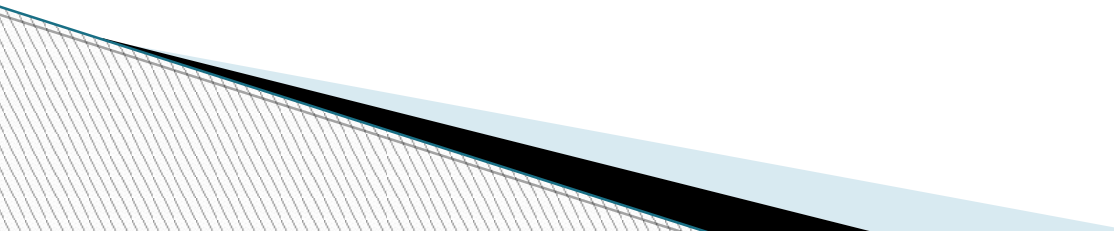


A large, two-story wooden house with a red metal roof. The house is surrounded by lush green trees and bushes. In the foreground, there is a green trash bin and a person riding a motorcycle. The sky is blue with some clouds. The text "SOLAR TREE" is overlaid in the center of the image.

SOLAR TREE

Contents:

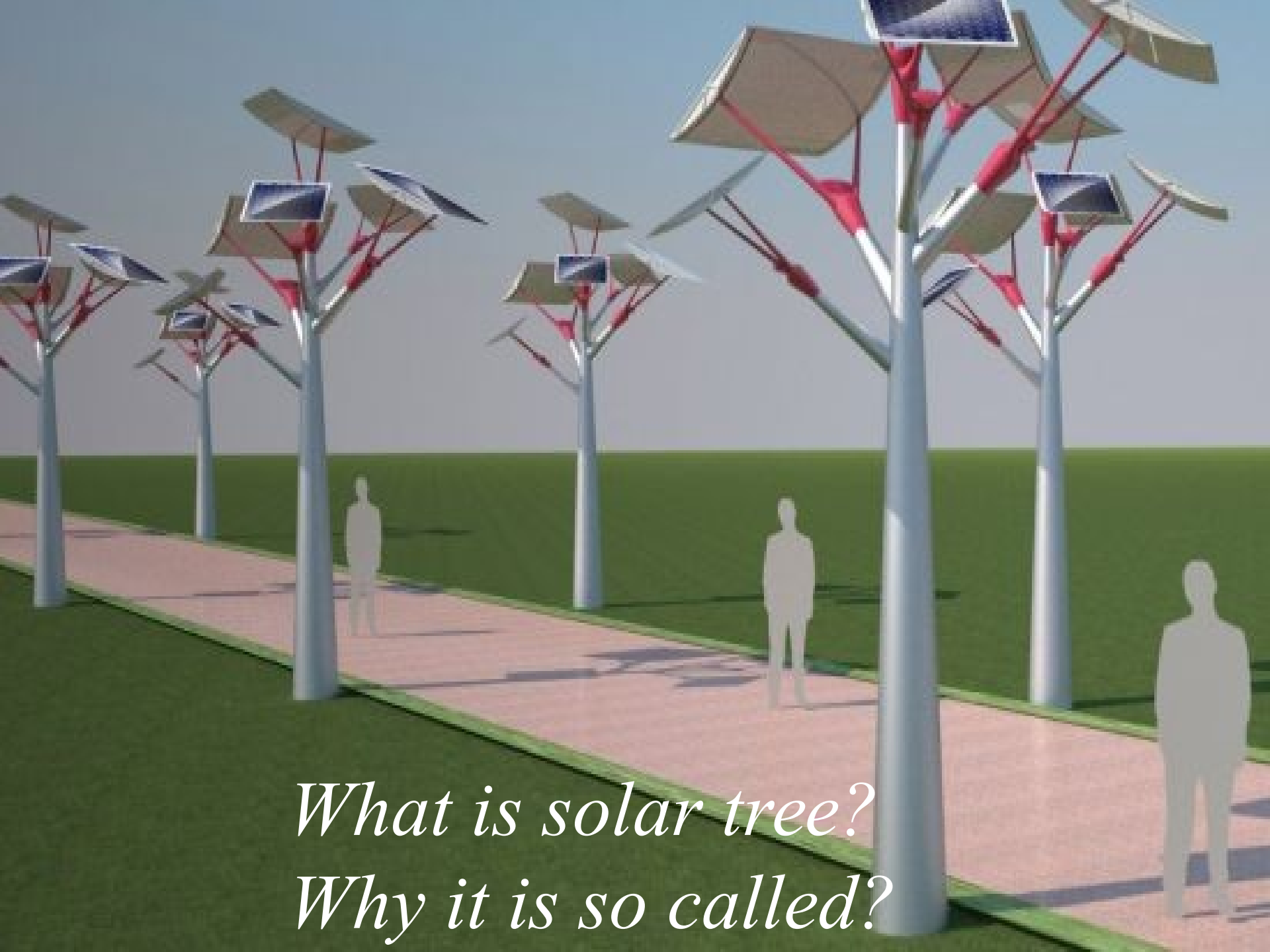
- Introduction
 - What is a solar tree?
 - Why we called it as tree?
 - Construction and working
 - Cost of panels
 - Advantages
 - Challenges
 - Application
 - Conclusion
 - references
- 

