

Bringing Communication to Kenya, The Fighting Koalas

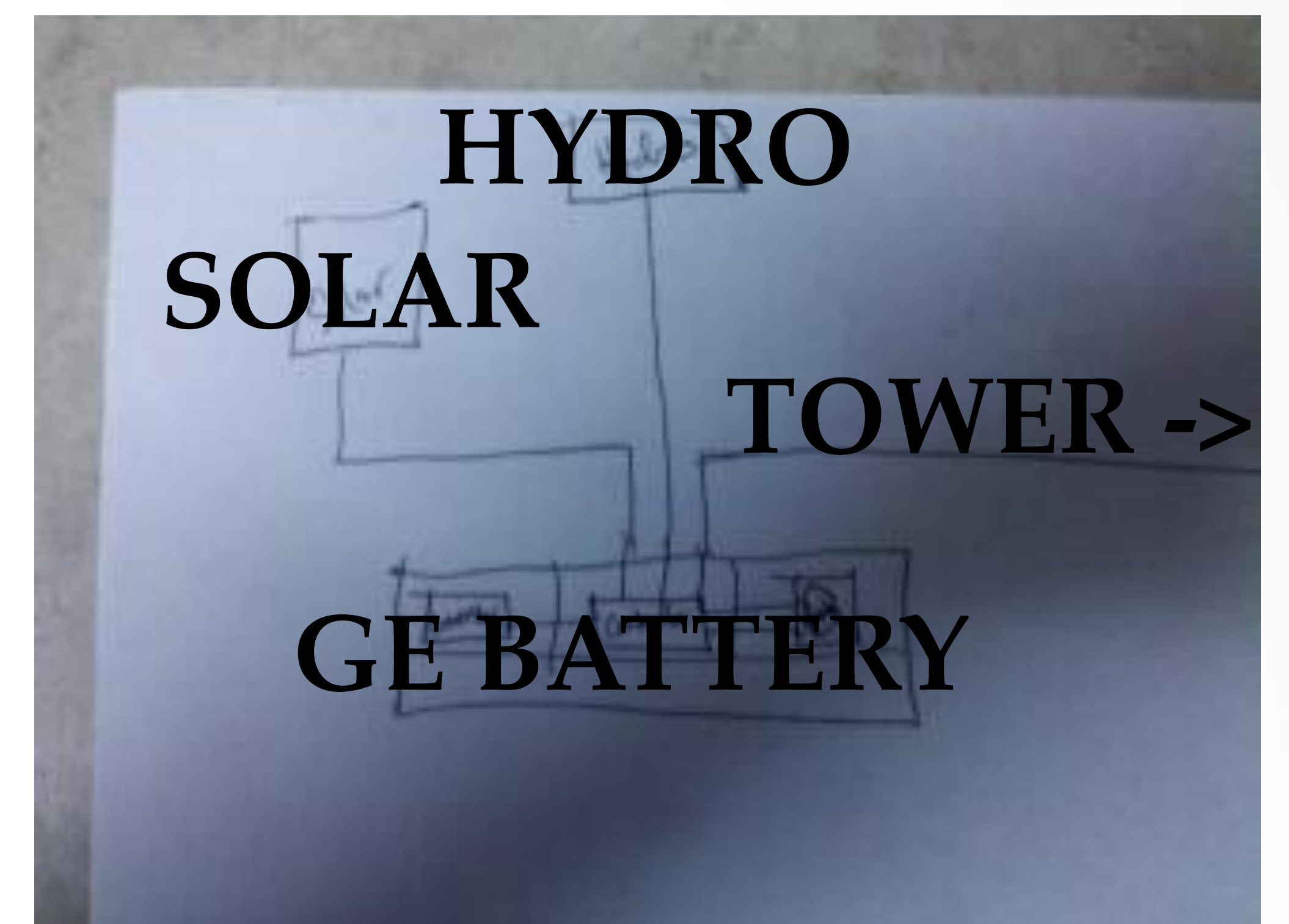
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Buna, Kenya – small village on the Laga Har river, off the grid, limited communication capabilities, introduction of a telecom station will bring new technology and innovation to the area

Initially, solar and wind energies considered, also hydro energy and fuel cells

Researched location, cost, maintenance, life cycle, energy output, etc. Effective solution found



