



Needs Assessment for Energy Education

RFP# EERMC-2017-03

A Proposal to The Rhode Island Energy
Efficiency and Resource Management
Council (EERMC)

Submitted by Evergreen Economics

January 31, 2018

TECHNICAL PROPOSAL



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January 31, 2018

Ms. Becca Trietch
Rhode Island Office of Energy Resources
One Capitol Hill, 4th floor
Providence, RI 02908

Dear Ms. Trietch,

Evergreen Economics is pleased to present our proposal to conduct a needs assessment for public energy education in Rhode Island.

We wish to highlight the following specifics of our team and features of our proposal:

- *A focused approach* that will strategically focus on identified market actors that are best suited to energy education, and that have the least amount of barriers to putting additional energy education to use. We will focus cost-effective actions based on EERMC priorities among key Rhode Island market and policy actors.
- *A customized approach* that considers communication channels and mechanisms for each specific group of market actors.
- A literature review that includes both *local and national* data sources to leverage past research about specific market actor groups while not ignoring the importance of regional differences.
- *An eye toward the future* with a changing grid that will require education beyond messages to encourage energy efficient purchases and behaviors.
- *A strong background* in assessing market actor groups which are difficult to reach but are integral toward the EERMC achieving its long term goals.

Should you have any questions about our proposal, please do not hesitate to contact me.

Sincerely,

Tami Rasmussen
Vice President

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I. Cover Sheet

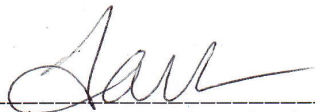
RFP Cover Sheet

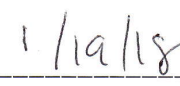
Offeror's Name:	Evergreen Economics
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RFP Information	
Title of RFP:	Needs Assessment for Energy Education
RFP Number:	EERMC-2017-03

Offeror Information	
Legal Name of Offeror:	Evergreen Economics
Type of Entity (i.e. corporation, partnership, sole proprietorship):	S-Corporation
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Contact Person for the Offeror	
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Title:	Consultant
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Phone Number:	510.899.5558
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Signature of Authorized Person


Date

Tami Rasmussen, Vice President
Printed Name, Title

II. Technical Proposal

Evergreen Economics is pleased to present our proposal to assist the Rhode Island Energy Efficiency and Resource Management Council (the EERMC) with an education needs assessment, including an analysis of knowledge levels and message penetration among various subsets of the population of Rhode Island.

A. Overview

As the EERMC moves toward the grid of the future, it will be necessary to go beyond energy efficiency and work toward integration with demand response, renewable energy and smart grid technologies. Engaging Rhode Island energy consumers in the integration of these newer strategies will require an understanding beyond what is needed to encourage participation in energy efficiency programs or adoption of energy efficiency behaviors.

Evergreen proposes an assessment of the education levels among a strategic group of market actors that are best positioned to encourage or enable actions that will be key in moving toward the grid of the future. We will take two key steps prior to data collection and analysis to ensure that the needs assessment focuses its resources on market actors of value. The first step will include a meeting with the EERMC's Communications Subgroup to facilitate a discussion about which market actors may have the most influence in progressing goals related to the grid of the future, renewable integration, energy efficiency, and resource diversity and management. The second step will be a prioritization of the market actor list to then investigate the education levels of the market actor groups with the most potential for influence and lower existence of barriers to using the education to reach the EERMC's goals.

In the work plan outlined below, we share a range of examples of the types of data collection that we would investigate for each identified market actor group. These data sources include published articles, past evaluation studies, blog posts and existing educational materials.

Evergreen has evaluators with experience in conducting needs assessments to guide future program design. We have a strategic vision, which will allow us to focus on educational needs that will be most impactful in upholding Rhode Island's Least Cost Procurement Law, and are well versed in succinctly presenting actionable findings to study teams.

