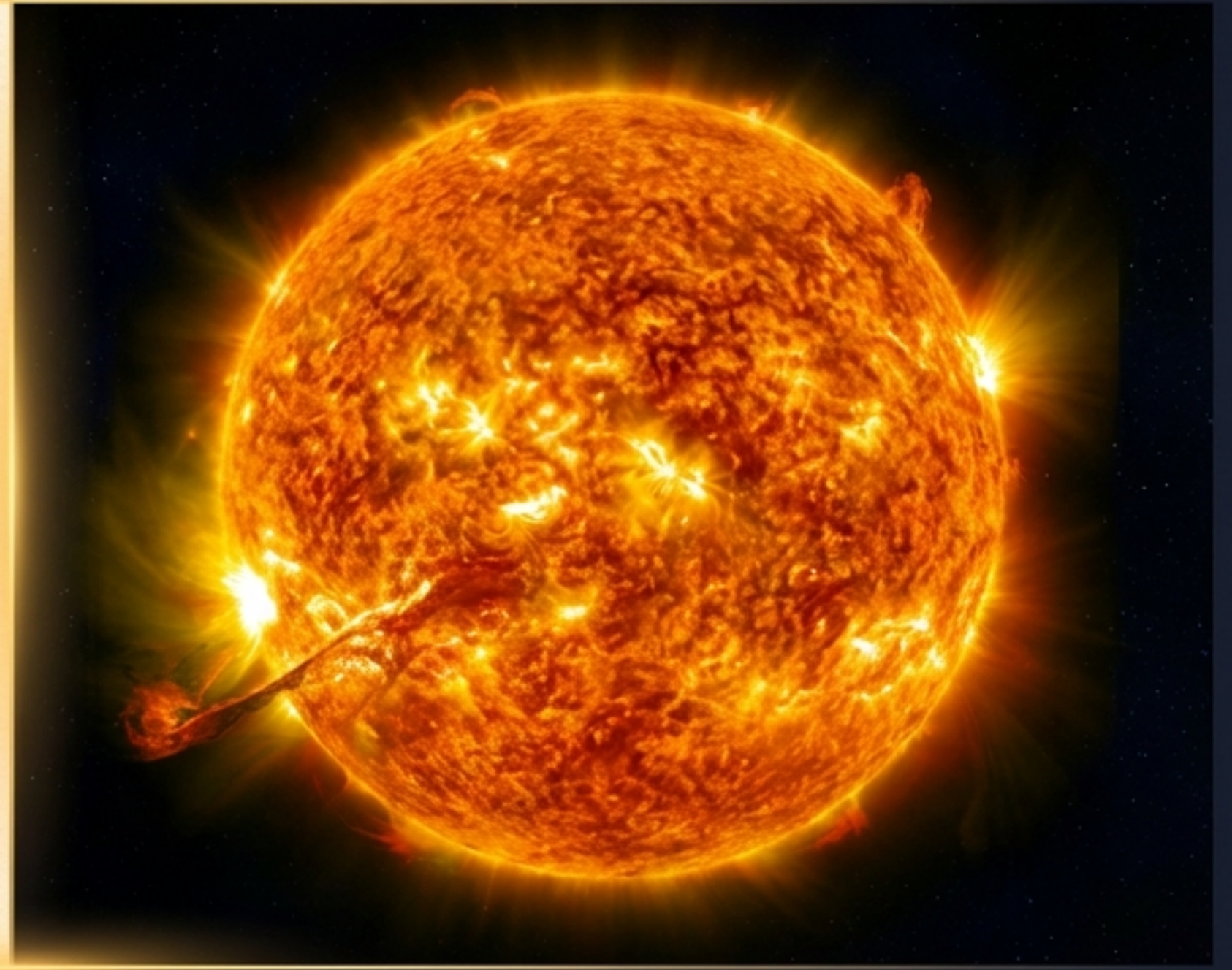


# Sun-Tour: The Celestial Powerhouse

From Ancient Myth to Modern Energy



Exploring the heat that defines our days, the energy that powers our lives, and the language we use to describe it.

# The Contest of Strength: Wind vs. Sun



**The Boast:** I can uproot trees and blow off roofs.



**The Challenge:** Can you make him take off his coat?



**The Outcome:** Warmth persuades where force fails.

**Lesson:** True strength lies in intensity, not violence.

# A Star is Born: The Statistics



**Age:** 5 Billion Years



**Distance:** 15 crore km from Earth



**Size:** 130,000 times the size of Earth



**Surface Temp:** 6,100°C



**Core Temp:** 20,000,000°C

# The Nuclear Engine

Core Temperature:  
20,000,000°C

Surface Temperature: 6,100°C  
(Turns rock to gas immediately)

Like a continuous hydrogen bomb, the Sun releases energy.

Nuclear Fusion:  
Converting Hydrogen  
into Helium

Surface Temperature: 6,100°C  
(Turns rock to gas immediately)

The energy the Earth uses in 100 years is released by the Sun in just **one second**.

# The Challenge of the Indian Summer

**Context:** In India, summers are extremely hot and long.

## The Struggle:

- People feel restless.
- Strong sun-rays cause sun-strokes.
- We are forced to protect ourselves from harsh rays.
- Scorching heat.

# Turning a Bane into a Blessing

- **Solar Energy** = Energy from the **Sun**.



**The Breakthrough:** Scientists have successfully converted the heat from sun-rays into electricity.

We no longer just hide from the **scorching heat**; we tap into it.

**The Blessing**



# Harnessing the Rays: Urban Applications



## Solar Heaters

Used in hotels, hospitals, and factories for bathing, cleaning, and cooking.



