



10 myths about solar

Have you ever wondered about solar water heating or solar electric and decided that it was not for you? Or thought that there was no way you could have a solar system in Forest Heights? We have heard such questions and comments from fellow residents, so this month we set out to dispel some of the myths about going solar in Forest Heights.

1 | Portland does not have the right climate for solar

Portland gets, on an average, as much sun as the rest of the country. Our long sunny summer days compensate for our short winter days. It is good that the winters are cloudy rather than summers because the winter days are shorter and the sun is less intense. But even on

cloudy days, there is enough incident solar radiation (that is the stuff that matters—incident solar radiation, or *insolation*—which is a measure of the sun's energy on a surface) to make a solar installation worthwhile. While shading and the angle of the roof does make a difference, most roofs do get adequate exposure. There are different types of solar panels for different climates, including ones well suited for the weather here. *Portland is just as good as any other place in the country for a solar installation.*

2 | Solar installations are not aesthetic

Nothing could be further from the truth. Today, solar panels and frames come in various designs meant to complement roof surfaces. A professionally installed solar system brings a degree of sophistication to a roofline while blending with the elements of the roof. Solar hot water panels have such a small footprint that they can be mistaken for a skylight. *Solar installations on a roof can be just as harmonious as a skylight.*

3 | Solar installations make a home "hippie" and decrease the value of the home and the neighborhood

The latest and growing trend in housing is LEED certified houses—houses that are professionally certified to be "green". In our very own community, an entire lot of homes were proposed LEED homes. A solar addition to an existing home makes the home greener and hence more marketable. Market data suggests that a solar addition increases the value of a home by \$20 for every \$1 saved from solar. A 2kW system typically saves \$200/year in electric bills and builds \$4000 in equity. So, *a solar installation actually increases the value of the home and may make the entire neighborhood desirable* by appealing to the aspirational value of sustainability. A solar home may be the most desirable one on the block.

Continued on page 11

4 | Solar devices fail often and do not work in the long run

Solar panels typically have a 25 year warranty—the manufacturer guarantees the performance for 25 years! Try getting that from your refrigerator or washing machine. Solar installations are known to perform with very low failure rates. Solar water heating installations from the 70s may have had issues with climatization; however, modern systems are well-adapted to our Northwest climate. *Solar systems perform reliably even in our climate with very minimal operating and maintenance costs.*

5 | Solar is too costly

The total off-the-shelf price of a solar system can indeed leave you with sticker shock. But remember, no one pays off-the-shelf price. And with solar systems you don't even have to cut coupons from the Sunday newspaper to get the "real deal". There are a large number of incentives and tax credits that bring down the cost of a typical 2kW system by 70%. And if the community takes advantage of bulk pricing (residents all buy from the same installer), the starting price can drop by as much as 30%. Furthermore, the money invested in a solar installation can be easily recouped by the increased value of the home, and perhaps recovered upon the sale of the house as a home-improvement expenditure. Local banks such as Umpqua also provide financing specially designed for solar installations.

6 | The price of solar is going down and if I wait long enough it will become very inexpensive

It is true that the price of solar has gone down over the past year. What you may not know is that the incentives offered by Energy Trust

of Oregon have also gone down. This is exactly how the system is expected to work—as the popularity of solar increases, and as the price drops, the incentives and credits taper off to a point where the market sustains solar installations at a price point that makes it very attractive to everyone. *The current out-of-pocket expense, after all incentives and tax credits, is very reasonable.*

7 | Solar installations require expensive battery systems

Most solar installations are grid-connected. This means that whatever energy you produce, you sell to PGE and what energy you need, you buy from PGE. Thanks to net-metering laws, the selling price is the same as the buying price. The net effect is that you don't need any batteries with this system; you simply use the power grid as a giant battery. The solar energy is synchronized with the grid-energy, so there is no difference to your appliances or any other electric usage in your home.

8 | Solar works well for new homes but retrofitting an existing home is troublesome

Most solar systems are installed on existing homes. Hence most panels and installations are designed for existing homes. Solar installers have considerable experience installing on existing roofs and a good installer can install on any roof type.

9 | My solar installation will blind the neighbors and passers-by

Solar panels are, by design, built to capture as much solar energy as possible. Manufacturers try their best to eliminate reflection and panels have a very effective anti-reflective surface. Solar installations do not reflect any light.

10 | Solar installations require a lot of maintenance

Solar installations are built to last. You do not have to clean the

surfaces as the periodic rain takes care of that. There is really nothing to do after an installation. For a solar electric system, the inverter (this is the part that connects the solar panels to the meter/grid) typically has a warranty of 10 to 15 years and so it is possible that it may need to be replaced. The replacement work is routine.

The FHHOA G2 Committee is working with the Architecture Review Committee (ARC) to prepare guidelines for rooftop solar installations in Forest Heights. These policies will then be presented to the board and recommended for endorsement. Note that residents of sub-associations need to get approval from their sub-associations in addition to approval from the ARC.

Following are a few interesting links on Solar in Oregon:

<http://energytrust.org/residential/incentives/solar-electric/SolarElectric/>

<http://solaroregon.org>

http://tonto.eia.doe.gov/kids/energy.cfm?page=solar_home-basics

Now that spring is right around the corner, perhaps this is the right time to be thinking about tapping into the sun this summer while increasing your property value and going green. Watch for announcements that will provide you with opportunities to participate in a community solar project right here in Forest Heights.

*~Devidas Gupta
Chair, Go Green, Natural Habitat,
Trails & Landscape Committee
and Forest Heights resident~*