B. Work Plan

We propose an informative needs assessment that:

- **Selects market actor groups that are poised to best use additional education** to take actions in line with goals set forth by the EERMC;
- **Utilizes secondary data and internal industry communications such as blog posts, white papers and continuing education descriptions** to better understand what topics related to energy are commonly discussed, how they are framed, and why they are important among certain market actors; and
- **Provides actionable recommendations** related to what types of energy education will be helpful in targeted market actor segments.

Table 1: Task Overview

Task	Timeline	Purpose
Task 1: Kickoff Meeting	March 2018	Meet with the EERMC's Communications Subgroup to lead a discussion to select market actors that are of interest and offer the most potential for future education efforts. Finalize work plan and finalize market actor selection.
Task 2: Data Collection	March – May 2018	Conduct two interviews with staff involved in program implementation to understand current educational activities. Review existing materials or education plan documentation for current relevant efforts. Conduct literature review and finalize sources for investigation of current level of educational knowledge within selected market actor groups.
Task 3: Data Analysis	April – May 2018	Assess education gaps in market actor groups via literature review.
Task 4: Develop Recommendations	June 2018	Utilize findings from the data analysis to present actionable recommendations.
Task 5: Reporting	July 2018	Interim and final reporting of results and recommendations to the EERMC.
Task 6: Project Management	Ongoing	Ensure project remains on course, on time and on budget. Monthly progress reports to the EERMC.

I. Kickoff Meeting

To initiate the project, key team members will facilitate a webinar with the EERMC Communications Subgroup. We will submit an agenda three days prior to the meeting date. At this meeting, Evergreen’s project manager Martha Wudka will present a draft research plan for discussion; this will be followed by a more general group discussion regarding the overarching research objectives, data collection methods, deliverables and timeline. This meeting will also be used to gather input on the market actor selection, as Evergreen would like to focus on market actors that have the most potential impact in helping to reach the EERMC’s overall goals. Ingo Bensch will facilitate a brainstorming session to identify strategic priorities and desired outcomes from energy education for the various stakeholder groups identified in the RFP. Evergreen will also use the kickoff meeting to gather suggestions for two additional staff interviews that are described under the data collection task. Following the meeting, Evergreen will revise the study approach as needed.

2. Data Collection

Data collection will be done in two stages:

- **Two interviews**, each with either a single staff member or group of staff members who are identified during the kickoff meeting.

- **A strategic literature review** that looks at existing studies in addition to published communications, coursework outlines and information shared online between market actors. During this broad review, we will look at information on how market actors are or are not engaging in certain energy education topics.

This two stage data collection process will allow us to focus our research efforts on high priority market and policy actors, using data that is already available about (and from) these groups, ultimately ensuring a cost-effective needs assessment.

Interviews:

The two interviews will help to further narrow down the market actor groups that Evergreen will focus on during this research. The interviews will also be used to ask staff familiar with program implementation (National Grid program managers, program implementers or additional EERMC staff) about existing educational efforts, and areas that staff believe are ripe for additional education. Interviews will be informed by a discussion guide prepared by Evergreen Economics. To keep the EERMC informed on our progress and approach, we will share a near final version of the discussion guide with the EERMC study contact before conducting any of the interviews. Evergreen will submit a draft interview guide to the EERMC Communications Subgroup prior to these phone interviews for review and approval.

Evergreen will use information gathered from the kickoff meeting and from the phone interviews to narrow down the list of market actors shown later in Table 2. Table 2 shows the list of suggested market actors from the RFP and categorizes them according to their role in relation to making changes to energy related practices.

Strategic Literature Review:

Evergreen proposes to focus data collection on a strategic literature review and secondary data analysis that will provide more value for the available budget than would be possible from primary data collection alone. We propose data collection that will include 1) an examination of data already available about energy knowledge and awareness by key market actors from existing studies, and 2) innovative examinations of their use of this knowledge, as revealed in communication pieces written and released by selected market actors. The analysis of existing data will indicate quantified energy knowledge and awareness, while the review of communication pieces will illustrate how key market actors understand relevant energy issues and apply them (or not) in ways that are compatible with Rhode Island's transition to the grid of the future.

