

## Solar Panel Reuse : A Case Study by Reuse Alliance + Amy's Roofing & Solar

Funded by The California Product Stewardship Council and Zero Waste Marin  
*In this guide we will show you how to convert a used solar panel into a table.*

### Necessary Tools:

- [Used Solar Panel](#)
- Used Table or Legs
- [VHB Tape, double sided, 1/2"+, 45mil](#)
- Impact gun or screw driver
- Measuring tape, Sharpee, Allen Wrench, Scissors
- Soapy water and a rag (to clean the panel at the end)
- *Optional* solar panel clips for wire management, zip ties also work.

### Important Note:

For solar panels to be reused, they must have active safety certifications, verified on CEC's solar equipment list. Furthermore, it is recommended for fire safety purposes to not utilize solar panels manufactured before the year 2015. **Reuse projects must utilize solar panels in its original intended use – energy generation.** The safest reuse applications for used solar panels are off-grid and non-dwelling installations. CPSC and Zero Waste Marin highly recommend contacting a professional and licensed installer for expert advice and to ensure safety. For more details on safety and compliance, refer to the [Department of Toxic Substances and Control's Solar FAQ webpage.](#)

### Step One: Acquire Used Solar Panel(s)

The California Product Stewardship Council has a [Solar Reuse Resource Map](#), which lists solar reuse resources including recyclers, thrifts, installers and more. Zero Waste Sonoma also has a list of resources for household hazardous waste, including solar panels. Local reuse stores like Recycle 1234 offer refurbished used panels, with guaranteed quality. Online resources for finding used panels include Fabtech, Rheaply, Craigslist, ebay and other online secondhand marketplaces. You can always reuse your own used panels too!

### Step Two: Acquire a Used Table or Legs

For this Case study we are using a sit stand desk we got for free from Craigslist. The surface is the worse for wear so it's a great candidate, but this would work with lots of existing tables or legs. *Note: Ensure that the surface of the existing table is smaller than the solar panel frame and make accommodations for the inverter and wires.*

### Step Three: Assembly

Easy version for sit/stand desk:

1. Clean solar panel and surfaces of desk
2. Measure the desk top
3. Measure to underside of the solar panel and mark the desk size underneath
4. Place VHB tape on top of desk
5. Align solar panel and press.
6. Use cord clips or other means to neaten up the wires. **WARNING:** Do not cut the wires!  
The solar panel is active and will generate power if placed in the sun.

That's it! Enjoy your new reused solar panel table! For a video version of this case study visit: <https://youtu.be/FyZ8MvfKDEI>

**IMAGES**

Image 1 : Used Solar Panel and Used Desk



Image 2 : VHB adhesive tape and other tools used.