Introduction

- *Sun radiates enormous amount of energy to Earth, but that energy is still not properly exploited,*
- *There is no systematic arrangement for usage of solar panels,*
- *Here is an idea to utilize that energy in a proper way.*
- *That is Building the solar tree can be very beneficial for raising awareness about solar energy, its advantages and ways of usage.*

Analogous between “natural tree” and “solar tree”

<i>NATURAL TREE</i>	<i>SOLAR TREE</i>
<i>LEAFS</i>	<i>SOLAR PANELS</i>
<i>STEM</i>	<i>HOUSE FOR WIRES COMING FROM THE PANELS and SWITCHING BOARD</i>
<i>ROOTS</i>	<i>POINT WHERE POWER IS COLLECTED</i>
<i>BASE</i>	<i>POWER HOUSE contains batteries, inverter</i>



*What is solar tree?
Why it is so called?*

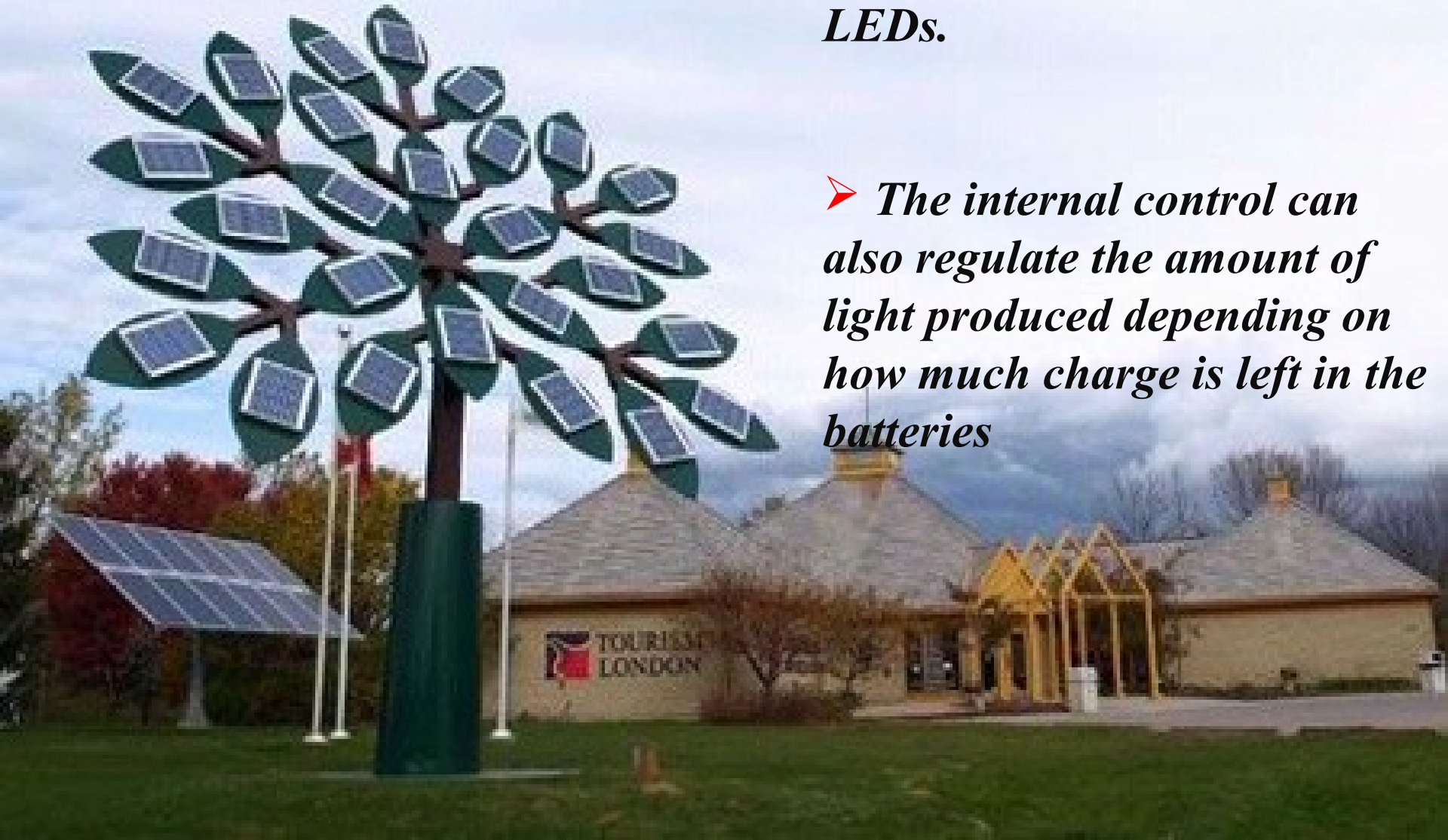


CONSTRUCTION OF A SOLAR TREE

Working:

