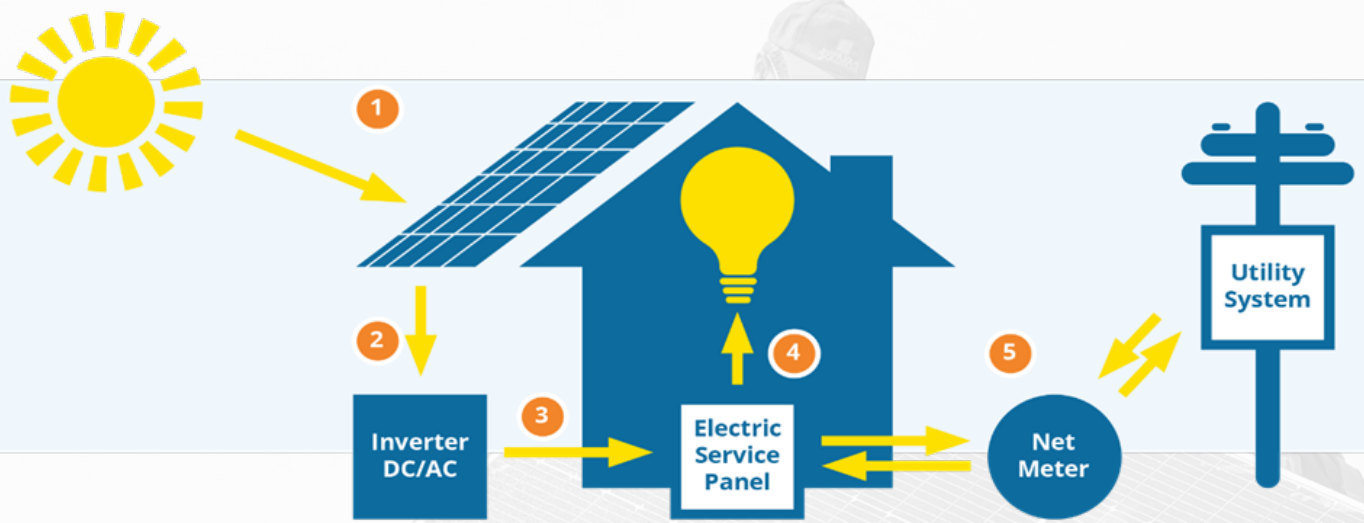


## Agenda

- **Solar Overview - How it Works**
- **Your layout**
- **Economics**
- **Roof Integrity**
- **Solar Panel Recycling**
- **Questions**



