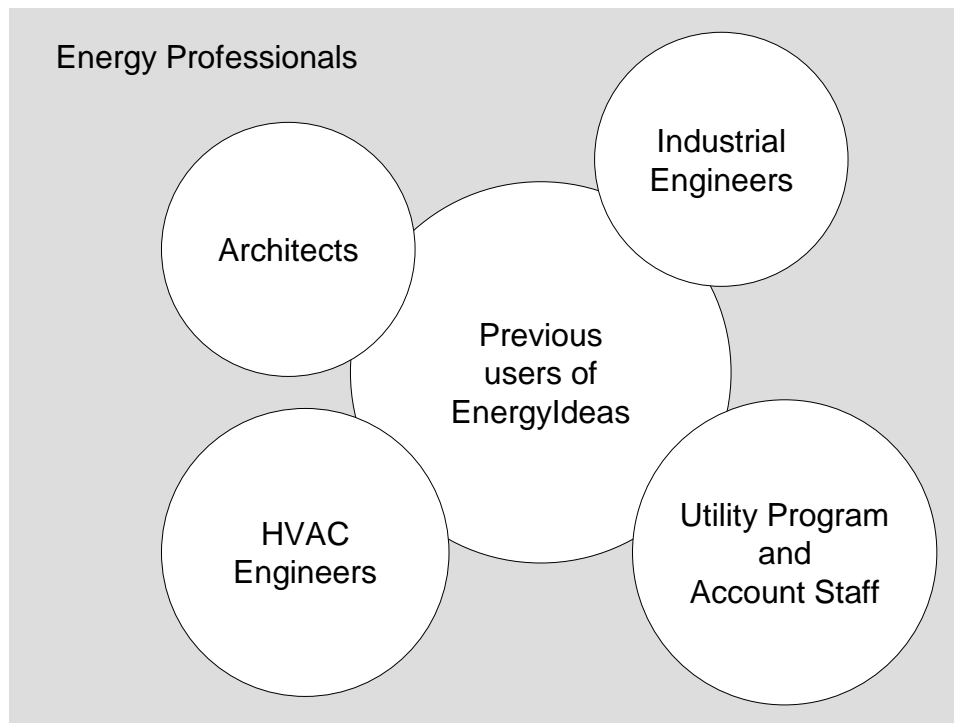


Figure 46. Venn Diagram showing overlap of web survey samples

Contact Methods and Follow-Up Protocol

Utility Staff

Our goal was to get in touch with 2-3 account executives, member service representatives, or energy program staff at each utility. We expected that at the larger utilities we could reach more staff, and that this would help to remove any bias in favor of small utilities.

Within each cyclic sample, we began gathering contact information from the top of the list and thoroughly moving through each list. Contact information was gathered mainly by a web search for each utility. If possible, we recorded email addresses and phone numbers for specific representatives. If no individual contacts were identified, then a general phone number was recorded and we called the utility asking to be directed to the correct individuals.

In almost all cases, initial contact was made through an individual’s email explaining the study, requesting participation, and providing a link to the survey. We asked all potential participants to pass the survey on to other appropriate respondents, in which case they would receive a \$10

gift card. Initially, if a representative did not respond within three days we sent a second email and/or phoned the individual.

Often times, especially with smaller utilities, a general manager or office manager asked to be sent the email prior to sending it to representatives and then offered to pass it to the appropriate contacts. If necessary, we left voicemail, briefly explaining the study and asking that someone contact us directly.

We found that the most effective method to generate survey responses was through repeated emailing. Therefore, we sent briefer emails containing the link and reminding participants of the possibility to receive gift cards at least three days in a row to an unresponsive representative. If there was still no response after repeated email requests and a personal phone call then we considered the specific utility less of a priority and remaining utilities were pursued. Eventually all four samples were pursued.

Small Utilities (<10,000) When we placed a call we usually spoke to a secretary and were directed to an office manager's voicemail. The contact often claimed to be very busy. In most situations, we realized that one person was representing multiple roles. We found that it was more difficult for the smaller utilities to identify account executives, because there was often no one within the utility defined as filling this role, or it was filled by a representative within customer service whose position was simply to facilitate the billing process. Additionally, it was within this category that representatives were occasionally unfamiliar with NEEA altogether.

