

Solar City

Project Planning



Solar City

This project is based on the concept of Solar Energy and how that energy can be efficiently used in day-to-day life.

Creating a concept model is necessary so as to understand the basic need of Solar Energy and how it can be useful on large scale.

Members:

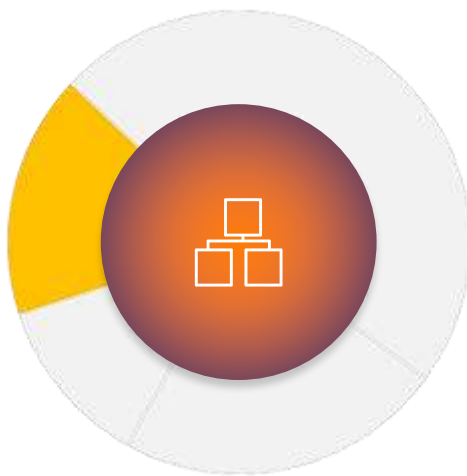
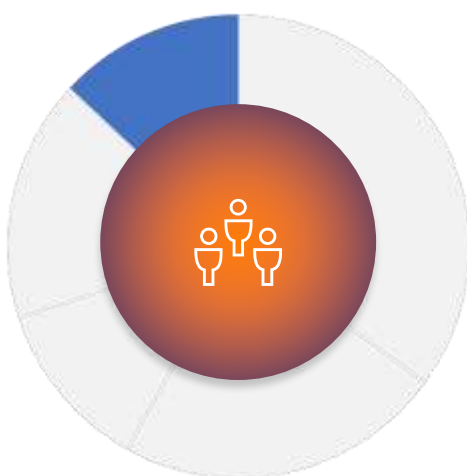
- 1 Pratik Pingale (19CO056)
- 2 Sagnik Roy (19CO061)
- 3 Rohan Dayal (19CO060)
- 4 Tanay Zope (19CO074)
- 5 Yash Tatiya (19CO067)

