# **ROOFTOP SOLAR CHECKLIST** for Homeowners



# ENERGY EFFICIENCY

Have you completed all of the energy efficiency measures recommended from a Flint Energies home energy audit? Making your home as energy efficient as possible, is the most economical way to reduce your electric bill and the number of solar panels needed.



## **ROOF DIRECTION**

What is the direction and pitch angle of your roof? In general, south-facing roofs are best, but east and west-facing roofs still work. If your roof isn't a perfect 30 degree angle, solar panels will still work if the pitch is between 15 and 40 degrees. In fact, even if it's flat, you can still go solar as long as you mount your panels at a good angle.



## **ROOF MEASUREMENTS**

What is the size and shape of your roof? How big is your roof? Is it big enough for the panels you will need? Are there skylights, dormers, chimneys, or other things that break up the open space on your roof? It's easiest to install panels on a large, square roof. A general rule of thumb is that for each KW of your system size, you will need about 100 square foot of roof space.

#### SHADING

Is your roof shaded? It is important that your roof gets enough sun throughout the day to maximize electricity production. Tall trees or other building(s) may block the sun from hitting your roof which will reduce the amount of energy generated and extend the payback period for your investment.

## ROOF AGE

How old is your roof? Solar panels can last for more than 25 years, so you'll want to make sure your roof is in good shape and won't need to be replaced in the near-term. If your roof needs to be replaced within five years, you should consider doing it before installing solar panels. Also, consider the impact of penetrating the roof's membrane with anchor bolts. Consider getting a professional roofer's opinion.

## OWNERSHIP

Who owns your roof? If you are renting or in an apartment building, the owner must agree to install the rooftop solar.

## PAYBACK

How long will you live at this location? If your payback exceeds 10 years, you may want to consider how long you plan to live at this location. If this is not your "forever home", you may find that when you try to sell the property, the solar panel addition fails to increase the value of your home to make it worth your initial investment.

