



SUSTAINABLE ENERGY USE

PROGRAM EVALUATION

Assuring results and generating insights to build effective programs

Leadership in energy program evaluation

For over 35 years, DNV GL has been an acknowledged leader in energy program evaluation. We have used our deep experience to deliver accurate and reliable estimates of energy savings and other key outcomes to hundreds of program sponsors, while identifying actionable recommendations on program design and management. We regularly call on this deep experience to increase the reliability, cost-effectiveness, and applicability of the evaluation methods we use. Many of our innovations have been widely adopted in the industry.

Matching methods, resources to client needs

DNV GL tailors project methods and resources to our clients' needs. Our senior technical experts in engineering, field data development, sampling and survey design, advanced statistics and econometrics, and qualitative analysis regularly help our clients to understand the advantages of available methods so they can select the best approach for their research objectives, budget, and schedule. DNV GL's evaluation experience ranges from highly-focused assessments of pilot projects that test new technologies to multi-year evaluations of a portfolio of energy efficiency and renewable energy programs.

DNV GL PROGRAM EVALUATION SERVICES

- Portfolio evaluation/evaluation planning
- Impact evaluation, including attribution estimation and non-energy impacts
- Process evaluation
- Market effects assessments
- On-site measurement & verification
- Billing analysis
- Randomized trials
- Survey sampling and research

Evaluation grounded in experience

Most of our senior evaluation staff have worked for utilities, government agencies, or energy equipment and service vendors. The first-hand experience underpins our focus on client priorities and our drive to create clear results.

Project Snapshots

Portfolio-wide evaluations

Multi-year evaluations of a portfolio of programs pose special challenges for resource allocation, project management, stakeholder involvement, and reporting. We have served as prime contractor for several large-scale portfolio evaluations.

- **California Public Utilities Commission:** Impact evaluation of all residential and codes & standards programs operated by California's investor-owned utilities, as well as cross-cutting efforts in lighting and market effects.
- **U.S. Department of Energy:** Impact evaluation of all state level programs funded by the American Recovery and Reinvestment Act through the State Energy Program and Energy Efficiency Block Grants.
- **Massachusetts Program Administrators:** Impact evaluation and market assessment for all C&I programs sponsored by the Massachusetts investor-owned utilities.
- **Tennessee Valley Authority:** Comprehensive evaluation of all energy efficiency and demand response programs operated by the TVA and its affiliates.

Behavioral programs

DNV GL evaluates a wide range of behavioral programs for residential and commercial customers.

- **Comparative feedback programs:** Evaluating comparative feedback programs with embedded experimental design for the following sponsors: California Public Service Commission, Puget Sound Energy, and Seattle City Light.
- **Information Programs:** DNV GL has developed approaches for informational programs made available to all customers without random assignment, including a "do-it-yourself" television program and an information portal. Clients include Alliant Energy and Iberdrola.
- **Industrial Energy Management:** DNV GL is currently assessing the effect of programs designed to strengthen energy management practices among industrial facility owners for a number of clients, including the Northwest Energy Efficiency Alliance and the U.S. DOE.



ABOUT DNV GL

DNV GL is a global authority in business and technical consultancy, testing and inspection, emissions reductions, certification, and risk management across the energy value-chain.

With over 16,000 experts around the world, DNV GL is committed to driving the global transition toward a safe, reliable, efficient, and clean energy future. www.dnvgl.com

Demand response and pricing programs

DNV GL developed innovative methods for estimating demand reduction from demand response programs and have conducted numerous evaluations.

- **Direct Load Control Programs:** DNV GL has evaluated direct load control programs addressed to residential and small commercial customers for many clients, including Tennessee Valley Authority, Xcel Energy, Southern Maryland Electric Cooperative, Southern California Edison, and Hawaii Electric.
- **Pricing Programs:** We have evaluated a wide range of time-of-use and real time pricing programs offered by clients including Consolidated Edison, Portland General Electric, and Dominion.

Analysis of market effects

We pioneered the quantification and attribution of market effects generated by energy efficiency programs. We have established widely-used methodological studies on the subject. Our program impact studies have addressed markets for ENERGY STAR® appliances, CFLs, and efficient high bay lighting, LED lighting, and whole house retrofits. Clients for this work include the California PUC, US EPA, and Massachusetts Program Administrators.