Medium Utilities (10,000-50,000) It was relatively easy for us to get in touch with an Account Services Manager. We observed that individual roles within the organization were more clearly defined, thus providing more time for individuals to respond to this specific request. There seemed to be a better understanding of NEEA's role. We had the most success in contacting the correct respondent within this category

Large Utilities (>50,000) Many times, we were sent into automated loop and eventually directed to a specific account representative. The account representative was usually not allowed to give permission for themselves to take survey. It was somewhat difficult to get in touch with account services or member services manager to get permission, but when contact was made, we were directed to the correct individual. Additionally, we received responses from more diverse positions within the utility than in any other category.

We found that email was the most successful means of obtaining a response from the utility respondents, and was less time-consuming than follow-up by telephone. Figure 47 shows the number of attempts (either by phone or email) required to reach those who eventually responded. Those who required more requests were more expensive to include but likely help create a less biased sample.

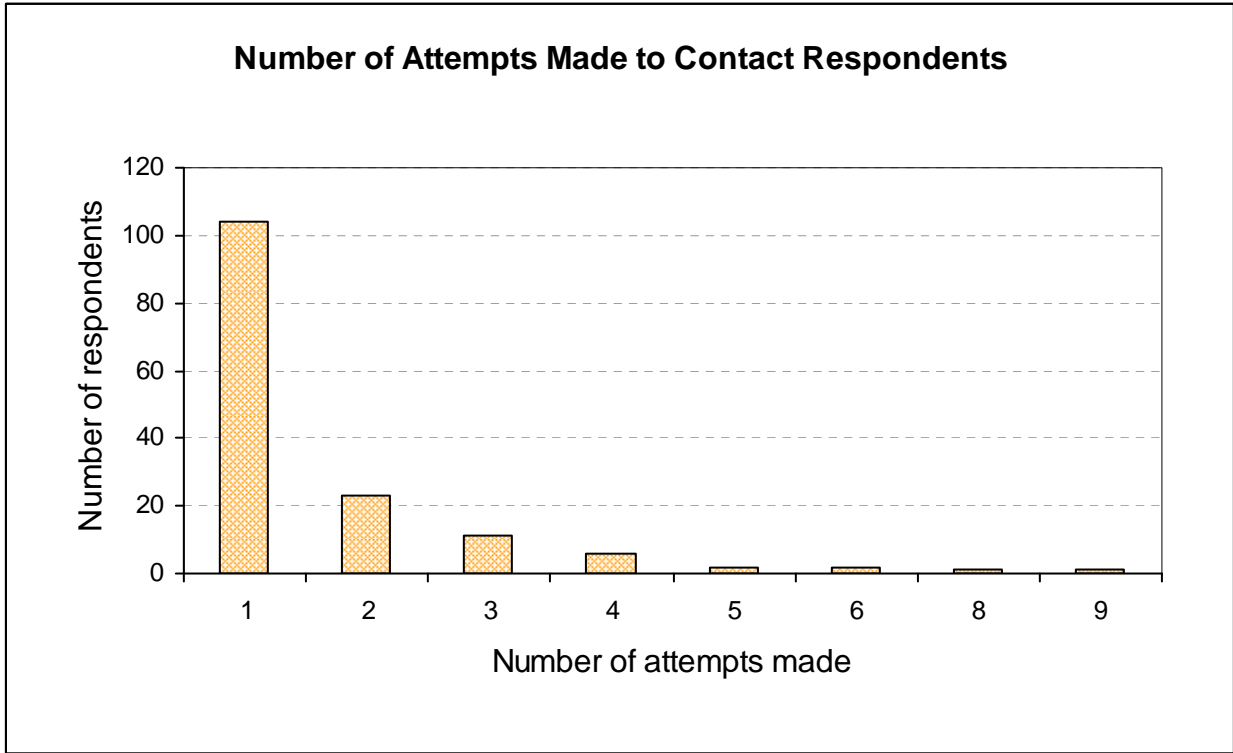


Figure 47. Number of attempts made to contact utility respondents

Other Energy Professionals

The contact and follow-up methods for the energy professionals were dictated to some extent by the type of contact details we were given. For architects we were given only physical addresses, so we did not send follow-up reminders. For the HVAC engineers we were also unable to send reminders because we did not have direct access to their contact details—ASHRAE sent out the emails from its own database. For the industrial engineers we sent follow-up emails in quick succession to try to minimize self-selection bias.

