

BAY AREA SMART ENERGY 2020

“There’s an ongoing schizophrenia in state energy policy between what we say we want to do and what we actually allow to happen.”
– John Geesman, California Energy Commission

BACKGROUND: In 2002 California passed a renewable portfolio standard (RPS) that requires the state’s investor-owned utilities to have at least a 20 % renewable portfolio by 2010. With that law California emerged as a leader in clean energy policies. Other laws to stimulate energy efficiency and renewable energy production and to curb California’s emissions of greenhouse gas emissions followed the 2002 legislation. However, it is clear that the utilities will fail to meet their 2010 renewable energy goals.

WHY IT’S NEEDED: Missing from California’s clean energy policies is any sort of site-specific road map that takes an integrated analysis of all of the factors that influence energy planning. The *Smart Energy 2020* series provides that road map. *Smart Energy 2020* is an independently published series of site-specific energy plans, each of which examines California’s main energy markets and recommends specific actions which both investor-owned and public utilities can take to meet—and exceed—California’s clean energy goals. *Bay Area Smart Energy 2020* is the second in the series, following the 2007 publication of *San Diego Smart Energy 2020*.



WHAT IT IS: *Bay Area Smart Energy 2020* lays out a plan for the nine San Francisco Bay Area counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma. The plan provides a road map for the Bay Area’s utilities, demonstrating how to develop a clean energy portfolio to comply with the new regulations while leveraging currently available incentives.

Bay Area Smart Energy 2020 will demonstrate how intelligent use of off-the-shelf technologies can be rolled out in the next 10 years in the following service areas:

- Alameda Bureau of Electricity
- Healdsburg Electric Utility Department
- Pacific Gas & Electric
- Palo Alto Utilities Department
- San Francisco Public Utilities Commission
- Santa Clara Public Utilities

THE AUTHOR: Bill Powers, P.E. is an expert on regional power provision. He has extensive knowledge and experience in the fields of renewable energy and fossil fuel-fired power generation systems, air emissions monitoring and control equipment, and regional energy planning. He is a member of San Diego Association of Governments' Regional Energy Working Group and is actively engaged in the California Energy Commission's Renewable Energy Transmission Initiative process.

WHY IT'S UNIQUE: Both the government and nonprofit sectors have published reports demonstrating the need for and economic benefits of clean energy development. *Smart Energy 2020* builds on this work with a specific plan of action for utilities. The report will include thorough analyses of:

- The policy context for Bay Area energy use, including current energy plans for the Bay Area, state laws, and local initiative programs.
- Current utility contracts and commitments.
- An analysis of why the Bay Area's utilities are not meeting their RPS goals.
- High value energy efficiency and demand-response opportunities in the Bay Area to lead to a 20 % reduction in electricity usage by 2020.
- Achieving 50 % greenhouse gas reduction with primary emphasis on urban and suburban photovoltaic (PV) arrays.
- The impact of renewable energy tariffs.
- Local examples of cutting-edge facilities.
- Maximizing renewable energy benefits with technologies such as battery and thermal energy storage.
- The potential of combined heat and power.
- Getting the maximum benefit from the existing transmission grid.
- How much natural gas generation is needed with greater system efficiency and increased renewable generation.

ABOUT PACIFIC ENVIRONMENT: Pacific Environment protects the living environment of the Pacific Rim by promoting grassroots activism, strengthening communities, and reforming international policies. Our successes over the past 20 years stem from a deep and abiding trust that local people, armed with the right tools and solid support, are the world's best hope for the environment. As such, we support the development of grassroots organizations, prioritize coalition-based advocacy, and use international leverage points in service of our local partners.

In 2003, Pacific Environment saw that California was on track to become dependent on a new imported fossil fuel, liquefied natural gas (LNG). LNG threatened to derail market opportunities to develop renewable energy in California. To fight this threat to California's efforts to reduce greenhouse gases, Pacific Environment founded its California Program. Since 2003, we have partnered with coastal communities in California to win six LNG project cancellations. Thanks to these efforts, LNG is no longer a significant threat. The California Program also co-founded the Local Clean Energy Alliance, which has focused on urging Bay Area cities to pursue aggressive renewable energy goals. However, California can and must do much more to meet its commitments, spelled out in AB 32, to reduce greenhouse gas emissions. Pacific Environment's California Program is focused on transforming California's electricity grid to lower fossil fuel dependence, increase the use of renewable energy, and reduce greenhouse gas emissions.

HOW YOU CAN HELP: Pacific Environment is a not-for-profit organization working to help keep California's clean energy promise of clean energy development and greenhouse gas reductions. Projects such as *Bay Area Smart Energy 2020* are costly to research and produce. Foundations and individuals will comprise partial support, but your investment in a new energy road map for California is needed to fully realize this project. *With underwriting from the clean energy sector, we can bring our message to the widest possible audience and showcase the technologies you represent that can address this need.*

WITH YOUR SUPPORT, WE CAN MAKE WIDESPREAD ADOPTION OF CLEAN ENERGY A REALITY IN THE BAY AREA