

Supplementing BWMs power generation system

Ann Makosinski's body heat powered flashlight does not work in temperatures above 50 degrees Fahrenheit. The device does have the potential to be refined for use in our crank handles. Hollow handles could work if the center is cooled below 50 degrees.

Solar panels could either supplement current BWM or take over power generation. In order to supplement power generation, panel must produce at least half of the power requirement to start up the purification process. The panel would need to be fairly inexpensive and the price of the current BWM must also be brought down. It would be expected that the solar panel does not trickle charge.

Pros

- Reduces the amount of power needed to be generated by the hand cranks (tiles or solar panel)
- Water generation is less labor intensive

Cons

- Weather affects the ability to use the device (becomes difficult for women and children to use once again)
- Price of solar panel may take over total product cost (\$100-150)
- Tiles are not OTS components
- Panels are not OTS components
- Not trickle charging will limit time of day use

Risks

- Lacks reliability if the internal temperature of the handle is not reached to produce required additional energy (tiles)
- Increases risk of theft (solar panel)
- Tiles may not prove to be ergonomic in design

- Budget is exceeded in attempt to complete design