Project Plan





CONSTRUCTION



35%

**SOLAR
PANELS**



23%

**AC/DC
CONVERTER**



12%

**HUMAN
CONTRIBUTION**



13%

**CHARGE
CONTROLLER**



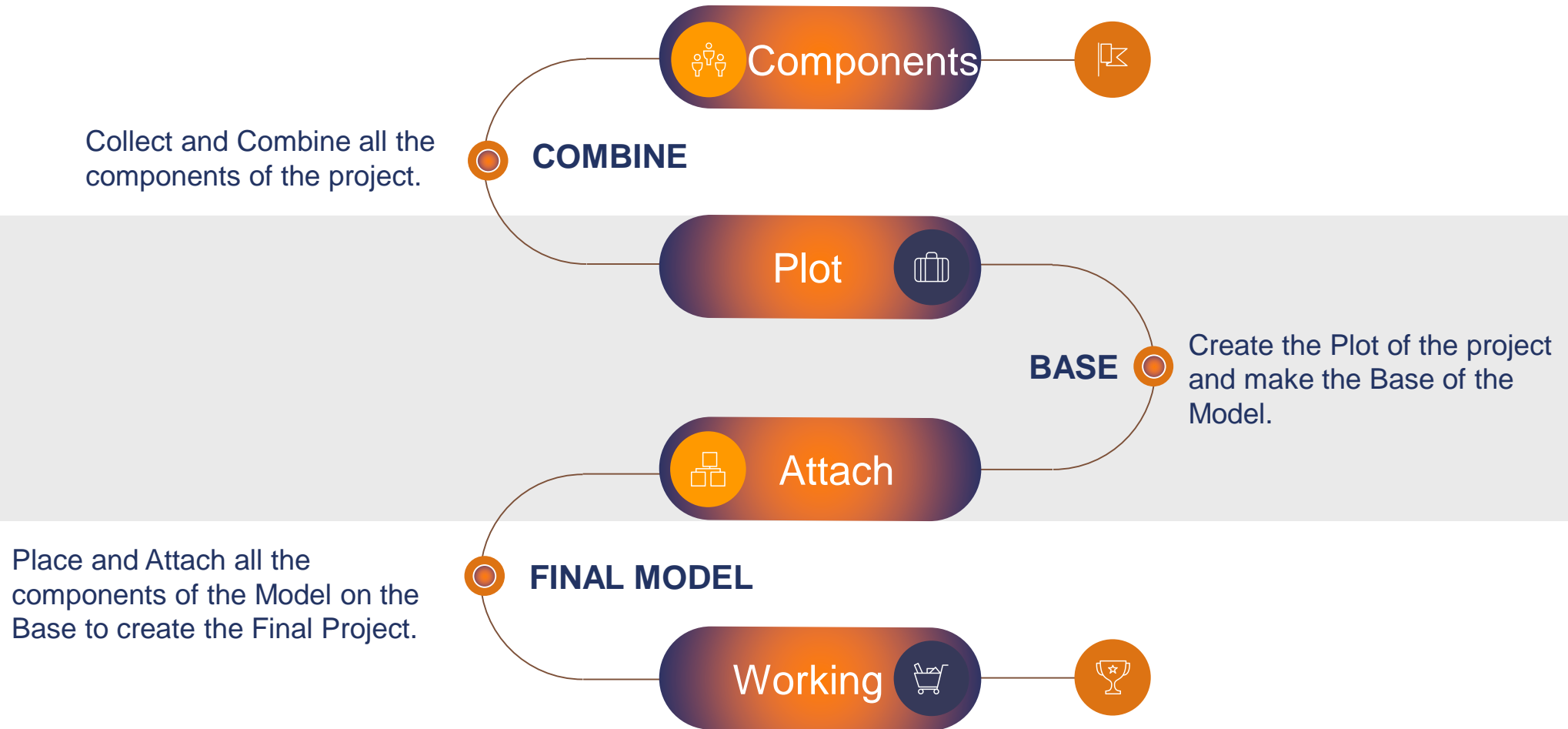
17%

BATTERY





WORKFLOW





WORKING

Collect

Distribute

Use

Using Solar Panels capture the Solar Energy during the daytime.

For individual purpose one can store this Electrical Energy in their home.

This Solar Energy is converted to Electrical Energy in Solar Cells.

This current can now be transferred to all other local suppliers which will use this energy for other purposes.

This Electrical Energy is then stored in Batteries or any other storage device.

For general purpose like Street Lights, this Electrical Energy is transferred to near-by Power Station





