

# Portable solar device creates potable water

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Jon Liow

(PhysOrg.com) -- By harnessing the power of the sun, a Monash University graduate has designed a simple, sustainable and affordable water-purification device, which has the potential to help eradicate disease and save lives.

The Solarball, developed as Mr Jonathan Liow's final year project during his Bachelor of Industrial Design, can produce up to three litres of clean water every day. The spherical unit absorbs sunlight and causes dirty water contained inside to evaporate. As evaporation occurs, contaminants are separated from the water, generating drinkable

condensation. The condensation is collected and stored, ready for drinking.

Liow's design was driven by a need to help the 900 million people around the world who lack access to safe drinking water. Over two million children die annually from preventable causes, triggered largely by contaminated [water](#). It is an increasing problem in developing nations due to rapid urbanisation and population growth.



‘After visiting Cambodia in 2008, and seeing the immense lack of everyday products we take for granted, I was inspired to use my design skills to help others,’ Mr Liow said.

Mr Liow’s simple but effective design is user-friendly and durable, with a weather-resistant construction, making it well suited to people in hot, wet, tropical climates with limited access to resources.

‘The challenge was coming up with a way to make the device more efficient than other products available, without making it too complicated, expensive, or technical,’ Mr Liow said.









Mr Liow, and a working prototype of his Solarball, [was featured on ABC1's 'The New Inventors'](#). The product has been [named as a finalist](#) in the 2011 Australian Design Awards - James Dyson Award. It will also be exhibited at the Milan International Design Fair (Salone Internazionale del Mobile) in April 2011.

Provided by Monash University

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