

FACT SHEET: AB 1470 – Solar Water Heating and Efficiency Act of 2007

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SUMMARY

This bill would create a \$25 million per year, 10-year incentive program to encourage the installation of solar water heating systems that offset natural gas use in homes and businesses throughout the state. AB 1470 would authorize the Public Utilities Commission to create a statewide program of performance-based incentives to grow a mainstream market for solar water heating cutting prices and increasing demand to 200,000 solar roofs over 10 years. The program would be funded through a small surcharge (13 cents/month) on gas bills capped at \$250 million and would benefit all ratepayers by lowering demand, stabilizing prices and cutting global warming pollution. The states municipal gas utilities would be required to also offer a similar rebate program.

THE PROBLEM

California relies heavily on natural gas for water heating and 85% of the state's gas supply is imported. As California grows, demand for natural gas will continue to rise, straining limited supplies, causing price spikes, and contributing to global warming. Fortunately, California's abundant sunshine can be captured through reliable rooftop solar water heating technologies. These systems are designed to last decades, over which time they save their owners 50-75% in fuel costs. By creating a mainstream market, California can save more than 1 billion therms of natural gas per year – 24% of the state's residential natural gas usage.

THE TECHNOLOGY

Solar water heating systems use energy from the sun to heat water, reducing the amount of energy needed for water heating. Up to 90% of the solar energy that lands on a roof can be absorbed by a collector, heating liquid that is then pumped into a storage tank. This in turn reduces the need for natural gas 30-50% per home or business. Without rebates, a solar water system on an existing home costs \$4,000-\$6,000 and can pay for itself within 20 years. Unfortunately, this long pay-back period prevents many consumers from investing in solar power. A statewide incentive program would increase public awareness and offer financial incentives to consumers, cutting the payback period in half. Many countries are already encouraging solar hot water systems. Hawaii, too, has a strong rebate program and as a result installs four times as many solar systems as California.

THE BENEFITS

- ✓ **Global Warming Solution:** Solar water heating could reduce global warming pollution by 6.8 million tons of CO₂ per year. This is equivalent to the annual emissions from over one million cars, and represents 5% of the total reductions needed to meet the state's greenhouse gas emissions cap by 2020.
- ✓ **Save Consumers Money:** Consumers can cut their energy bills by up to 50% by investing in solar water heating technologies. Further, decreased demand for natural gas saves all ratepayers money: some studies have shown that a 5% reduction in demand could shave 25-35% off California's wholesale natural gas prices.
- ✓ **Help Low-Income Families Achieve “Zero” Energy Bills:** AB 1470 carves out at least 10% of the total funds for installing solar water heating systems on low-income and affordable housing projects. In addition, low-income ratepayers that are enrolled in CARE or FERA programs are exempt from paying the surcharge created to fund the program.
- ✓ **Greater Energy Independence:** California imports 85% of its natural gas. An expanded solar water heating market could save 1.2 billion therms of natural gas each year, the equivalent of 5% of statewide gas consumption.

EXISTING LAW

California lacks an incentive program for solar water heating technologies. Existing law limits the California Solar Initiative incentives to solar technologies that displace electricity rather than natural gas. While the Public Utilities Commission (PUC) created a pilot program in San Diego for solar hot water technologies in 2006, a statewide program is needed to grow the market for this underutilized yet common-sense energy efficiency and renewable energy technology.

SUPPORT (partial list)

AFSCME, American Institute of Architects, Assoc. of California Community and Energy Services, Assoc. of Rural Northern CA Energy Providers, CA Labor Federation, CA League of Conservation Voters, CA Pipe Trades Council, CA Solar Energy Industry Assoc., CALPIRG, Campesinos Unidos, Inc., Center for Biological Diversity, Clean Power Campaign, Coalition for Clean Air, Davis Energy Group, Environment California (bill sponsor), FAFCO, Inc., National Wildlife Federation, NRDC, NO LNG Community Alliance, NorCal Solar Energy Association, PG&E, Planning and Conservation League, Sierra Club California, Sierra Pacific Solar, SMUD, SoCal Forum for Environmental and Human Services, SunTechnics Energy Systems, Union of Concerned Scientists

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