SURVEY OF INDIA

INDIAN ENERGY CONSUMPTION



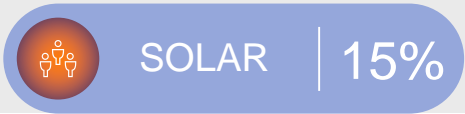
8.8 Mtoe

Nuclear energy i.e.
renewable energy source



31.86 Mtoe

Hydro electric source of
energy is one of the major
renewable energy source



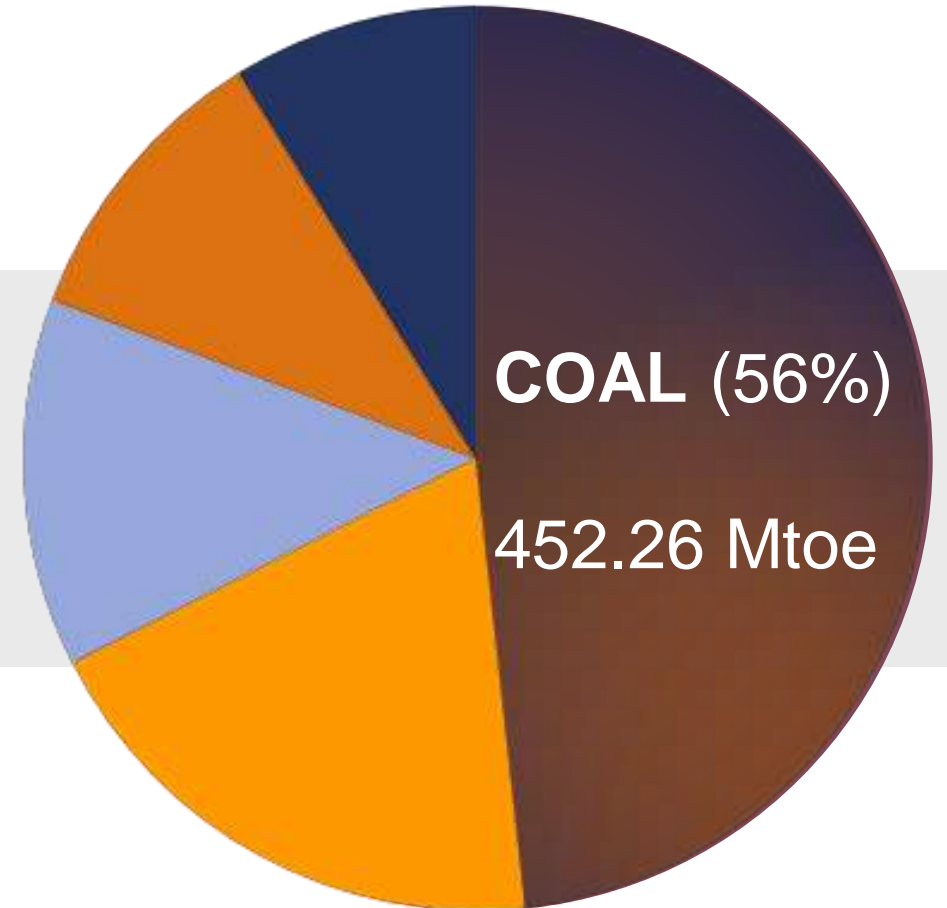
27.69 Mtoe

Solar energy source , the
main focus of our project
currently provides almost
equal supply as hydro
power



