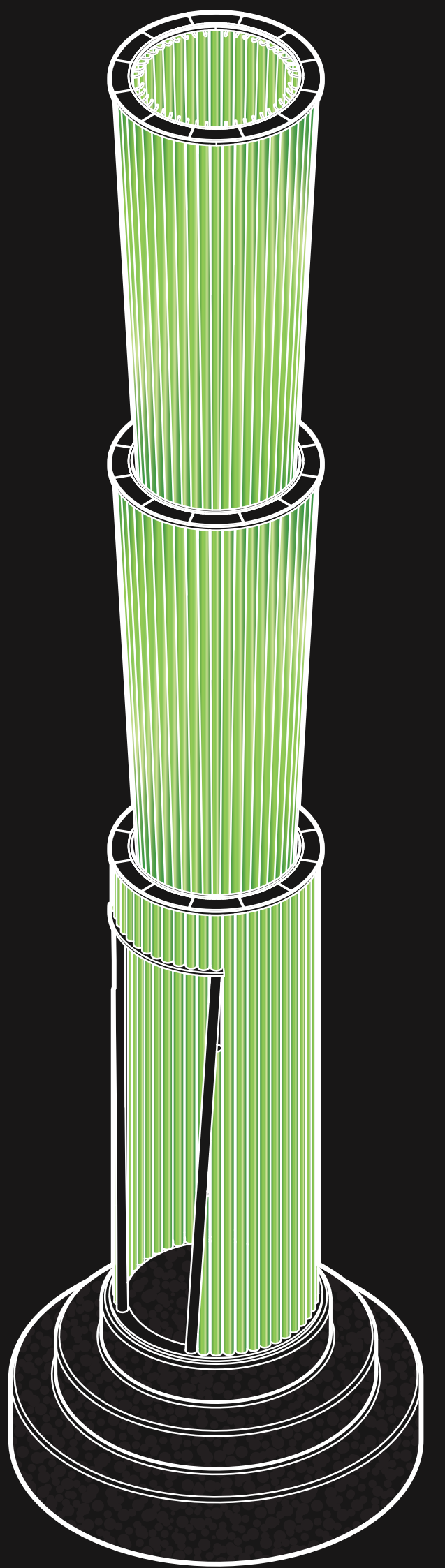


In terms of solar energy, it will be able to create 234 watt with 20% efficient solar panel installed at the top of each tier. The energy produced by solar panels will support the lighting of CACTi at night, giving illumination which enhances the dynamics of the column landscape with lights.

$1.44 \text{ sm} \times 162.57 \text{ watt/sm (20\% efficiency solar panel)} = 234.11 \text{ watt}$



Main output is biofuel gained by algae harvest. To obtain 1 liter of biofuel from microalgae with 50% lipid content, 10 to 20 liters are needed. (5~10% efficiency). We calculated with 7.5% efficiency as below:  
Total volume of algae photobioreactor = 1,830 liters.  
Biofuel extract efficiency = 7.5 %  
 $1,830 \text{ liters} \times 7.5\% = 137.25 \text{ liters of Biofuel.}$