APPENDIX G – PROGRESS INDICATORS THAT WERE NOT ASSESSED

	Progress Indicator	Evaluation Comment
Marketing		
M1	Marketing strategies are focused on electric utilities and their associations.	Not evaluated—not a quantitative measure, not an outcome.
M2	Marketing materials are developed, updated (as needed) and distributed to utilities.	Not evaluated—not a quantitative measure, not an outcome.
M4	The Energy Newsbriefs format is updated and improved; effectiveness of improvements is assessed and reported to the Alliance.	Not evaluated—not an outcome.
M6	Semi-annual meetings are held with Alliance commercial and industrial sector managers to discuss and agree on utility marketing priorities.	Not evaluated—not an outcome.
Website		
W2	Utility Resources page usage is tracked to set a baseline for future growth.	Not evaluated—not an outcome.
W4	Within one year, 50 percent of website content is subject to a technical review by EnergyIdeas staff.	Not evaluated—not an outcome.
W5	Website links are checked automatically each month to ensure they are in working order.	Not evaluated—not an outcome.
Customer Service		
None		
Technical Assistance		
TA4	Suitable technical answers are posted on the project website (e.g., a running question-and-answer section sorted by major topic areas).	Not evaluated—not quantitative, not an outcome.

Progress Indicator		Evaluation Comment
Product and Technology Reviews/Utility Factsheets		
PTR/U F2	Up to eight new reviews and/or utility factsheets are completed each year.	Not evaluated—not an outcome.
PTR/U F3	A monthly status report on requests and reviews is distributed to electric utilities and Alliance stakeholders that have signed up for the PTR listserv.	Not evaluated—not an outcome.

Figure 48. Progress indicators that were not assessed

APPENDIX H – OTHER SOURCES OF ENERGY INFORMATION NAMED BY WEB SURVEY RESPONDENTS

Sources	Number of times named	Sources	Number of times named
Washington State University Extension Energy Program	7	DEER	1
DOE-Energy Star program	3	EEBA	1
NREL	3	eere.energy.gov	1
ACEEE	2	Energy Solutions Center	1
ASHRAE	2	FEMP	1
DOE	2	Get SMART Resource Efficiency Program	1
Energy Trust of Oregon	2	Google	1
IESNA	2	GRI	1
LBNL	2	harvestcleanenergy.org	1
Lighting Research Center	2	Interfaith Power and Light	1
PNNL	2	International District Energy Association (www.districtenergy.org)	1
ACEE	1	NEEA	1
ANSI	1	NIST	1
APPA	1	Northwest Energy Education Institute	1
ARI	1	NW Energy Efficiency Council	1
ase.org	1	NW Energy-Star	1
Association of Energy Engineers	1	nwcouncil.org	1

Built Green (Master Builders Association)	1	nwenergy.org	1
California Commissioning Collaborative	1	NWPPA	1
CALMAC	1	Oregon DOE	1
CEC	1	ORNL	1
CEE	1	Penn State Libraries	1
Census	1	Resnet	1
City of Portland Office of Sustainability	1	RTF	1
Conservation Update	1	State Websites	1
DEED	1	TAMU	1
		University of Wisconsin at Madison	1
		USGBC	1
		WSU Combined Heat and Power Regional Application Center	1