289.9 Mtoe

Crude oil and natural gas
i.e. non renewable energy
sources





SOLAR ENERGY USES IN OTHER COUNTRIES



53.26GW North America



55.26GW CHINA



130GW AFRICA



11GW INDIA

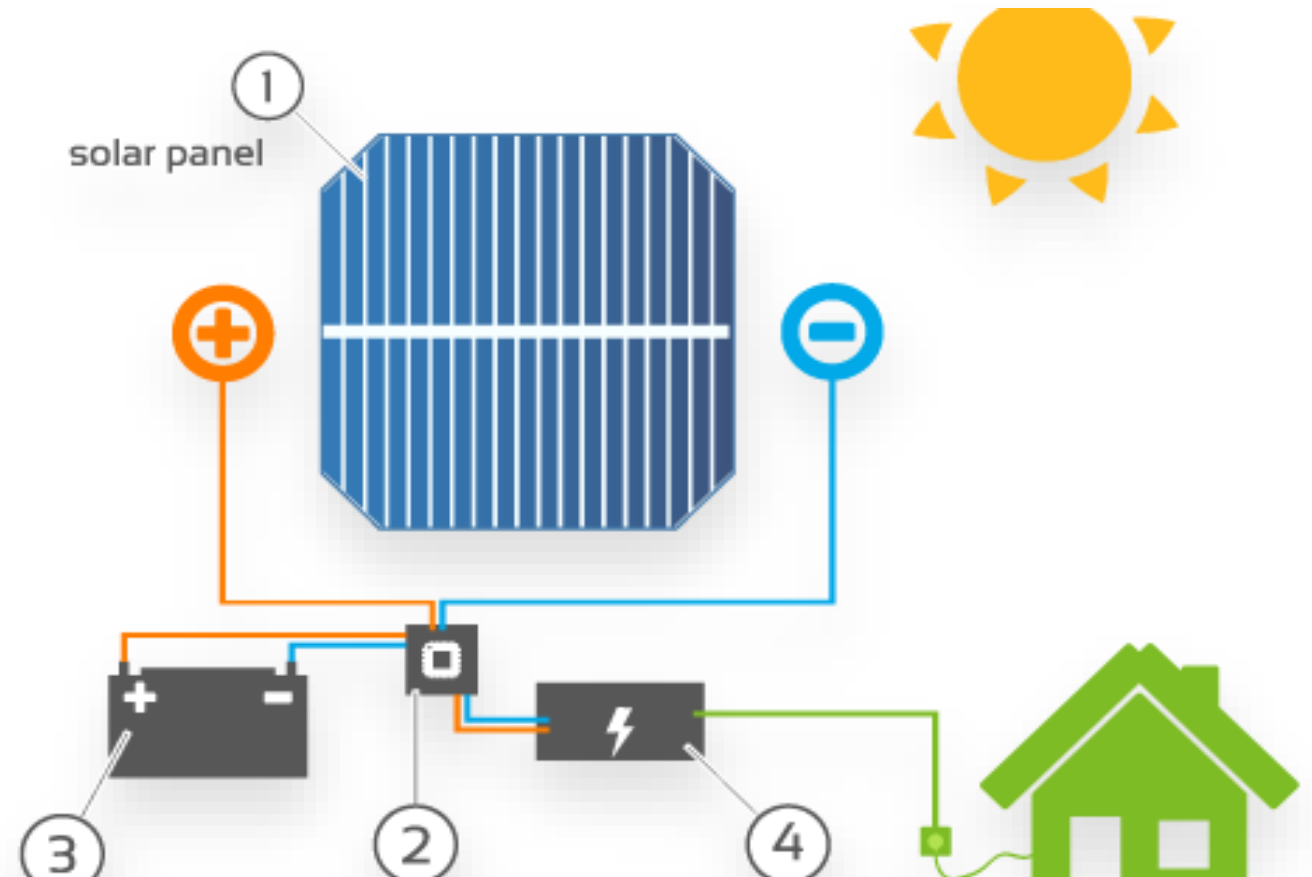


48.2GW SOUTH AMERICA



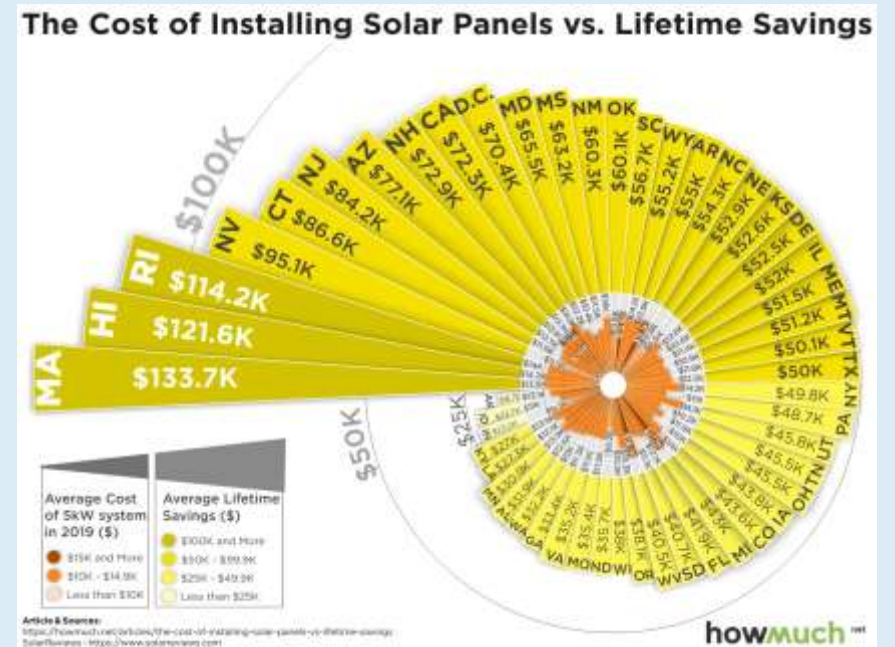
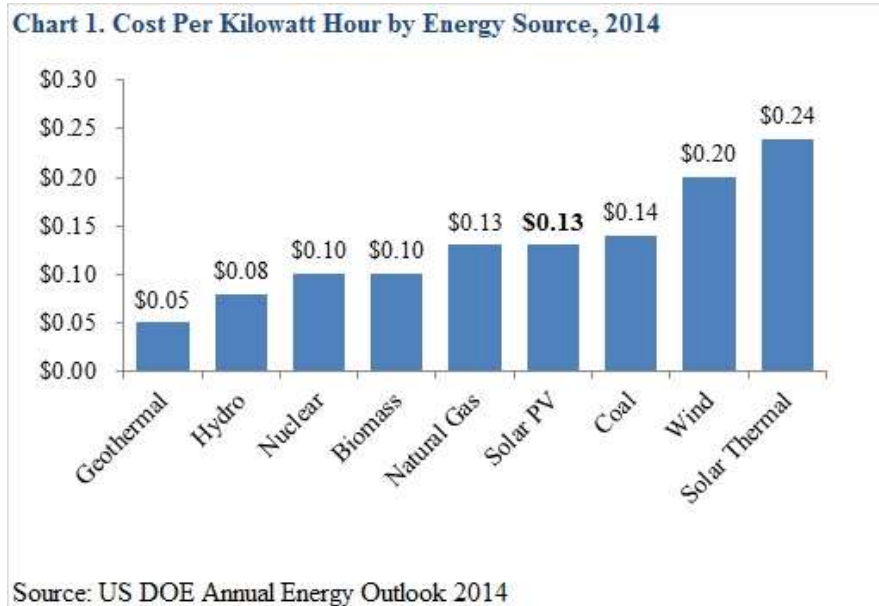
DOCUMENTATIONS AND SOURCES