Final Design

Pico-hydro station

Approx. 80% of power
Can produce up to 5 kW
About \$3000, little keep up

Solar panel array

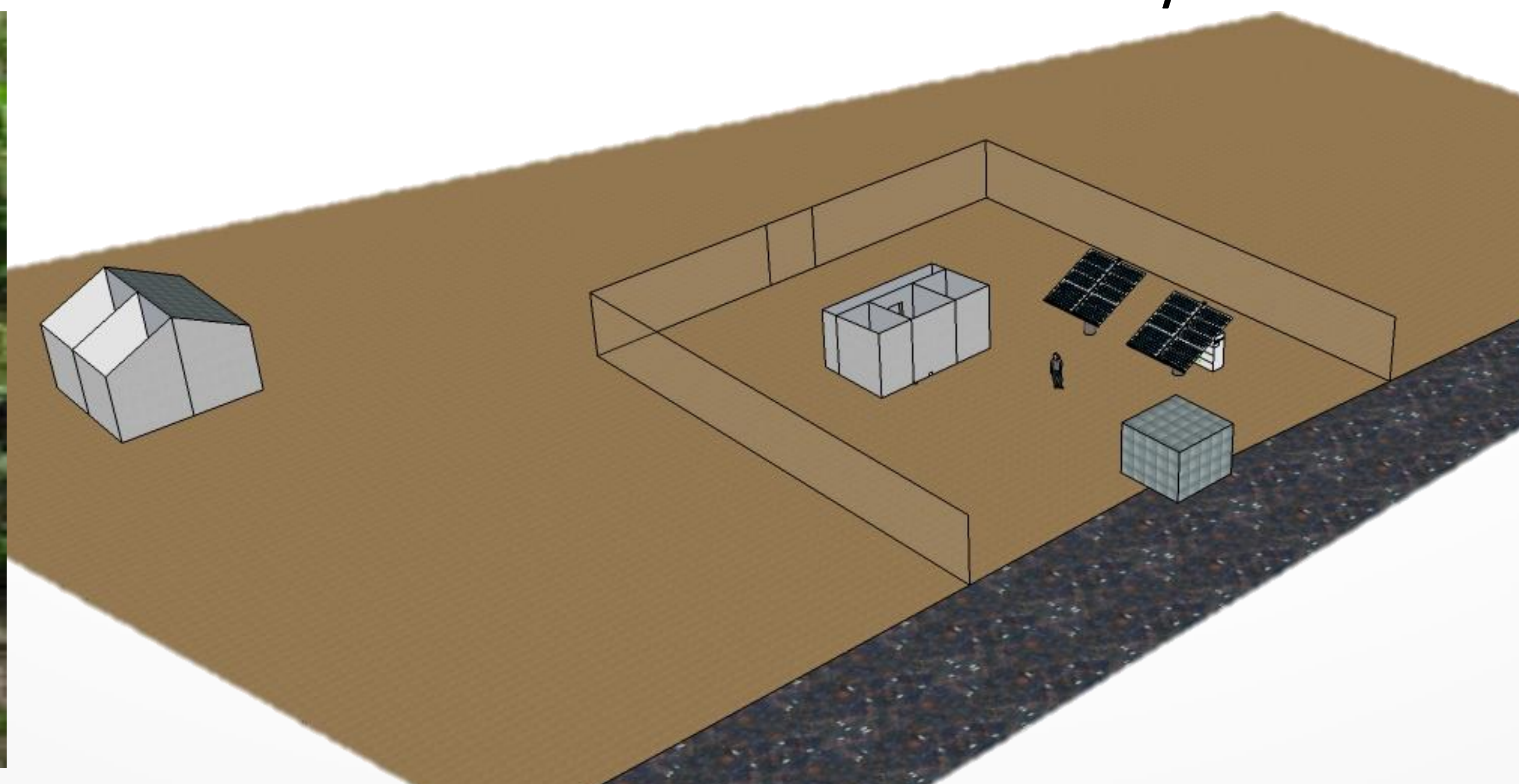
Remaining 20% of power
Can produce around 1 kW
About \$4400 in all

GE Battery

Smallest A3 size
Holds more than enough charge (8kW) to power cell tower

Entire Station

\$100 k - \$250 k
Extra power – cell phone charging station/community center



Not much about GE's prototype battery known, so some assumptions made. The cell tower should be of much help for all surrounding communities and can be made compatible with other cell towers.