

HOME HEATING, RENT, OR MEDICINE? THE IMPOSSIBLE CHOICE

An Affordable Energy Program for low-income households with solar energy and efficiency would lower cost and the need for energy assistance

THE PROBLEM: ENERGY, HOUSING, AND HEALTH INSECURITY

Low-income households face impossible choices between paying for energy, health, food, and housing.¹ A 2011 national survey stated that in the prior five years more than one-third of these energy insecure households had to forgo medical/dental care and purchasing medicines because of high energy bills; almost one in five became ill because their homes were too cold. Six percent of energy assistance recipients were evicted from rental units and four percent faced foreclosure, exacerbating homelessness. (2011 national survey at http://neada.org/wp-content/uploads/2013/05/NEA_Survey_Nov11.pdf)

A Maryland household with average income pays 3-4 percent of their income on

electricity and heating; for low-income households, that energy burden can be 10, 15, or even 20 percent and more. Why? Low-income homes are less efficient than the average home, especially when it comes to space heating – on average they use 50 percent more energy per square foot than the average household. They tend to have older appliances and less effective insulation. Older and sicker people may also need to keep their homes warmer in the winter so they don't fall ill. More low-income residents are renters who depend on landlords to improve their properties; yet many landlords may lack the incentive or the capital to do so. Landlords often refuse to give access to auditors even when offered free improvements, trapping low-income families with high energy bills.

THE SOCIAL AND ECONOMIC IMPACT

The costs to society of energy-housing-health conflicts are also huge. For instance, a 2010 U.S. Department of Housing and Urban Development study found that costs of housing a homeless family in Washington, D.C., ranged from \$1,251 to \$3,698 per month. Homelessness also aggravates health problems and causes new ones. A careful medical assessment of over 6,000 homeless people in Boston concluded that the added health care costs, like hospitalization and emergency room visits, compared to average low- and medium-income people totaled more than \$1,400 per month. Once homeless, all problems become more difficult and complex; individuals and families can remain homeless for weeks, months, and even years.

The problem of high energy burdens is presently addressed mainly by helping many low-income households pay their electricity and heating bills, though some funds are also devoted to improving efficiency. About one-third of eligible Maryland households get aid, which materially reduces their energy burdens. Even so, burdens often remain unaffordable at 7, 8, 10 percent or more of income. Assistance funds are limited; household income has stagnated; needs have increased.

The added health care and shelter costs when a family becomes homeless run into thousands of dollars a month

¹ For energy assistance in Maryland, low income households are those with income less than 175 percent of the federally-defined poverty level.



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References can be found in the report, [Energy Justice in Maryland's Residential and Renewable Energy Sectors](#), September 2015; Institute for Energy and Environmental Research.

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THE SOLUTION PART 1: AFFORDABLE BILLS

A fundamental approach is to ensure that the energy bills of low-income families are affordable – generally defined as 6 percent of gross household income. The rest of the energy bills would be covered by public funds from various sources. Such an Affordable Energy Program was researched by the Public Service Commission staff in 2012. It has been put on the shelf mainly due to concerns about cost. But our research indicates

that when the social benefits, including reduced costs of health care and homelessness, are taken into account, the overall cost of the Affordable Energy Program to the public will likely be lower than the present assistance costs. The principle of including such benefits when evaluating efficiency programs, including for low-income households, was ordered by the PSC in July 2015. Limiting energy bills of low-income households to six percent through the Affordable Energy Program can be the bedrock on which programs to reduce the needs for assistance can be built.

PART 2: SOLAR ENERGY, EFFICIENCY, AND WEATHERIZATION

The cost of solar installations has fallen dramatically, creating an enormous economic opportunity to bring solar to low-income households, even renters. This is a huge opportunity because providing solar energy at a discount to low-income households would reduce the costs of energy assistance.

Efficiency and weatherization will also reduce energy bills and the costs of assistance. Just one measure, a heat pump water heater, would save \$220 per year compared to a regular electric

water heater. For comparison, the average electric bill assistance was \$325 per year in 2013.

The combination of investments in solar energy, efficiency, and weatherization will reduce the amount of assistance needed; in many cases, the bills will be below six percent of income, eliminating the need for assistance. The long-term social cost of a comprehensive program will likely be lower than the present assistance program, even if the number of recipients increases substantially in the future.



Photo: Lake City Village low-income housing, Seattle, Washington. Photo courtesy of SolarWorld – www.solarworld.com

- + Reduce energy burden to 6 percent
- + Invest in solar
- + Provide weatherization/energy efficiency assistance

THE POLICY SOLUTIONS

- Maryland should enforce its “minimum livability” and other codes and require landlords to allow property access for weatherization and efficiency improvements.
- Maryland should expand its efficiency and weatherization investments to bring down bills and the long-term cost of assistance.
- All new public and publicly subsidized low-income housing should be net-zero with solar panels onsite and/or offsite. Generally, residents of such housing will not need energy assistance because their bills will be very low.

- State energy assistance programs should allow units to switch from using fossil fuels, especially propane and fuel oil, to efficient electric HVAC systems. This will save money and reduce emissions.

JOB AND THE ENVIRONMENT

A solar energy and efficiency program directed at low-income households will create more than 1,000 steady jobs that will endure for a period of at least 10 to 15 years. Reduced air pollution, CO2 emissions, health care costs, and homelessness will be other major benefits.

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