

New Gosun Solar Cooker Is Bigger And Better And Still Absolutely Brilliant

Source: treehugger.com

Published: April 20, 2015



© GoSun

[Lloyd Alter](#)

When I [first saw the GoSun stove](#) I thought it was absolutely brilliant. Inventor Patrick Sherwin took an existing idea for concentrating solar energy, the evacuated tube hot water heater, and adapted it to cooking. But I noted that you have to modify the way you eat too; "Instead of a big solar oven that adapts to our conventional idea of cooking, The GoSun requires a bit of adaptation of our diet. But that really is a feature, not a bug; it can be a healthier diet with less food waste."

After my review the [GoSun people sent me a stove to try](#), and former TreeHugger foodie [Kelly Rossiter](#) adapted some [Fuchsia Dunlop](#) Chinese food recipes for it. But not everyone has Fuchsia on the shelf or Kelly in the kitchen, and there was a lot of interest in a larger oven that could cook more conventional foods.

GOSUN MATERIALS

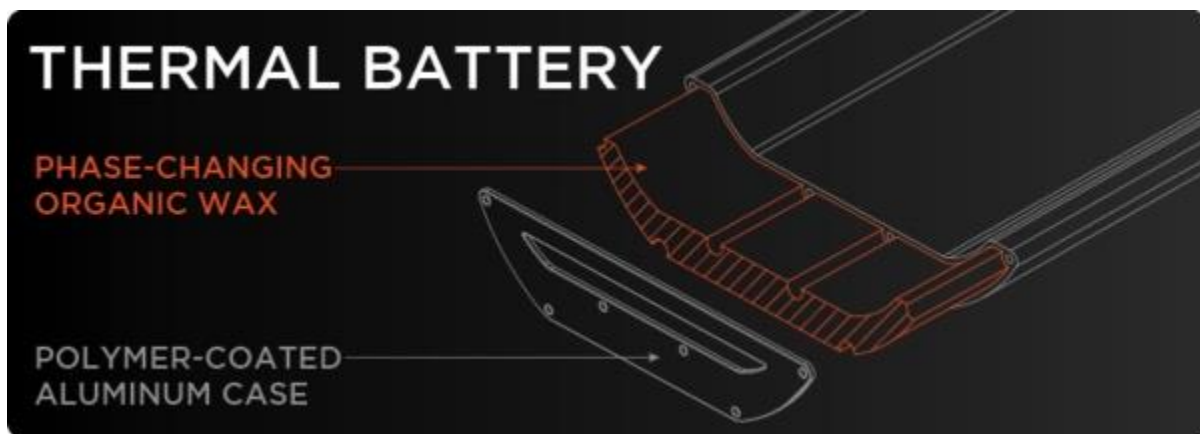
- 1) Stainless Steel Insulated Lid
- 2) Enamelized Steel Pans
- 3) Aluminum Tray
- 4) Soft Touch Rubber Grips
- 5) Borosilicate Glass Vacuum Tube
- 6) Mirrored Aluminum Reflectors
- 7) Rubber Feet
- 8) Stainless Steel Frame



© [GoSun](#)

So now they have introduced a new cooker with a much larger 5" inside diameter evacuated tube that they had custom made just for cooking. It's big enough that you can put in trays, racks and a whole bird. It also comes with a substantial and solid base, cover and optional stand so that it can operate like a real backyard barbecue. Almost all the limitations of the previous design have been basically designed out.

Cooking with the GoSun is a lot healthier than cooking with charcoal, and better for the environment than cooking with gas, and we are not running out of sun anytime soon. (Running out of propane in the middle of cooking is a serious pain.) However the sun doesn't always shine, so they have actually [invented a solar battery](#) that is full of a phase-changing organic wax material; Stick it in the GoSun for two hours and it will "autonomously cook a meal for eight people. For example, this could be four pounds of chicken or four loaves of bread."



© [GoSun](#)

“Using the latent-heat capacity of our proprietary PCM (short for Phase Change Material) encapsulated within an aluminum extrusion, the Thermal Battery is able to store much more energy than a material with only sensible heat (such as concrete or sand). Through the process of melting the PCM at roughly 310°F or 155°C, the Sun’s energy is stored for use later in the day. Capable of reaching temperatures over 400°F or 205°C, this heat is fully insulated while left inside the evacuated tube chamber.”

This can work only because the vacuum tube is such a good insulator.

GoSun has worked hard to turn an idea that did have limitations into one that can be used for almost any kind of cooking. It is a sort of steaming, so you won't be doing conventional barbecued burgers and steaks, but hey, we eat too much of that stuff anyway. You can still bake, roast, steam and boil and that's a lot healthier than grilling. This is a big step forward in the world of solar cooking.



© [GoSun](#)

There is another side to the GoSun story; [empowerment](#). They have taken the GoSun on the road to Guatemala, and have been teaching the locals how to use the stove, to help eliminate the second leading cause of death, smoke inhalation related illnesses. They are part of the [Global Alliance for Clean Cookstoves](#) to help the 3 billion people on earth who cook with dirty fuel sources.

It's on [Kickstarter starting today](#), and you can watch the meter go up at about \$500 per minute; I bet it blows through its target by tomorrow. And well it should; I am often appalled at what goes viral on crowdsourcing sites but GoSun already have a great product and track record, and this just makes it so much better. If I sound over the top about this, it is because I am; I really believe that it is revolutionary and brilliant.