APPENDIX I – PRODUCT AND TECHNOLOGY REVIEW SUMMARY AS OF JULY 2007

Factsheets

ArticMaster	Refrigerant management system
Compress Shield 1.1	Polarized refrigerant oil additive
DeltaPValve	Pressure-independent 2-way balancing valve
Electrical Harmonizer -Legend Power	Voltage reduction and power quality improvement device
Energy Director	Equipment controller to reduce peak demand charges
Fan Saver (Original name:ART Controller)	Evaporator fan controller
Fan Wall Technology	Fan wall air handling system
Heat Transfer Technology	Supplement to rFOIL and Insuladd reviews
Insuladd	Insulating paint additive
MicroPlanet 1.3	Voltage controller, power conditioning device
The Energy Saver / Electric City	Programmable interior/exterior lighting control
Turbocor	HVAC chiller compressor with magnetic bearings
Ultra CBF rFOIL	R-10 replacement for 2" blueboard under slab

In Progress

All Climate Heat Pump (Original name: Cold Climate Heat Pump)	Heat pump for cold climates
Circuit Rider	Power factor correction/power conditioning device
Cooler Miser	Appliance occupancy controllers
Motor Voltage Controllers / Nola Controllers	Technology review of motor voltage controllers

Waiting List

Intellidyne, Polartech Services	Compressor control unit – reduces short cycling
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Manufacturer Declined to Sign Waiver

Comfort Cove	Radiant ceiling heater
Electroflow	Power factor correction and power conditioning device
Hot Water Lobster	Instant hot water valve
Performance Controller, Power Planner, Nola Controller, Energy Smart, FEDSI, MotorBoss	Motor voltage controllers review in progress
Supertherm	Ceramic roof coating - See Insuladd PTR

Other Researched Products

24/7 Utility Shield	Radiant barrier
Airmover	Tubeaxial fans
Cizenre REnU	Solar PV Purchase service
Cold Climate Heat Pump	Manufacturer changed, see All Climate Heat Pump
CoolTrol	Automated energy management system for walk-in coolers
EASI Energy System	Package of energy-saving technologies including Electroflow, Energy Saver, and Compress Shield -addressing products separately
eCube	Thermostat sensor for freezer compressors
Eden Pure	Quartz radiant infrared portable heater
Enerjoy	Radiant ceiling panels
EP Systems	Power factor correction and power conditioning device
FazTech	Industrial battery charger
Fordy's Chilling Filter	Chiller/AC evaporative condensing retrofit
Frigi-Tech	See compress shield
Hummingbird Perpetual Motion	Permanent magnet electricity generator
Hy-Tech, TEMP-COAT®, Sherwin Williams E Barrier, MASCOAT	Insulating Reflective paint – addressed in the Insuladd review
Ice Bear	Ice storage air conditioner

ICETRON	Induction lamp for street lighting application
Lexin	Far infrared commercial and residential heating system
Otto Off	Automatic bathroom fan timer
P2000	EPS foam insulation
Polar Shield	Polarized refrigerant oil additive
Power Save	PC energy management software
Power-Save 1200™	Power factor correction device
QL-3 – The Power Control Lighting Solution	Semiconductor power control device for incandescent & tungsten halogen lighting applications
Redi-Volt	Transient voltage surge suppressor
SilKote Pretreatment	Cooling tower water treatment to prevent scale
Smart Power Strip or Smart Strip	Auto shut-off power strip
SpaCap	Hot tub cover
STEMS Energy Management System	Power factor correction and power conditioning device – See Circuit Rider
SunHeat electronic heating	Radiant heater
Surveyor / Verdiem	Network energy manager software by EZ Conserve
UtiliData's Adaptive Voltage Control	Voltage controller
Watt Warrior" by Easco	Energy Interior/exterior lighting level/voltage control

Archive: Pre-waiver *

Just Right Lighting	Dimmable ballast
Retrolux Caddy	T-5/specular retrofit kit for T-12/8 fixtures
Tritek HX	Dimmable, low-voltage, screw-in replacement for line voltage lamps
WindTree	Residential rooftop wind turbine

* These are reviews that were produced prior to our waiver requirement being instituted. Since the manufacturers subsequently declined to sign a waiver, these fact sheets are not available to the public.