

-1400kwh/m2 Solar Radiation  
On Lambrate site

According to NASA each m2 on our site receives 5000kwh/yr at 30deg

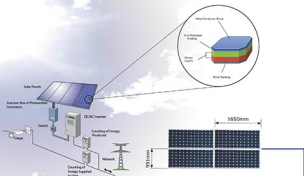
1 m2 of our panel (16.2% efficiency) gets (5000 X 1.162) = 5810kwh/yr

1.65 m2 = 1 panel = 1.65 X 351 = 579.15kwh/yr

4 579.15kwh (1 rotary hydroponic unit) needs 4.8 (1.34 = 3.8 panels needed for 1 unit @ m2)

Panel Product:  
J&Solar company

- Monocrystalline  
- 16.2% efficiency  
- 30% inclination



Capacity:  
50 plants

Dimensions:  
1.93m x 1.21m x .70m

Consumption:  
4.8 kWh/day = 1 unit

Benefits over other hydroponics:  
- Cylindrical planting drastically increases yield/pace (3-5 times)  
- Light in the center means limited waste - it all goes to the growing.  
- Can be easily moved  
- Can be grown without natural sunlight  
For example, Lettuce and Tomatoes can grow in 12 days.



Each person produces 60-80 Kg of organic waste per year (on average)

Every m2 of green surface produces 3-4 Kg per year

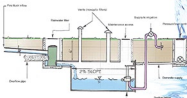
400 Kg of organic waste = 100 Kg of fertilizer material

Average precipitation on site: (NASA) 3.12 mm / day (90.6mm / month)

1 m2 x 3.12mm = 2.8 Liters / m2 of land (day)

Tank size = 4L (max) \* (1/2 of m2)

Uses:  
- local fishing  
- laundry  
- garden use



/ ZERO+ / B.U.D.

/ FALL 2013 / FAULI FEDERICO  
SIMANDVSKY YAFIM  
MONTICELLI DAVIDE /  
CRITICS: SIMONE GOSTRA / ROBERTO MANCINI / TUTOR: VALERIO SIGNORELLI / ROY MASH