Examples of secondary sources may be evaluations done for National Grid programs or published results for similar out-of-state efforts in American Council for an Energy-Efficient Economy (ACEEE) and International Energy Program Evaluation Conference (IEPEC) papers. Examples of communication pieces are illustrated in Table 2 and include op-ed pieces, coursework outlines and descriptions of listed properties.

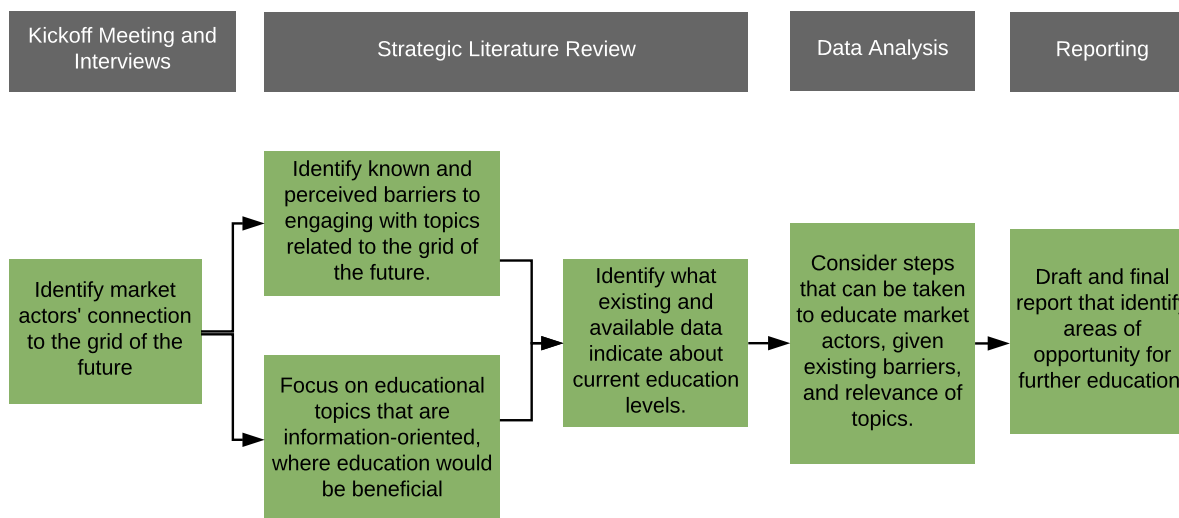
If more funds become available, primary data collection on selected priority audiences could be added subsequently.

Table 2: Market Actor Possible Information Sources

Category	Market Actor	Possible Information Sources
Policy Influencers	Public officials	Press releases and op-ed pieces written by elected officials in Rhode Island that cover topics related to the energy sector.
	Legislators	A review of language in drafted legislation to highlight any instances of discussion about the grid or energy procurement.
Decision Makers	Building operators	Review of local and national evaluations of building operator trainings. We will also gather information from NGRID regarding their Building Operator Certification Program at the University of Rhode Island.
	Facility managers	Review coursework for facility management and sustainability programs and existing literature on efforts to educate and reach facility managers.
	Private citizens	Not recommended as selected market actor group for this study. Too broad given budget constraints.
Enablers	Appraisers	Articles released by local (Rhode Island) appraiser schools. Review of “MLS Data Appraising Solar/Energy Efficient SFR” by Southern California Appraisal Services. Review coursework related to the Valuation of Sustainable Buildings from the Appraisal Institute.
	Realtors	Listed property descriptions, property walk through comments available online, etc. Blog posts by local realtors. Papers related to the value of energy efficiency and solar on home sales including “Residential Solar Energy Property Values, and Real Estate” by Ben Hoen of Lawrence Berkeley National Laboratory.
Influencers	Business stakeholders	Articles in the <i>Rhode Island Small Business Journal</i> , <i>Providence Business News</i> or put out by business associations local to Rhode Island.
Lenders	Financial professionals	A broader review of literature from across the United States with regard to energy financing and topics of interest to financial professionals.