- <http://www.quora.com>
- <http://www.seminarsonly.com>
- <https://www.encyclopedia.com>
- <https://www.alldatasheet.com>
- <https://mnre.gov.in>
- <https://seci.co.in>



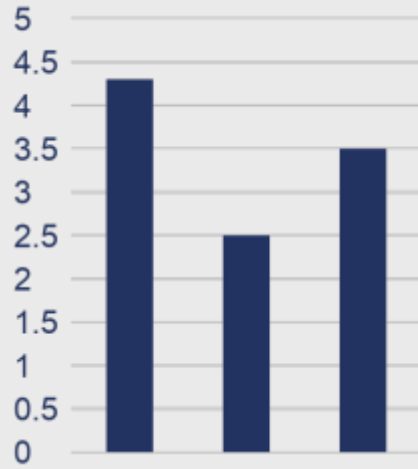
ADVANTAGES

- As it is Renewable energy source it is an infinite source.
- Solar energy is quite Energy Efficient as we will see now.
- As Energy Efficiency increases Cost Effectiveness also increases.
- Use of Solar energy is quite Diverse.
- Effect of Solar energy on our environment is quite low.



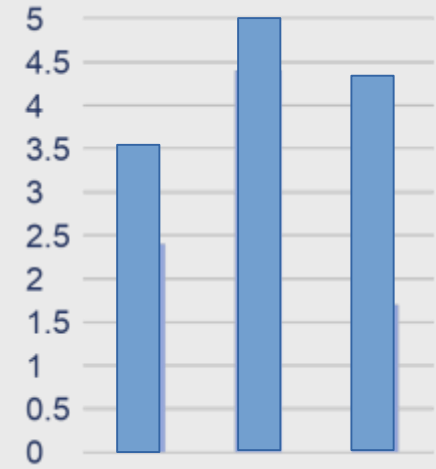


BUSINESS CASE



 **COST**

Per kWh



 **VALUE**

30%

CONCLUSION OF THE PROJECT PLAN

- Successfully reduce the cost of clean energy.
- Set up charging station for fleet of fuel efficient vehicles.
- Accurately brought down homeowners electricity bill per month.
- Serves 14 states, 25000 customers with 25 local operating centers.
- Helps the environment by wasting less energy and requiring less new energy production (energy efficiency).
- Recognized with environmental leadership awards by Aspen Institute and Actera.
- Recognized as the a Green Power Supplier of the year by DOE in 2010.





KEY POINTS



THANK YOU

