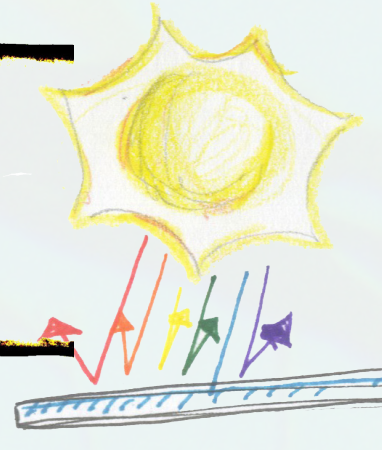


Luminescent Solar Concentrator

Separates a color from white light and harvests the energy from the light photons collected.



Equation -
Output [W/100mm²] x Area [mm²] = Watts
= 7700 KW
= 66.5 MW per day

Cross Section

Energy Systems Diagram

Energy Need of Santa Monica
= 228 MW per day

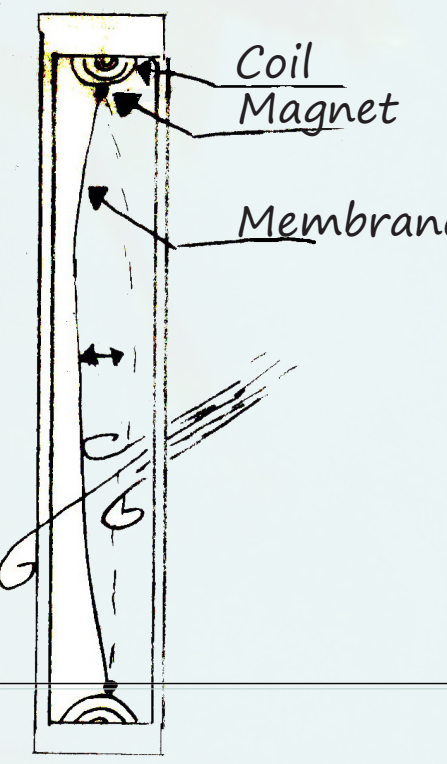
67 MW per day (LSC)
+ 228 MW per day (Wind Belt)
= 294 MW per day - total
= 67 MW per day - extra

Vortex Hydropower

Uses tide motion the same way a fish does to move the bar up and down. The up and down motion brushes a magnet against a coil to create harnessable energy. Is to be tested here for energy efficiency and ecological impact

Wind Belt Turbine

Uses the wind in a phenomena called aerodynamic flutter to pull the membrane back and forth. The repetitive motion brushes a magnet against a coil to create harnessable energy.



Equation -
 $W [j/s] = .0017 \times \text{Area [m}^2] \times \text{Air Pressure [N/M}^2] / \text{Air Temperature [K]} \times (\text{Wind Velocity [m/s]})^3$
= 26400 KW
= 228 MW per day

Breakwater Diagram

