

AUSTRALIAN SOLAR QUOTES

The Past, Present And Future of Portable Solar Energy



The "100% renewables" movement worldwide is rapidly advancing thanks to cities, companies and communities pursuing the goal of clean power. Renewable sources of energy have finally become cost-competitive with fossil fuels, and are slowly becoming mainstream sources of electricity around the world. Similarly, distributed renewable energy is growing fast in a bid to close in on the large energy access gap.

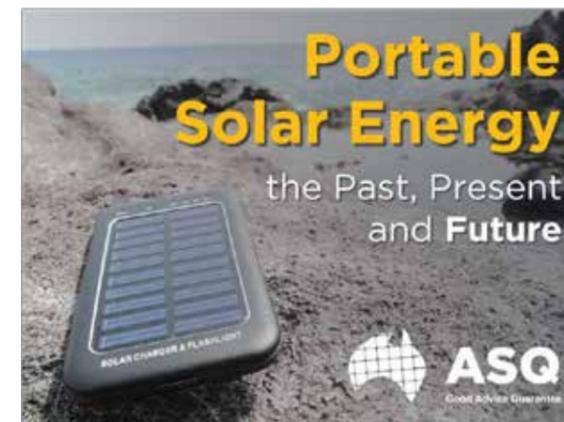
Here in Australia, the fossil fuel market is notoriously difficult to challenge due to its economic dominance and strong political support. That said, portable solar energy is a force to be reckoned with, with the technology already a realistic energy source replacement for many Australians.

Indeed, portable solar has advanced greatly from the ill-designed and inefficient devices of a few years ago, which I think was more of a gimmick than an effective and reliable source of energy for day-to-day use.

With constantly improving manufacturing processes, solar cell efficiencies and battery storage technology, portable solar chargers and power packs are now a possibility that is not only practical and effective, but affordable too.

Currently, the cost of large-scale solar production has decreased to less than \$1 per watt and an average of about \$5/watt for household arrays. This compares to portable solar costs that still range between \$10-20/watt.

Despite the fact that portable solar demand takes up just a small portion of the overall energy demand, it does fulfill a critical need for particular circumstances - for example travelling, working off-grid or lighting up a small house.



So, What's The Best Portable Solar Energy System When off the Grid?

Portable solar power systems can be used for a variety of purposes, from emergency kits at home to lightweight kits to take with you on adventures miles away from a wall plug; they provide reliable power that is clean, renewable and immediate.

As long as the sun is up, you have power. Portable solar energy kits with lower wattage like the Poweradd 40W Solar Panel can keep your camera, cell phone or laptop fully charged, while larger emergency kits such as the Goal Zero Yeti or Solar Suitcase from Renogy, will help you keep your lights on or even power the inside of a recreational vehicle.

Bigger Panels for Portable Solar System Setups

In reality, portable doesn't just mean tiny enough to fit your pocket or backpack. Most kits advertised as portable are actually sold as heavy briefcases or slabs that roll on wheels. So the right solar power kit will depend on the purpose of use, wattage, accessories and adaptors you need, and the amount you expect to carry. One of the recent developments in the portable solar setup market is the design of larger panels that are paired with bigger capacity battery storage systems (normally called solar generators).

These can be used as a microgrid to support the following uses:

- AC (recreational vehicle current) complete with an onboard inverter
- DC (charging batteries, portable devices)
- To support multiple output ports (USB, RV plugs, 12V auto, standard 110V outlet)
- Other charging options (tent or recreational vehicle current, additional battery bank)

Portable solar power kits enable users to plug their devices right into their batteries with their AC power cords just like they would at the office or at home. This makes running gadgets like power tools, electronic devices and simple appliances easy and eco-friendly.

Some portable solar energy systems are so flexible they can be folded, hung up or stowed while on the move. In fact, foldable portable solar panel kits are more ideal for camping, hiking and military use.



(Stephan Ridgway / Flickr)

Why Solar Energy is Vital for Your Next Off-grid Adventure

With the right choice of portable solar energy system, only your imagination limits you. A fully charged portable solar power kit gives you the ability to surf on your laptop under the stars, stay plugged-in without relying on the grid, or even keep your food fresh without having to lug around ice or find power outlets.

Are you planning for a trip around the country? With their ease of use, versatility, portability and weight, there's a portable energy system for everyone!

Darryn Van Hout - Founder & Editor, Australian Solar Quotes Darryn's keen interest in the Australian energy sector stretches over ten years and within that time he has closely monitored the trends, technologies and direction of the Australian Energy and Solar Market. He was drawn to the Australian solar market in 2006 and since then has worked heavily in the field. Over the years, Darryn has partnered with local and global solar energy organisations including the installers on the ground, retailers, manufacturers and other professional industry bodies. This exclusive network combined with his creative and innovated natures has embedded him as one of Australia's leading solar marketing professionals.