Figure 1 outlines the way in which the strategic literature review considers barriers that may exist for certain market actors, the type of education that is applicable to their role in the grid of the future, and how these will be considered going into the analysis phase of research.

Figure 1: Outline of Research Process and Considerations



3. Data Analysis

As shown in Figure 1, the data analysis task will consider steps that can be taken to educate market actors on topics relevant to them. The analysis will include a categorization across relevant energy education topics (energy efficiency, integration with demand response, renewable energy and smart grid technologies) into three categories for each market actor:

1. Well understood and applicable to market actor activities;
2. Not mentioned, and not relevant to market actor activities; or
3. Not mentioned or well understood, relevant to market actor activities.

The third and last category (not mentioned or well understood, relevant to market actor activities) will be the key area of importance for the EERMC going forward as it will identify what energy education needs exist for certain sets of market actors.

4. Develop Recommendations

As we consider the energy education needs of each selected group of market actors, we will consider appropriate strategies when developing our recommendations. The needs assessment will lay out the information gaps associated with each target audience. We might determine, for example, that a realtor's lack of understanding of smart thermostats results in a missed opportunity to talk about demand response and the larger grid with their clients who will soon be responsible for the energy use of a space. We understand that engaging individuals around energy is difficult and that busy people have hundreds of other priorities for their time and attention, but know that this period of considering and purchasing a property may be an ideal time to encourage and educate future owners on the benefits of making changes to their building that consider the needs of the grid. As experts in behavior change theory and practice, we will frame our findings in a way that considers educational engagement opportunities that fit within the roles and conversations that market actors already employ and will provide

informed direction on useful next steps as the EERMC works to educate Rhode Islanders on the future of the grid.

5. Reporting

The project will close with the delivery of a written report and a presentation. We will work with the designated EERMC contact person on the structure and format of the report. We propose a remote presentation if the EERMC is amenable to a webinar presentation with a live video feed to maximize the use of project resources on tasks directly related to understanding the education needs of the selected market actors. We suggest also using this time to facilitate a discussion with EERMC staff to prioritize educational strategies with targeted market actors. Evergreen staff can facilitate a discussion using the findings from the report while discussing constraints with EERMC staff.

6. Project Management

Evergreen Economics consultant Martha Wudka will serve as a single point of contact for the EERMC and report progress on a monthly basis to ensure the EERMC is aware of our activities and next steps. Martha will lead the project to ensure it remains on target in substance, timeline and budget. Ingo Bensch will be involved with strategy and advising for this project as needed.

C. Company Profile

Evergreen Economics is an economics research firm whose researchers employ robust and innovative analysis techniques to explore and understand energy markets, energy-related decision-making by households and businesses, and the role that information plays in the decision-making process. Our work encompasses actionable research that energy-related programs can use to design, implement and modify their efforts to promote sustainable use of energy. Moreover, we are experts at measuring results and impacts from those programs.

Evergreen researchers have the desire, commitment and ability to seek out answers to complex questions, and to communicate those answers and findings in a clear and effective manner to stakeholders. We have extended our passion for clear, thorough and helpful communication to trainings and workshops that Evergreen staff conduct for diverse audiences. Martha Wudka has years of experience in project management, data collection and analysis, including on the recent California Low Income Needs Assessment. She is passionate about understanding how customer knowledge influences their decisions related to energy use in order to inform program design. Ingo Bensch has managed several Evergreen evaluation projects and has become an expert on assessing how customer behavior informs program design. He believes in providing actionable, empirical insights for use in program design, planning and implementation.

Evergreen was founded in 2011 as an S-Corporation based in Portland, Oregon. Evergreen currently employs 15 staff members and has offices in Portland, Oregon; Berkeley, California; and Madison, Wisconsin.

D. Relevant Experience

The Evergreen team brings a wealth of experience to each of the components of the public energy education research we propose. Evergreen Economics has performed interviews with

market actors, utility staff and regulators to understand what paths have been explored and what challenges are faced. Evergreen Economics also has a staff well versed in literature review and believes that literature reviews can be foundational in moving forward with program design. We provide just a few examples of our work in Section E and can provide additional project examples if desired.

