

# **Minnesota Solar Energy Industries Association**

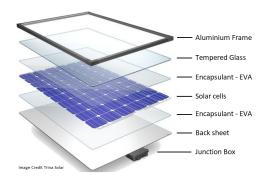
We Move Minnesota Solar + Storage Forward

## **Solar Panel Recycling in Minnesota**

As the solar industry rapidly grows, so does the need to responsibly think about its end-of-life. Solar panel recycling is very important to MnSEIA members and we're developing plans with the Minnesota Pollution Control Agency to enact recycling frameworks for our state.

### Q: Can solar panels be recycled?

**A: Yes!** Like many other products, **solar panels can be recycled domestically** at the correct facilities. PV panels typically consist of glass, aluminum, copper, silver, and semiconductor materials that can be successfully recovered and reused. By weight, more than **80% of a panel is glass and aluminum** – both common and easy-to-recycle materials. Inverters can be recycled as e-waste and racking equipment can be re-utilized with newer technology or recycled like other metals.



#### Q: How long do solar panels last?

**A: 20-30 years!** Solar manufacturers and installers usually guarantee their panels for 25 years, but most will far outlive their warranties. In fact, the 32 solar panels Jimmy Carter put on the White House in 1979 are still producing energy at Unity College in Maine!

## Q: What happens when the panels reach their end-of-life?

**A:** Panel efficiency will gradually decline over their lifetime, just like any other product. Once the panels stop producing power completely, the solar installer will often remove them and offer the option to replace the panels with new, more efficient ones. For ground-mounted solar, all the pieces of the project can be removed, leaving little to no trace that the solar was ever there.

### Q: Can solar panels be reused?

**A: Yes!** Sometimes solar projects will be "decommissioned" when their efficiency declines, but that doesn't mean the panels aren't still valuable. They can be reused or refurbished for a "second life" of generating electricity. Many are donated to use in Africa, bringing energy to places that need it most.

### **To Learn More:**

- 🛟 Vist the <u>EPA's site</u> or <u>Energy.gov</u>.
- 🛟 Join MnSEIA's <u>Solar Panel Recycling Group</u>.
- or local panel recyclers, contact MnSEIA member: The Retrofit Companies.
- Get involved with SEIA's National Recycling Program and see their panel recycling checklist.