

Case Study

Traveler's Choice Solar Bag



The Challenge: Bring new excitement and solar capabilities to traditional backpacks and travel bags.

The Solution: Design stylish solar bags that power handheld devices from the sun—and on the go.

Traveler's Choice, one of the world leaders in fine travelware, selected Konarka Technologies Power Plastic[®] as the key technology behind its first-ever selection of solar bags. Lightweight, efficient, durable, and flexible, Power Plastic is the right material for briefcases and backpacks that can charge cell phones, iPods, digital cameras, and other mobile devices.

Travelware leader Traveler's Choice prides itself on being ahead of the curve with innovations and enhancements for its extensive line of practical, attractive, and advanced travel goods—from suitcases to briefcases to duffels and more. Encompassing Traveler's Choice, Coleman, Pacific Gear, and other leading brands, Traveler's Choice calls itself "the trusted choice in travelware." In 2009, company leaders began exploring the possibility of incorporating solar power in a bag. They were intrigued by the potential of Konarka Power Plastic[®] and felt that its unique qualities made it a good match for use in innovative travelware.

The right material for a pioneering bag

"The Konarka material is light, more like fabric," says James Lin, chief operating officer of Traveler's Choice. "It's checkpoint-friendly, so it goes through airports smoothly. It's lightweight. And it's durable." All of these qualities and more led Traveler's Choice to create prototype bags integrating Power Plastic and the associated electronic components necessary to charge cell phones and other handheld devices from solar power. There are other bags that use traditional solar panels, but they are specialized, heavy, and not appropriate for

the mass market. With its new bags, Traveler's Choice is introducing an innovative, next-generation of travel bags—all fueled by Power Plastic.

Simple handling and fabrication

Fabrication was simple, thanks to the inherent simplicity of Power Plastic. "We found that Power Plastic was extremely easy to work with during fabrication," says Lin. "No other solar material is as lightweight and flexible. Plus, it looks great, merging easily with fabric designs." It's a telling fact that Traveler's Choice required no special assistance or consultation from Konarka when designing and constructing its first bags.

Traveler's Choice solar bags integrate panels of Power Plastic, a built-in capacitor that stores electricity on board, and an energy meter. Under full sun, a Traveler's Choice solar bag can charge a cell phone completely in two hours. Or it can be used to trickle charge devices, extending their battery life. And the bag can convert ambient and angled light into power, thanks to the unique qualities of Konarka Power Plastic.



Traveler's Choice solar bags incorporate all the elements necessary to charge handheld devices with solar energy.



The Traveler's Choice Solar-Powered Computer Case won a Silver Award at the 2010 Travel Goods Show.



Traveler's Choice continues to explore other concepts for solar-powered bags, including a cooler.



Konarka Power Plastic brings new solar capabilities to a wide range of travelware.

The Results?

The response was overwhelmingly positive, right from the start. "The reaction from buyers has been phenomenal," says Lin. "It's a new, pioneering bag—and a very exciting product." And by combining technology with style, the solar bag attracts a broad range of consumers, from eco-conscious travelers to technology-savvy businesspeople. Initial concept designs include briefcase/backpack and duffel bag, with a cooler and other designs in the works.

For now, the Traveler's Choice Solar-Powered Computer Case has already won a Silver Award at the industry-leading 2010 Travel Goods Show. The bags will be featured in the SkyMall in-flight magazine. And they'll be broadly available at retail outlets in summer, 2010.

Traveler's Choice sees these bags as an initial offering in a new category of travelware. As travelers become even more dependent on their handheld devices, they'll be looking for new, sustainable ways to charge them—wherever they may go. In the future, ever-increasing levels of efficiency will let Power Plastic charge more power-hungry devices, such as laptops. And Traveler's Choice also anticipates integrating Power Plastic into other types of bags, such as emergency kits.

Why Konarka?

Konarka and Power Plastic provide the right combination of capabilities necessary for Traveler's Choice solar bags:

- **The right solar material.** Power Plastic's organic photovoltaic technology provides the light weight, flexibility, durability, and efficiency required by Traveler's Choice solar bags. "Other types of solar material are too heavy," says Lin. "But Power Plastic is light, flexible, and much easier to work with." Plus, Power Plastic is available in quantity, simple to integrate into wide-ranging bag designs, and effective even in indirect lighting.
- **A compelling look.** Konarka Power Plastic also meshes well with the fabric used in the initial bags and integrates seamlessly into the overall design. Its unique appearance makes it attractive in a high-tech kind of way, one that consumers find intriguing and distinctive.
- **A solid partnership.** "Konarka was very helpful to work with," says Lin. Konarka answered all questions and provided the material and expertise that Traveler's Choice needed to create its innovative solar bags.

Find Out More Today

Traveler's Choice solar bags are just one example of the many wide-ranging, innovative product designs to integrate Konarka Power Plastic. To find out more, call Konarka at +1-978-569-1400 or visit www.konarka.com.