E. Examples of Prior Work

We offer the following examples of prior work to showcase our abilities. Some of these projects are collaborative efforts, as noted.

Cannabis Agriculture Energy Demand Study, Phase I

San Diego Gas & Electric, 2016

SDG&E contracted with Evergreen Economics prior to cannabis legalization in California to conduct foundational research regarding the implications of legalization on energy demand. This study addressed a number of research topics related to the cannabis industry: 1) its energy use; 2) possible energy efficiency intervention strategies; and 3) implications of recreational production and use in SDG&E's service territory. The research tasks included a literature review (including two articles from the *Portland Business Journal* and one from *The Oregonian*), and in-depth interviews with trade organizations and utilities that were operating in jurisdictions where cannabis production had already been legalized for recreational use (Oregon, Washington, Colorado, Alaska and Washington D.C.).

Multifamily Eco-concierge Pilot

Illinois Science and Energy Innovation Foundation (ISEIF), 2016-2017

Evergreen Economics evaluated an innovative pilot to engage multifamily tenants around sustainability, energy efficiency, and use of smart grid information and services available to them. Seventhwave and Cool Choices used an eco-concierge approach and a sustainability game to engage interested tenants around sustainable actions they can take. These activities emphasized opportunities to save energy and make use of smart grid data and services available to them from their utility company. Evergreen provided real-time measurement of program effectiveness and helped identify what activities are working and which are not. This effort provided not only real-time feedback to the pilot implementers, but also built our collective understanding of new and innovative ways to engage multifamily tenants, a traditionally hard-to-reach audience. The project was funded by the Illinois Science & Energy Innovation Foundation.

Low Income Needs Assessment

California Investor-Owned Utilities (IOUs) and the California Public Utilities Commission (CPUC), 2015-2016

For the California IOUs and the CPUC, Evergreen Economics conducted an assessment of the state's low-income population energy-related needs, including characterization of their demographics and energy-using equipment characteristics and assessment of their energy burden and energy needs. The study included a phone survey with 900 low-income residents, focus groups and in-depth interviews to determine drivers of and barriers to participation in both of the state's low-income energy assistance programs. A targeted study of high burden customers identified educational opportunities to help households reduce their energy usage

and costs without impacting their comfort.

F. Reference Information

Table 3 provides two client references for Evergreen; additional information on any of these projects is available upon request. The EERMC has our express permission to contact both clients we have identified, and may request information on the performance of our firm.

Table 3: Relevant Client References Including Project Description

Reference Contact	Email and Phone	Projects
Amy Webb, Project Manager, Market Research & Evaluation Northwest Energy Efficiency Alliance	AWebb@neea.org (503) 688-5448	Evergreen Economics conducted a comprehensive market characterization of residential heat pump clothes dryers. As part of this project, the Evergreen team led by Ingo Bensch conducted consumer research to understand customer information needs and incentive structures needed to prompt consideration of new dryer technologies.
Kris Miller, Senior Business Analyst, Customer Programs, Measurement and Evaluation San Diego Gas & Electric	kmiller@semprautilities.com (858) 654-1138	Martha Wudka at Evergreen Economics has managed research for SDG&E to better understand the following market actors: <ul style="list-style-type: none"> • Agriculture customers; • Cannabis growers, both residential and commercial; • Local Government Partnerships through a statewide evaluation; and • Low-income customers through the statewide Low Income Needs Assessment.

G. Identification of Staff and Subcontractors

Table 4 lists our team members and the expertise each member brings to the project. We highlight individuals assigned to this project in Section H.

Martha Wudka and Ingo Bensch will work together to complete this project, along with an analyst. We are not utilizing the services of any subcontractors for this project.

Table 4: Team Members and Respective Areas of Expertise

	Martha Wudka	Ingo Bensch
Formative research and needs assessments	X	X
Literature reviews	X	X
Innovative and creative communications approaches	X	
Energy education evaluation	X	X

H. Staff Responsibilities

Martha Wudka will manage the overall project and reporting. She will lead the needs assessment and facilitate the selection of market actors. Ingo Bensch will serve as an advisor to the project and will be involved with the selection of information sources and in finalizing recommendations.

