

**Project Portfolio**



**Client:** GlaxoSmithKline, Cape Town, South Africa  
**Project Details:** Hybrid solar/heat pump water heating solution to replace steam

1Energy/FreePower designed, supplied and installed a hybrid system to heat process water at GlaxoSmithKline’s Epping, Cape Town facility. As a direct result of this energy intervention, the plant won GSK’s EHS Sustainability award for in 2012.

FreePower’s evacuated-tube solar units efficiently gather solar thermal energy, even in colder winter months. The peak heating capacity of 80kW at GSK saves 60 tonnes of CO2 emissions annually.



Bulk thermal stores feature composite construction and minimal standing losses, providing a reservoir of efficiently-heated water.



Two 37kW high-efficiency heat pumps provide supplementary heating, ensuring that the process water is always maintained at the minimum required temperature regardless of time of day or weather conditions.



Combining solar and heat pump water technologies dramatically reduces electricity and furnace consumption. Freepower's many installed hybrid solutions typically reduce water heating energy costs by up to 80%.



1Energy and Freepower design, engineer and install renewable energy and efficiency solutions in Southern Africa. Enquiries [info@1energy.co.za](mailto:info@1energy.co.za), +27 21 510-8405