Image 3 : Old top removed, and prepping for assembly

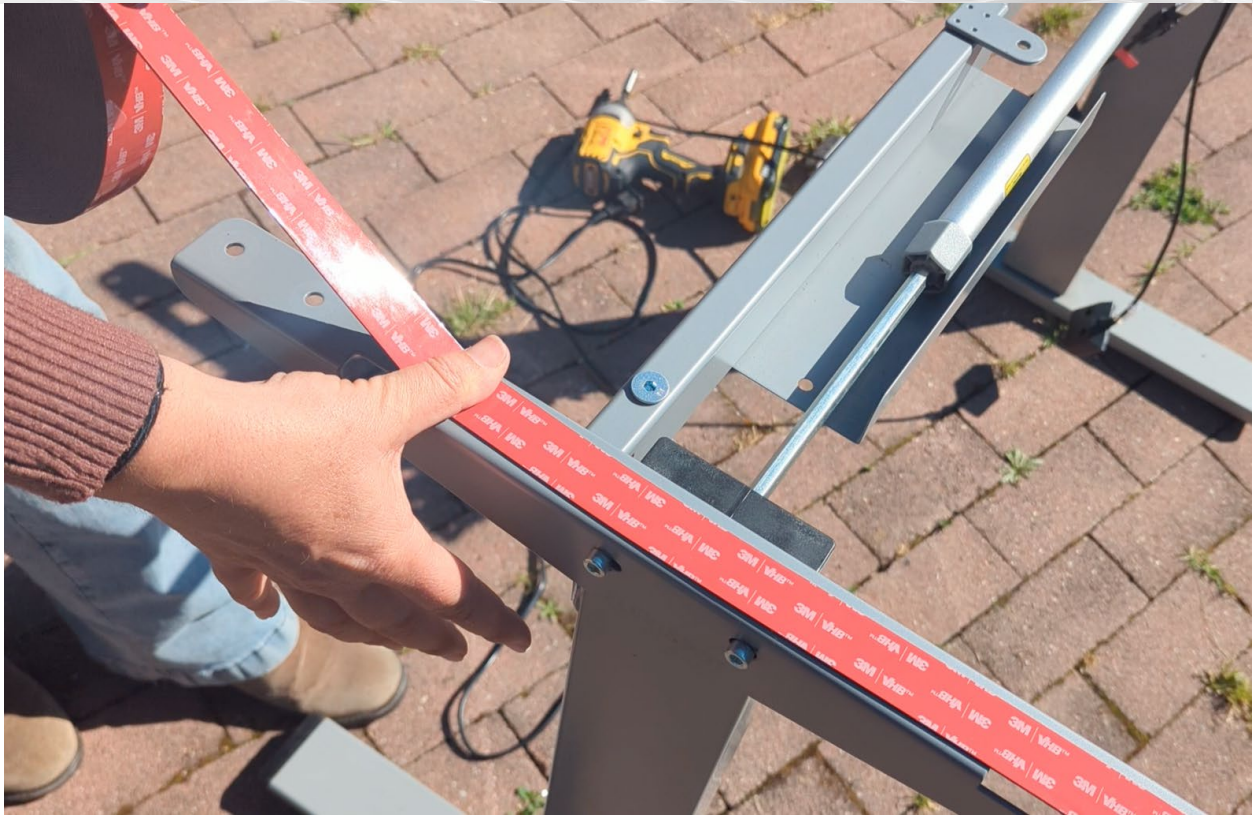


Image 4 : Final Table

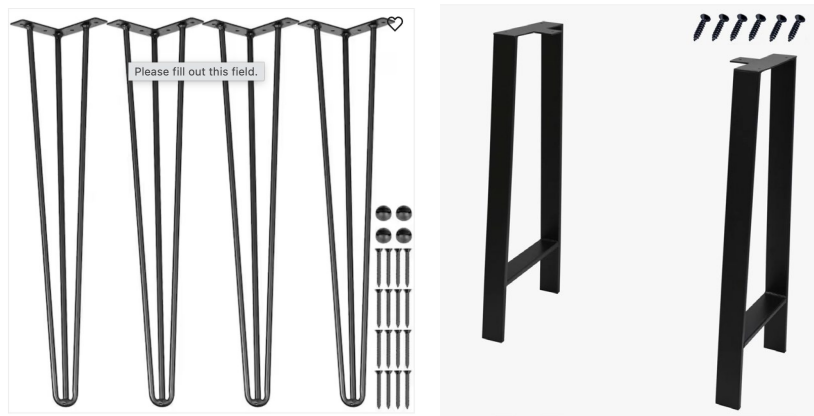


**Inspiration for Other Found-item Solar Panel Tables:**

Option 1 : Solar panel desk using metal shelving



Option 2 : table legs + plywood options:



Cut plywood to fit inside solar panel, attach legs to a scrap piece of plywood, use VHB tape to affix plywood to solar panel, OR 1/2" screws through the frame into the plywood.

Option 3: Free desks and tables on craigslist that would work



Red would look classy with a solar panel top.



Coffee Tables are a great option too.

**Or, make your own legs out of conduit or custom welded steel:**



Image above shows how to make table legs out of conduit  
(image credit and full video: <https://www.youtube.com/watch?v=cTijdfHAz2k> )



Image credit for welding video: <https://www.youtube.com/watch?v=4pxd6Fdemw>  
Note: Making your solar panel table so it is usable as a solar panel is more complicated, but not impossible. This video is a great place to start.