I. Staff Experience

Resumes for key staff members are attached in Appendix A. Sections G and H above present our intended roles and responsibilities.

III. Cost Proposal

We have submitted Evergreen's cost proposal in a separate sealed envelope as required by the RFP.

IV. ISBE Proposal

Our team is not eligible for ISBE preferential scoring.

Attachment A: Staff Experience (Resumes)



MARTHA WUDKA

Consultant

Email: wudka@evergreenecon.com



PROFILE

Martha (Thompson) Wudka has experience conducting energy efficiency program evaluations and market assessments for a variety of clients across the country and is well versed in reporting, analysis, in-depth interviews, and survey development. Martha has managed the implementation of several surveys including phone interviews, on-site visits, and online interviews across the residential and commercial sectors. She has presented research findings at trade conferences including the International Energy Program Evaluation Conference and the Behavior, Energy and Climate Change Conference, and conducted various workshops and focus groups. Martha has a B.A. in Economics with a concentration in Public Affairs from the University of California, Los Angeles.

INDUSTRY EXPERIENCE

- **Pacific Gas and Electric Company Home Energy Use Study** – Assisting with a field study including on-site surveys and metering of equipment to update saturation estimates and load shapes. The study covers the residential sector, encompassing all electricity and natural gas-using equipment, as well as building shell characteristics and the presence of distributed generation (i.e., solar photovoltaic).
- **California Investor-Owned Utilities and the California Public Utilities Commission Low Income Needs Assessment (2015-2016)** – Performed in-person outreach with Community Based Organizations as part of an effort to understand and improve outreach to hard to reach low income customers. Assisted with focus groups for customers with a high energy burden in Riverside and Fresno.
- **California Investor-Owned Utilities Local Government Partnership Program Process Evaluations** – Leading comprehensive process evaluations of the IOUs' LGP programs to document current activities and operations, program delivery successes and challenges, and offer recommendations for program improvement.
- **California Investor-Owned Utilities Multifamily Program Process Evaluation** – Managed and performed in-depth interviews with laundry leasing companies and property management firms as part of a laundry study focusing on common area laundry in multifamily buildings. This research was part of a statewide process evaluation of California utilities' multifamily energy efficiency programs.
- **San Diego Gas & Electric Cannabis Agriculture Energy Demand Study** – Managed Cannabis Study for SDG&E. The study included in-depth interviews with trade organizations and utilities that currently operate in states where cannabis production has been legalized for recreational use, and an industry review, to collectively provide information on the industry in the case of legalization in California.
- **Northwest Energy Efficiency Alliance Heat Pump Water Heater Initiative Market Progress Evaluation Report #1** – Assisted with an evaluation of a heat pump water heater

market transformation initiative involving surveys of homeowners and water heater installers, and interviews with market actors and Northwest utility partners.

- **Hawaii Energy Comprehensive Evaluation** – Conducted analysis and reporting for a comprehensive market assessment, impact and process evaluation of the state’s residential and non-residential energy efficiency programs.

SELECTED FOCUS GROUPS, WORKSHOPS AND PRESENTATIONS

- Reported and prepared a presentation for Southern California Edison on Whole House Retrofits and their current market presence.
- For the Northwest Energy Efficiency Alliance (NEEA), assisted with focus groups in Boise and Seattle with residential customers to better understand how heat pump dryers are perceived and what laundry habits exist.
- Co-hosted a Plug Load and Appliances workshop for the California investor-owned utilities (IOUs). As a co-moderator, Martha was responsible for MC-ing, organizing the slide decks, keeping presenters on time, assisting with Q&A, and documenting discussions and Q&A for a summary memorandum.
- In May of 2017, arranged and presented a workshop of commercial cannabis growers for San Diego Gas & Electric as part of Phase 2 of the Cannabis Agriculture Energy Demand Study.
- Assisted Ingo Bensch with a Multifamily Contractors workshop and another workshop of Multifamily program staff in 2015, for Southern California Edison, San Diego Gas & Electric and Southern California Gas Company.
- At the International Energy Program Evaluation Conference (IEPEC) in August 2017, presented a paper titled "Exploring the Characteristics of Low-Income Households with the Highest Energy Burdens: One Size Does Not Fit All."
- At the Energy Efficiency in Domestic Appliances and Lighting (EEDAL) Conference in September 2017, presented a paper on low income needs assessment research related to community-based organizations.