➤ *The Solar Tree panels charge batteries during the day. At dusk the Solar Tree automatically switches on its LEDs.*

➤ *The internal control can also regulate the amount of light produced depending on how much charge is left in the batteries*



**CIRCUIT WITH
STEPPER MOTOR**

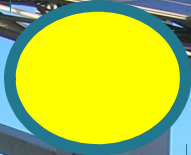


SOLAR PANEL



➤ With the help of this systematic arrangement we can trap solar energy all the time,
That means this device makes the panels to move accordingly to sun movement



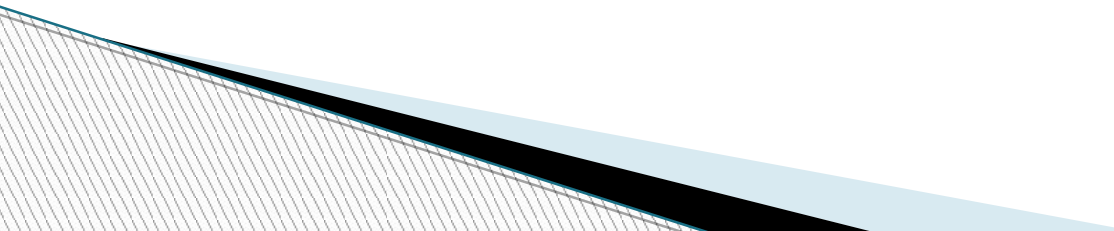


Stepper motors

Bernhard
Ludwig



Cost of panels

- *Depending on type of panel material used ,thickness and wattage ratings, its cost will depends*
 - *In Gujarat: their government is providing panels at **40-50 Rupees/Watt***
 - *In **our state** cost is different at different dealers*
 - *for example its cost is **80 rupees/Watt** nearer to my college*
- 

