Bubble-wrap device boils water, generates steam

MIT researchers created a low-tech method for boiling water from sunlight, even on overcast days, using bubble wrap, a sponge and a thin copper plate.

United States / October 2016

Using simple materials, easily procured, an MIT-
led (Massachusetts Institute ofTechnology) team of engineers developed an electricity and flame free method ofboiling water. Called a Solar Vapor Generator, the device is inexpensive, quick to buildand doesn't require dir ect sunlight to work. The Generator is able to capture enoughambient light to boil water even on overcast days .

Built from a sponge, thin copper sheet and a spectrally-
selective absorber that absorbssunlight and traps heat, the design team believes the device could be used in a varietyof environments. Potential applications include residential heating, medical equipmentsterilization and wastewater treatment. Development plans for the device includelarger-scale production and further testing.

Other recent advancements in the capture and conversion of sunlight includephotovoltaic
ink that creates energy and graphene-coated solar
cells that generateelectricity from rain. How else could alternative methods of capture broaden the use ofothe r renewable energy sources?

Website: www.web.mit.edu
Contact: georgeni@mit.edu