In addition, Martha conducted the following presentations:

Thompson, M., 2015, “Whetting Customer Appetite for Energy Savings in California’s Fourth Year of Drought”, Behavior Energy and Climate Conference, Sacramento, CA

Thompson, M., 2015, “Introducing....Emerging Technologies! Evaluation of Vendor Partner Solicitation Efforts”, International Energy Program Evaluation Conference. Long Beach, CA.

Cornwell, J., Thompson, M., Fischlein, M., Yin, C., 2015. “Filling the Measure Pipeline: An Examination of Six Utilities’ Emerging Technology Measure Development Processes”. International Energy Program Evaluation Conference (IEPEC), Long Beach, CA.



INGO BENSCH

Principal Consultant

Email: bensch@evergreenecon.com



PROFILE

Ingo Bensch conducts market, behavioral and evaluation research to inform energy-related programs and policy. His work combines sound research principles with pragmatic approaches to provide useful empirical insights for professionals and policymakers seeking to promote energy-efficient choices. Ingo's expertise includes behavioral research and survey-based data collection, and the evaluation of residential and behavioral programs. In addition to his process and impact evaluation and needs assessment work, he has developed and led a multi-year tracking study of attitudes and practices related to energy efficiency, and has also advised utilities on customer satisfaction and needs in the small and medium-sized business sector. Ingo has a Master of Public Affairs in Environmental and Natural Resources Management from Indiana University and a Bachelor of Arts and Sciences in Economics and Science-Technology Studies from Stanford University.

INDUSTRY EXPERIENCE

Some of the work highlighted below was done while Ingo was Principal Researcher at the Energy Center of Wisconsin (now Seventhwave) from 1998 to 2015. He joined Evergreen Economics in March 2015, lending his considerable expertise in market, behavioral and evaluation research.

- **Illinois Science and Energy Innovation Foundation Multifamily Eco-concierge Pilot** – Provided real-time process evaluation and outcomes measurement of an innovative behavioral pilot program that is introducing an eco-concierge to support sustainable behavioral practices and energy efficiency in a multifamily building in Chicago. The pilot is also testing whether energy education through an eco-concierge can engage utility customers to make use of smart grid data and services.
- **AESP DSM Program Manager Workshop** – Training utility staff on building demand side management programs as part of a 12-hour in-person workshop by the Association of Energy Services Professionals. Developed the training content related to the use of research to inform program design. Part of the three-person team delivering the workshop to AESP members and clients throughout North America.
- **California Investor-Owned Utilities and the California Public Utilities Commission Low Income Needs Assessment (2015-2016)** – Research director for an assessment of the California low-income population's energy-related needs to inform utility program design, delivery, and state policy. The study included a phone survey with 900 households, focus groups and in-depth interviews. To build on past studies, this needs assessment explored how low-income households address basic energy and non-energy needs, the degree to which different population segments face resource-related hardships, and their engagement with utility low-income programs.

