

Fighting Climate Change One Home at a Time

by Barbara Swart

According to the September 18, 2019 report of the <u>American Council for an Energy Efficient</u> <u>Economy</u>, energy efficiency can cut energy use on greenhouse gas emissions in half by 2050.

The report identifies efficiency opportunities in every economic sector, including existing housing. In order to avoid catastrophic consequences of carbon emissions, energy efficiency has to be a crucial and necessary part of the effort to combat climate change.

Believe it or not, in the face of the dire predictions related to climate change, there is actually some good local news! Our local elected officials and government staffers have been setting more aggressive goals which emphasize energy efficiency, and they've been taking action to meet these goals.

For example, last September Arlington County updated its Community Energy Plan to adopt the goal of net zero carbon emissions by 2050 (see article elsewhere in this newsletter). The City of Alexandria's <u>Environmental Action Plan</u> contains significant energy efficiency goals as well.

However, even though local governments have long supported residential energy efficiency programs, responsibility for the energy efficiency of an individual's house ultimately ends up at each homeowner's front door—so it makes sense that the first step would be to figure out just how much energy each home is using. But just getting numbers of kWhs or therms or BTUs from energy invoices won't mean much without putting them in context. You're left looking at a bunch of numbers saying "So what?"

The Yardstick

And that's where the nifty <u>EnergyStar Yardstick</u> program comes to the rescue. The Yardstick is an online program supported by the EPA and DOE on the EnergyStar website; it allows a resident to quickly determine the energy efficiency of their house compared to a large sample of homes in the United States. The comparison uses a database containing information from a large scale home survey (Residential Energy Consumption Survey) which is normalized with the unit's location and other factors, The housing database was updated in April 2019 and the EPA expects the sampling size to increase to 15,000 housing units by 2020. The program calculates a relative efficiency rating from o (lowest efficiency) to 10 (highest efficiency), with 5 being the average score. For example, a rating of 3 would indicate that the resident probably could easily find ways to improve how efficient the house used energy, and save money at the same time.

Yardstick Inputs

The Yardstick inputs are easy to find:

- Zip code
- Square feet of conditioned space (example: Arlington County's <u>online real estate</u> <u>database</u> has that information.)
- Number of residents in the home
- 12 months of data from energy source providers (examples: Dominion Energy and Washington Gas bills contain 12 months of data)

Yardstick Results

Besides the energy efficiency rating and a usage graph, the Yardstick also shows how much greenhouse gas emissions are created and how much money could be saved if the resident improved his score. There are also links to other areas in the <u>EnergyStar website</u> to provide information about energy saving changes that could be considered.

So give the Yardstick a try – 5 minutes or so and it's kind of fun. The planet will thank you.

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