



Gabel Associates, LLC, is a building energy consulting firm founded in 1981 and located in Berkeley, California. Gabel Associates specializes in architectural energy analysis, building energy code compliance, life-cycle cost evaluation, local energy ordinance research and development, technical writing and professional training.

Gabel Associates' experience and qualifications include:

- Consultant to over 1800 clients since 1981, including architects, builders, designers, mechanical contractors, engineers and homeowners. Gabel Associates educates and assists these professionals in testing, demonstrating and documenting compliance with California's Energy Efficiency Standards (Title 24) for over 700 residential and nonresidential buildings each year.
- Energy Coordinator for the West Contra Costa Unified School District (WCCUSD) for its upgrade of 51 schools as part of the Measure M and Measure D bonds. (2003 to 2006). WCCUSD has received approximately \$1.0 million in energy grant funding from the state.
- Consultant to the City and County of San Francisco (2008) in the development of their local green building ordinance.
- Consultant to the City of Santa Rosa (2007-2008) in the development of their local energy ordinance for residential buildings, an in assisting the City in obtaining the required approval from the California Energy Commission.
- Consultant to the City of Rohnert Park (2007) in the development of their local energy ordinance for residential buildings, an in assisting the City in obtaining the required approval from the California Energy Commission.
- Consultant to the City of Palm Desert (2006 to 2007) in the development of their local energy ordinance for all new buildings. Gabel Associates wrote the Ordinance, which is probably the most stringent in the United States, and assisted the City in obtaining the required approval from the California Energy Commission.
- Energy Consultant to the Office of Charles F. Bloszies, AIA, for the 235,000 square foot high-rise residential project at 690 Market Street in San Francisco. Addition and alteration to a historic downtown San Francisco building, including lower floor commercial and other nonresidential occupancies (2005 to 2006).
- Consultant to the Marin County Community Development Agency (2002, 2005) and the City of Mill Valley (2006) in the development of a new local energy ordinance for large homes, and assisting the county in obtaining the required approval by the California Energy Commission.
- Instructor at more than one hundred seminars on the residential and nonresidential energy standards since 1984 including trainings sponsored by the City of Berkeley, U.C. Berkeley Department of Architecture, Pacific Gas and Electric Company's Pacific Energy Center, Southern California Edison's CTAC, the Association of Bay Area Governments (ABAG), the California Energy Commission (CEC), the California Association of Building Energy Consultants (CABEC), Golden Gate and San Jose ASHRAE chapters, Gabel Dodd Associates (COMPLY 24 classes), Sonoma State University Department of Energy Management, and the Western Hydronics Association (1984 to present).

- Energy Consultant to Herman & Coliver: Architecture for the Polk and Geary Senior Housing Development in San Francisco (2004 to 2005). 74,000 square foot high-rise residential project at 990 Market Street in San Francisco with lower floor commercial. Provided energy life-cycle cost analysis of different HVAC system options and determined energy efficiency measures which exceeded the Title 24 Energy Standards by over fifteen percent.
- Energy consultants to Michael Willis Architects for the Chestnut Court (2001) and Mandela Gateway (2002 to 2004) housing developments in Oakland. Provided Title 24 Energy Compliance Analysis for the projects and worked with the architects to find combinations of cost-effective energy efficiency measures which exceeded the Title 24 Energy Standards by over fifteen percent.
- Energy Review Consultant (ERC) to the Division of the State Architect as an energy plan reviewer of modular portable classrooms, and of new schools applying for the Proposition 47 Energy Grant program (2003).
- Project Manager and primary author of a new version of PG&E's Savings By Design Track "B" report format and Guidelines (2002).
- Appearance on a KRON TV special on the energy crisis. Answered energy conservation questions from the public on the Contact 4 Energy Tip Line (2001).
- Designer and developer of the Daylighting Prospector under contract with Pacific Gas and Electric Company. The Daylighting Prospector is a computer program which helps determine potential money and energy savings as a result of replacing electrical lighting with natural daylighting through the use of dimming controls (2000).
- Energy Consultant to C.W. Fentress J.H. Bradburn and Associates for the City of Oakland Administration Buildings (1995 to 1997). One of the first projects to implement the innovative Performance Contracting concept, in which the design team commits to meeting a target energy cost per square foot both in the project design and in its actual operation. Consulting services included detailed DOE-2.1E energy analyses of project, evaluating the proposed building envelope, lighting and mechanical system. Analyzed and documented the building's compliance with California Energy Efficiency Standards (Title 24), and calculated the potential energy conservation rebate available from the Pacific Gas & Electric Company.
- Designer and developer of COMPLY 24, an energy compliance program for both residential and nonresidential Title 24 compliance analysis (1984 to 1996). Provided user support on COMPLY 24 and Title 24 to over 650 program users throughout California.
- Consultant to Pacific Gas & Electric Company's (PG&E) nonresidential energy incentive program (1994 to 1996). Performed major lighting retrofit studies for California School for the Deaf (CSD) in Fremont (34 buildings) and University of California at Santa Cruz (over 100 buildings). Both projects involved evaluating existing lighting systems and proposing energy efficient alternatives. CSD project included life cycle cost analysis of energy conservation options. UCSC project included a detailed site survey of existing lighting.
- Plan checkers and consultants for PG&E's California Comfort Home program, which provides incentives for energy conservation features in new residential construction (1993 to 1995). Helped design and develop the 1994 California Comfort Homes program.

- Author of the State of California's *Residential Manual for Compliance with the Energy Efficiency Standards* (1988, 1992, 1995) and *Residential Workbook* (1992).
- Consultant to PG&E to develop the 1994 incentive program for Manufactured Homes.
- Co-author of the *Nonresidential ACM Manual* for the State of California's 1992 Energy Efficiency Standards, including revision of compliance assumptions, development of new custom budgets and designing new nonresidential compliance forms.
- Worked with the City of San Jose, Office of Environmental Management, to perform DOE-2.1D computer energy analyses of buildings in support of the Innovative Design and Energy Analysis Service (I.D.E.A.S.) (1990 to 1992).
- Developer of training materials for Building Officials throughout California through the California Building Codes Institute (CBCI) on Plan Check of Computer Methods for the Residential Performance Standards and Energy Principles (1990). Wrote questions for the CBCI certification exam on both residential and nonresidential energy performance methods (1990).
- Performed energy analysis and plan check services in support of the San Diego Gas & Electric Company Title 24 Plus program (1990).
- Members of the California Association of Building Energy Consultants (CABEC).
- CABEC Certified Energy Plans Examiners for the Residential and Nonresidential Energy Standards.
- CABEC Certified Energy Analysts for the Residential and Nonresidential Energy Standards.
- Knowledge and on-site use of the DOE 2.1E Building Energy Analysis program and the EnergyPro Title 24 Energy Analysis software.

Key Personnel:

- Michael D. Gabel, Principal: Residential/Nonresidential CEPE, CEA
- Rosemary E. Howley, Senior Associate: Residential/Nonresidential CEPE, CEA
- Gina Rodda, Senior Associate: Residential/Nonresidential CEPE, CEA
- Micaela McCraner, Energy Analyst: Residential CEPE, CEA
- Tomita Shimamoto, Office Manager