- **California Investor-Owned Utilities Multifamily Program Process Evaluation** – Led a process evaluation of the investor-owned utilities’ multifamily program including participant surveys, market characterization and property owner/manager interviews; the evaluation was intended to be formative and provide actionable input that will allow greater integration of disparate services to the multifamily sector, easier and more efficient access to program offerings, and greater participation.
- **Northwest Energy Efficiency Alliance Super-Efficient Dryer Characterization Study** – Designed and led a characterization of the supply chain and consumer demand for highly efficient heat pump electric and natural gas dryers. The study explored market size and trends and investigated consumer awareness, potential interest, and willingness to try (and pay for) super-efficient dryers. The study relied on market data, in-depth interviews, focus groups, and a web survey with a structured stated choice analysis to inform the Northwest Energy Efficiency Alliance’s design of a dryer-related program initiative.
- **We Energies Business Customer Research** – Managed research services for We Energies, leading teams and conducting research to help the utility better meet business customers’ needs efficiently and effectively. Projects included a customer usability study of a newly developed online energy management tool, research-based strategy development for self-help services, testing of a redesigned interactive voice response system, and internal consulting to inform account management services to business customers.
- **Chicago Area Energy Efficiency Potential Study** – As part of a comprehensive study of achievable program-based energy savings for two Chicago natural gas utilities, led the development and fielding of complicated telephone surveys for residential, commercial and industrial customers to understand the end-uses served and the characteristics of gas-using equipment, households and businesses.
- **Cool Choices Evaluation** – Led independent evaluations and research support for Cool Choices' game-based sustainability efforts in workplaces and communities, including developing the appropriate research and analytical approaches and overseeing a team of analysts conducting the work. Worked closely with program staff to understand drivers behind participation in the game and assess the impact of players’ actions on their energy consumption.
- **Midwest Energy Survey** – Developed and led the implementation of a multi-year, multi-client tracking study of Midwestern households' perceptions, attitudes and practices on energy efficiency and related topics.
- **Minnesota Study of Residential Plug Load Savings Opportunities** – As co-principal investigator for a groundbreaking study, employed in-depth metering of numerous plugged-in devices to identify the theoretical savings opportunities for residential electric customers, and conducted interviews to understand consumer motivation, interest and acceptance of potential program approaches.
- **New Construction Market Assessment** – Managed research into market actor awareness, attitudes, practices and training needs related to high performance building design.

Designed a research strategy and approach to provide actionable information to Wisconsin's Focus on Energy program and a curriculum design project for the U.S. Department of Energy.

- **Evaluation of Education Programs** – For over a decade, oversaw the in-house evaluation process for the Energy Center of Wisconsin's education programs, which train thousands of professionals annually through conferences, technical training series, lunch and learns, and online training.
- **Daylighting Program Evaluation** – Conducted an internal evaluation of the Energy Center of Wisconsin's training-intensive Daylighting Collaborative program. Interviewed program stakeholders and participants, surveyed program participants and analyzed results of daylighting training evaluations.
- **Weatherization On-the-Job Training Program Feasibility Study** – Conducted a feasibility study for an on-the-job training pilot program to expand the current workforce of weatherization installers and auditors.

SELECTED PUBLICATIONS AND PRESENTATIONS

- Bensch, I., & Keene, A., 2015, "Energy Impact from Gamification-Induced Behavior Change", *International Energy Program Evaluation Conference*, Long Beach, CA.
- Kuntz, K., Shukla, B., & Bensch, I., "How Many Points for That? A Game-Based Approach to Environmental Sustainability", *American Council for an Energy-Efficient Economy – 2012 Summer Study on Energy Efficiency in Buildings*, Pacific Grove, CA.
- Bensch, I., 2008, "Is Climate Change a Good Thing? Opportunities and Barriers to Using Climate Change to Motivate Efficiency", *American Council for an Energy-Efficient Economy – 2008 Summer Study on Energy Efficiency in Buildings*, Pacific Grove, CA.
- Bensch, I., Pigg, S., & Anderson, M., 2006, "How Much Is that Training Program Worth? Quantifying the Value of Training and Other 'Fuzzy' Education Events", *American Council for an Energy-Efficient Economy – 2006 Summer Study on Energy Efficiency in Buildings*, Pacific Grove, CA.
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PROFESSIONAL AFFILIATIONS AND HONORARY ROLES

- International Energy Program Evaluation Conference (planning committee member since 2014)
- American Evaluation Association (current member)
- Mad-City BECCsters (co-organizer of a Madison-area behavior change professional group)