There is bad news and there is good news about efforts to promote distributed solar energy development in the United States. On balance, the long-term perspective seems to be improving. Greenwire reports that the California Solar Initiative, the states ambitious program to encourage photovoltaic installations on homes and businesses, has lost some steam, lately.

Builders of new homes filed 139 rebate applications in January, and 159 in February. These numbers are small, compared to the 485 applications last November and the 709 filings in December. Since housing starts are down, this might not be a big surprise. But applications for retrofits on existing homes are down, as well (1,053 in November, 1,162 in December, 608 in January, and 646 in February).

Do these numbers imply a loss of interest? Probably not, when the flagging economy is a more likely culprit. Nonetheless, it is discouraging in a program that had been experiencing steady growth. Observers point out that the rebate levels offered through the Solar Initiative were reduced a bit at the end of the year. Since this is a predictable aspect of a program designed to wean consumers of the rebates over the course of several years, it would be expected that many would rush to get the higher incentives, and that levels would at least temporarily subside just after the rebates change. It does raise a question, however, about how well the industry will do when the rebates go away entirely, but that is when the better news enters the picture.

An underlying premise of the incentive program is that increased demand for photovoltaics would stimulate innovations that would drive down the cost of installed systems. Since this has been an objective of government solar programs for 30 years, it is not immediately clear that the premise is sound. But a recent report suggests that there is movement in the right direction.

In their report, Lawrence Berkelely National Laboratory researchers Ryan Wiser, Galen Barbose, and Carla Peterman tracked the installed cost of photovoltaics in the United States from 1998 through 2007. They found that the average installed cost – in terms of real 2007 dollars per installed watt – declined from $10.5/W in 1998 to $7.6/W in 2007, without counting any direct financial incentives or tax credits. This equates to an average annual reduction of $0.3/W, or 3.5%/yr in real dollars. They attribute the changes to lower costs in the “non-array” portions of a project (things such as brackets, inverters, and labor). They conclude, “Although average installed costs remained flat from 2005-2007, recent developments portend a potentially

dramatic shift over the next few years in the customer-economics of PV. Most industry experts anticipate an over-supply of PV modules in 2009, putting downward pressure on module prices, and presumably on total installed costs as well. In addition, the lifting of the cap on the Federal [Investment Tax Credit] for residential PV, also beginning in 2009, will further reduce net installed costs for residential installations, potentially leading to some degree of renewed emphasis on the residential market in the years ahead."

Good news, indeed. Although there are miles to go before achieving the $1/W goal U.S. policy makers had hoped to reach by 1988, things are moving in the right direction. Occassional announcements of cost reductions for the manufacturing of solar cells provide a basis for further hope. Let's keep our fingers crossed.