## Rejuvalight

## Subscription Based Solar Powered Light & Charger

Unite-to-Light (UTL) is a non-profit organization with the goal to provide light to the most underdeveloped regions of the world. These regions still rely on fossil fuels, such as kerosene, to power their lighting needs on a daily basis. Using these fuels for home lighting is not only a health risk but a safety risk. UTL addressed this problem by making a solar powered LED to light their homes with their first generation devices (UTL-1).

However, just as many regions lack a reliable electrical grid, many are also missing a traditional phone infrastructure. Cell phone towers have taken the place of land lines as a response to the telecommunication demand; cell phone users with sporadic or non-



existent power grids have turned to expensive diesel powered charging hubs to fulfill their electrical needs. UTL's response is Rejuvalight which integrates a USB port to allow users to charge their electronics at home via a rechargeable solar power source.

As the complexity of the device increases, the cost also increases. UTL's Rejuvalight expands beyond charging to include "Pay-As-You-Go" functionality to allow renewal of the device on a monthly basis rather than purchasing the product in a costly lump sum.

The renewal process is simple and works anywhere there is a cellular phone network. During the transaction, the device is renewed for an arbitrary period and usage/performance information is sent back to the server. The device's functionality will continue until the allotted time has expired, and at this point, the device will cease functionality. Rejuvalight's payment system provides a flexible means for low-income users to achieve their lighting needs with minimal upfront cost.

Besides the Pay-As-You-Go functionality, Rejuvalight boasts efficiencies needed in modern battery operated devices. All it takes is a day's worth of sunlight, and Rejuvalight will provide off grid electricity for some of the most electrically isolated places in the world. With the addition of Rejuvalight's novel payment system, lighting and charging will become cheaper and more flexible. Rejuvalight will provide a more economical and environmentally sound solution to the energy problem of the world.