# Solar Overview

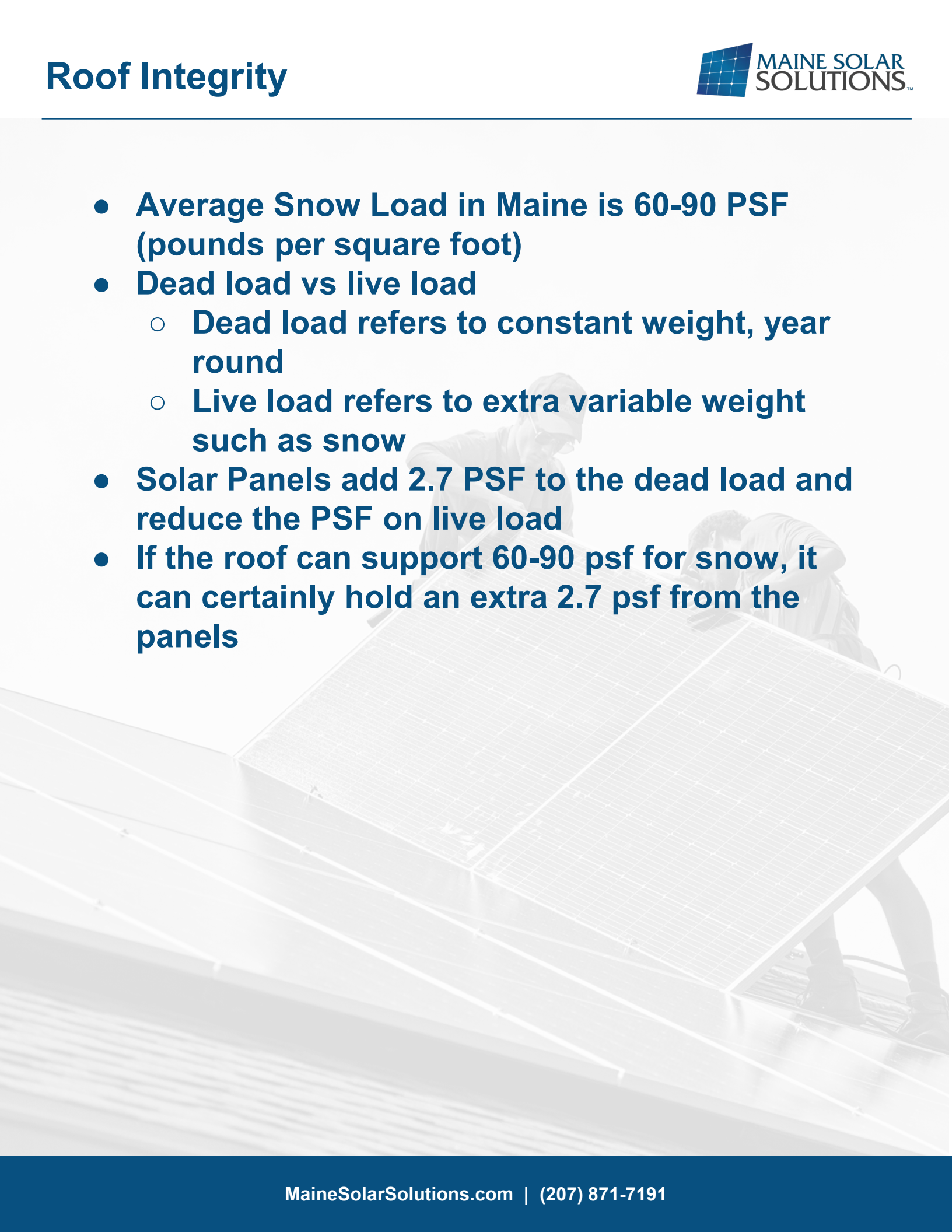


# Solar Layout



<b>Panel Manufacturer</b>	<b>Jinko 540 Silver Frame</b>
<b>Array Size</b>	<b>38.88 kW Array</b>
<b>Number of Panels</b>	<b>72</b>
<b>Size of Inverter</b>	<b>SolarEdge HH10000</b>
<b>Modeled Annual Output</b>	<b>44,571 kWh/yr</b>
<b>System Cost</b>	<b>\$100,000</b>
<b>Value of 30% Federal Tax Credit</b>	<b>(\$30,000)</b>
<b>Net System Cost</b>	<b>\$70,000</b>

<b>Project Savings</b>	
<b>Energy Savings (Year 1)</b>	<b>\$7,418</b>
<b>Payback of Net System Cost</b>	<b>9</b>
<b>IRR 25 Years (Warranty Period)</b>	<b>11.23%</b>
<b>25 Year Net Savings (Warranty Period)</b>	<b>\$111,289</b>
<b>Assumed Utility Rate Increase</b>	<b>2.20%</b>

- **Average Snow Load in Maine is 60-90 PSF (pounds per square foot)**
  - **Dead load vs live load**
    - **Dead load refers to constant weight, year round**
    - **Live load refers to extra variable weight such as snow**
  - **Solar Panels add 2.7 PSF to the dead load and reduce the PSF on live load**
  - **If the roof can support 60-90 psf for snow, it can certainly hold an extra 2.7 psf from the panels**
- 

- Relatively new industry with new technologies and companies expected to enter the market in the coming years
- I know of 2 that will pick up in Maine to recycle at their facilities today:
  - <https://solarpanelrecycling.com/>
  - <https://commercialsolarpanelrecycling.com/>

[Jinko Solar Panels](#)

- Questions??

