

## FAQs

# Solar Health and Safety

### Are solar panels safe?

Solar panels are safe. They are built using **strong sealants** and thick sheets of glass, making it highly unlikely to cause harm to people or animals.

### What makes solar panels safe after installation?

Solar panels remain safe for the entire time that they are operational. There are two safety precautions taken by solar installers: grounding and rapid shutdown.

- Grounding solar panels are similar to other electrical systems, such as the outlets in homes. By burying a copper rod and wiring into the ground, stray electrical currents will be directed away, ensuring that solar panel systems are **safe** in case of a lightning surge or short circuit.
- **Rapid shutdown** allows first responders to quickly de-energize solar panels in case of damages from external sources (e.g., storms or fires).

### Do solar panels leak PFA toxins into soil and groundwater?

No. There is **no presence or leaching** of per- and polyfluoroalkyl (PFAS) in solar panels. PFAS are **not used** in the manufacturing of solar panels.

### Can solar panels be recycled?

Yes, solar panels are highly recyclable. California is home to multiple public and private solar recycling **programs** including a new **partnership** with California-based Solarcycle to conduct on-site recycling. Many components of solar panels – such as glass, aluminum, copper, and electronics – can all be **recycled or repurposed**.

### Can solar power provide clean, healthy air?

Yes, the California Air Resources Board **finds** that shifting from a reliance on heavy carbon-based energy sources like fossil fuels to clean, renewable energy drastically improves air quality.



Solar panel manufacturers inspecting newly produced panels  
Photo captured in 2023  
Source: oakstudio22 via iStock