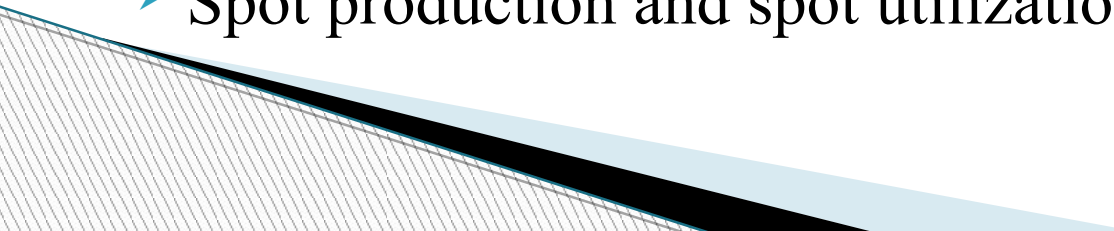
Applications



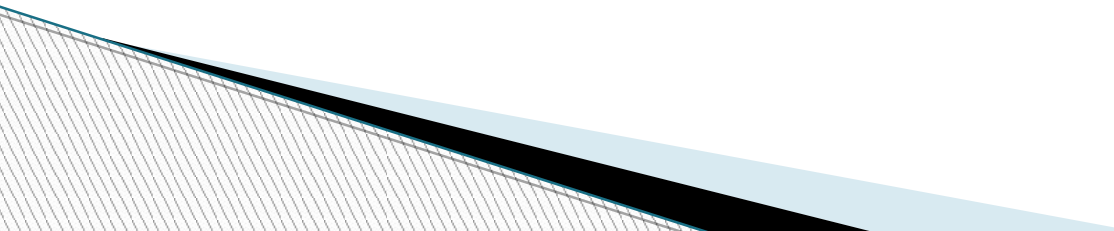




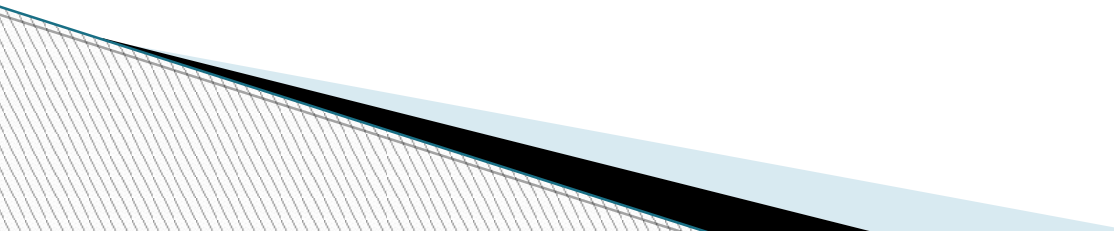
Advantages

- Consumes no fuel
 - Occupies less space
 - Solar Tree is capable of functioning for three consecutive days of cloudy or overcast weather
 - We can create a power generating station by installing these trees in between roads
 - Spot production and spot utilization .
- 

Challenges:

- Initial cost is more
 - regular maintenance is required
 - Only Seasonal power generation is possible
- 

Conclusion

- Possible usage of this type of zero fuel energy sources have the chance of attaining energy independence
 - In India, there are many power plants producing electricity.
 - But if we make a power generating station with this solar trees, There is only need to invest amount for installation and runs at very low operating cost.
 - Occupies less land than normal solar power plant.
- 



Thank You All

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A photograph of a modern urban park. In the foreground, there is a green lawn with a dark gravel path. Several stylized trees with grey trunks and colorful, flat, disc-like leaves in shades of purple, green, and blue are planted along the path. In the background, there are more trees with bare branches and a city skyline with tall buildings under a clear blue sky. The text "Any Queries ?" is overlaid in a white, cursive font across the lower middle of the image.

Any Queries ?