## Solar Panel Phone Charging Stations for Ukraine

## Project Budget

| Item | Quantity Needed | Price per item | Total for Line Item |
| :--- | :--- | :--- | :--- |
| 36 panel solar panel | 20 | 0 (donated) | 0 |
| 12 volt to 5 volt converter with 4 USB ports | 20 | 12.99 | $\$ 259.80$ |
| Silicone adhesive | 20 | 6.28 | $\$ 125.60$ |
| Wire nuts | One pack of 600 | $\$ 16.98$ | $\$ 16.98$ |
| Electrical Tape | Six rolls | 12.59 | 12.59 |
| Permanent Markers | Box of 72 | 54.94 | 54.94 |
| Small Folding Table (used as a stand) | 20 | $\$ 20.75$ | $\$ 415.00$ |
| Shipping tape | One pack of 6 rolls | $\$ 13.79$ | $\$ 13.79$ |
| Bubble wrap (25 ft x 12" per panel) | three rolls of 175 ft | $\$ 22.19$ | $\$ 66.57$ |
| Shipping boxes | One box of 20 | $\$ 116.99$ | $\$ 116.99$ |
| TOTAL EXPECTED COST FOR MATERIALS: |  |  | $\$ 1,082.26$ |
| TOTAL EXPECTED COST FOR SHIPPING (\$264.80 each): |  | $\$ 5,296.00$ |  |
| TOTAL COST OF PROJECT: |  | $\$ 6,378.26$ |  |

**We are planning to make 20 of these units- prices based on manufacturing and shipping 20 units to the club in Ukraine

## Shipping Calculation:

Each 36 cell ( 60 watt) solar panel will weigh between 12 and 20 pounds, depending on the manufacturer. We add in the weight from the folding table ( 2.89 lbs ), the USB port device, glue, bubble wrap, etc ( 5 lbs at most)- we are looking at between 16 and 28 lbs per unit. Shipping estimate is for a box 36 " x 24 " x 5 " that weighs 28 pounds, from 82443 to Kyiv, Ukraine 01001. Shipping costs will vary greatly, so I hope this is a high estimate. I only budgeted one way shipping, assuming we will be able to drive to pick up any solar panels to be converted, and that the fuel and mileage for that would be donated.