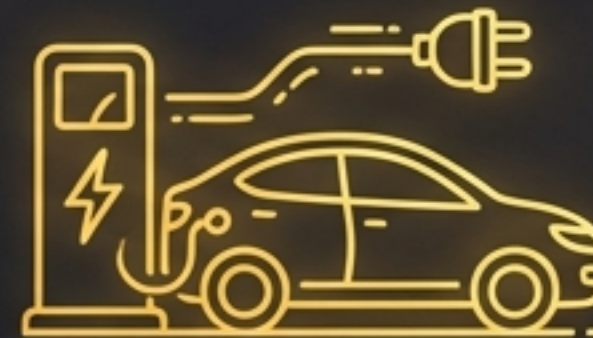
## Illumination

Lighting homes, offices, and streets.



## Electronics

Running television sets and computers.




## Vehicles

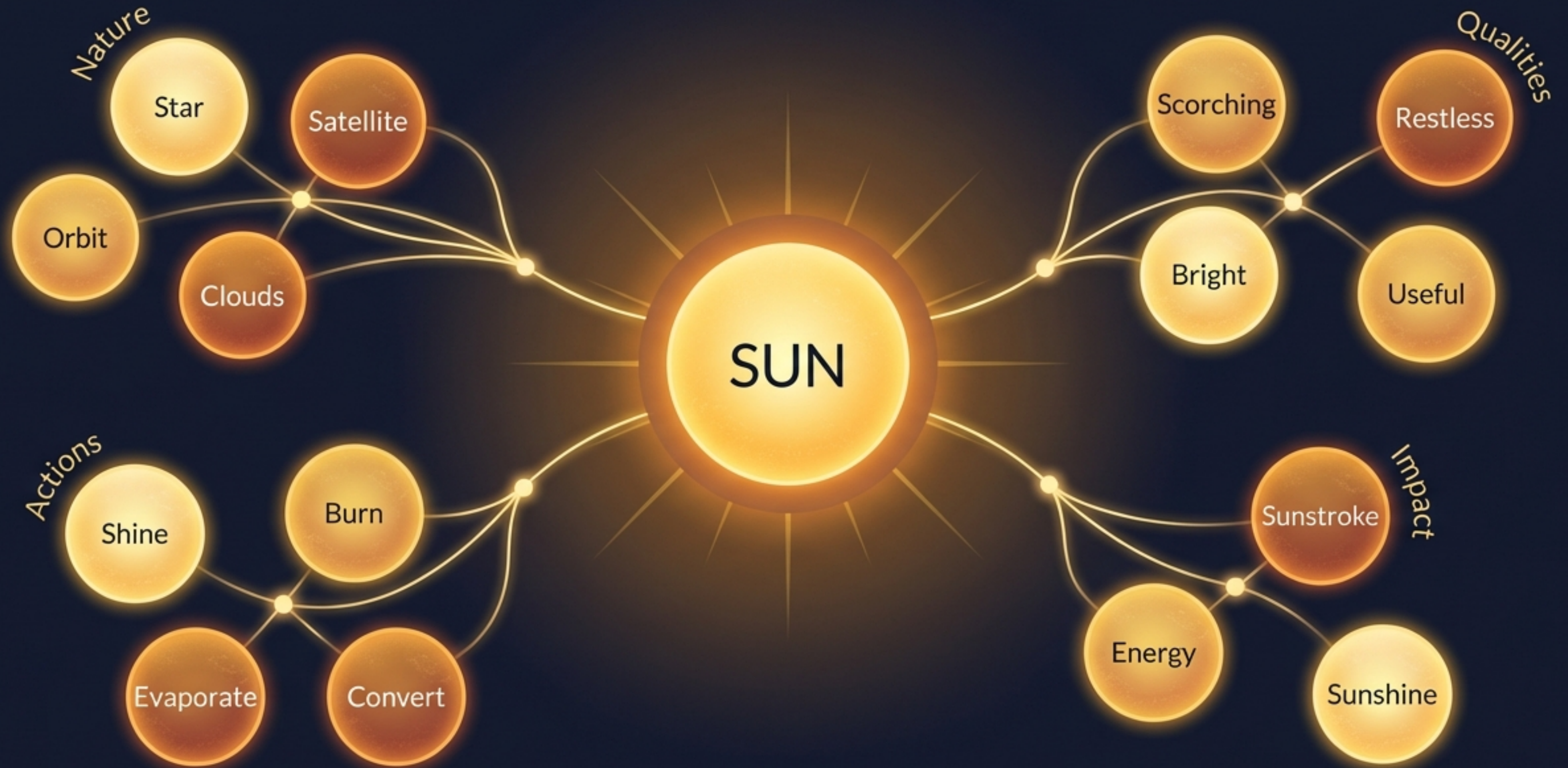
Energy to run transportation.

# The Village Transformation

| <b>BEFORE (The Past)</b>           | <b>AFTER (The Present)</b>          |
|------------------------------------|-------------------------------------|
| No solar energy used.              | People use solar energy.            |
| No electricity.                    | Houses have solar fans & TV.        |
| Dark village streets.              | Streets are illuminated.            |
| Kitchens full of smoke (firewood). | Solar cookers (smoke-free cooking). |



# The Language of the Sun



# Experiences & Actions

Using the Present Perfect Tense

Have you ever visited  
the **Solar Park**?



Manthan has  
**studied** the  
solar system.



Have you **been** unique?



**Grammar Note:** We use 'Have you ever...' to ask about life experiences up to now.

# Solar Facts: True or False?



**FALSE**

Solar energy is the energy from a bright planet. It is a star.



**TRUE**

Solar energy can illuminate our homes.



**TRUE**

Scientists convert the sun-rays into electricity.



**TRUE**

Food can be cooked with energy from the sun.



**FALSE**

The sun is the only source of energy.

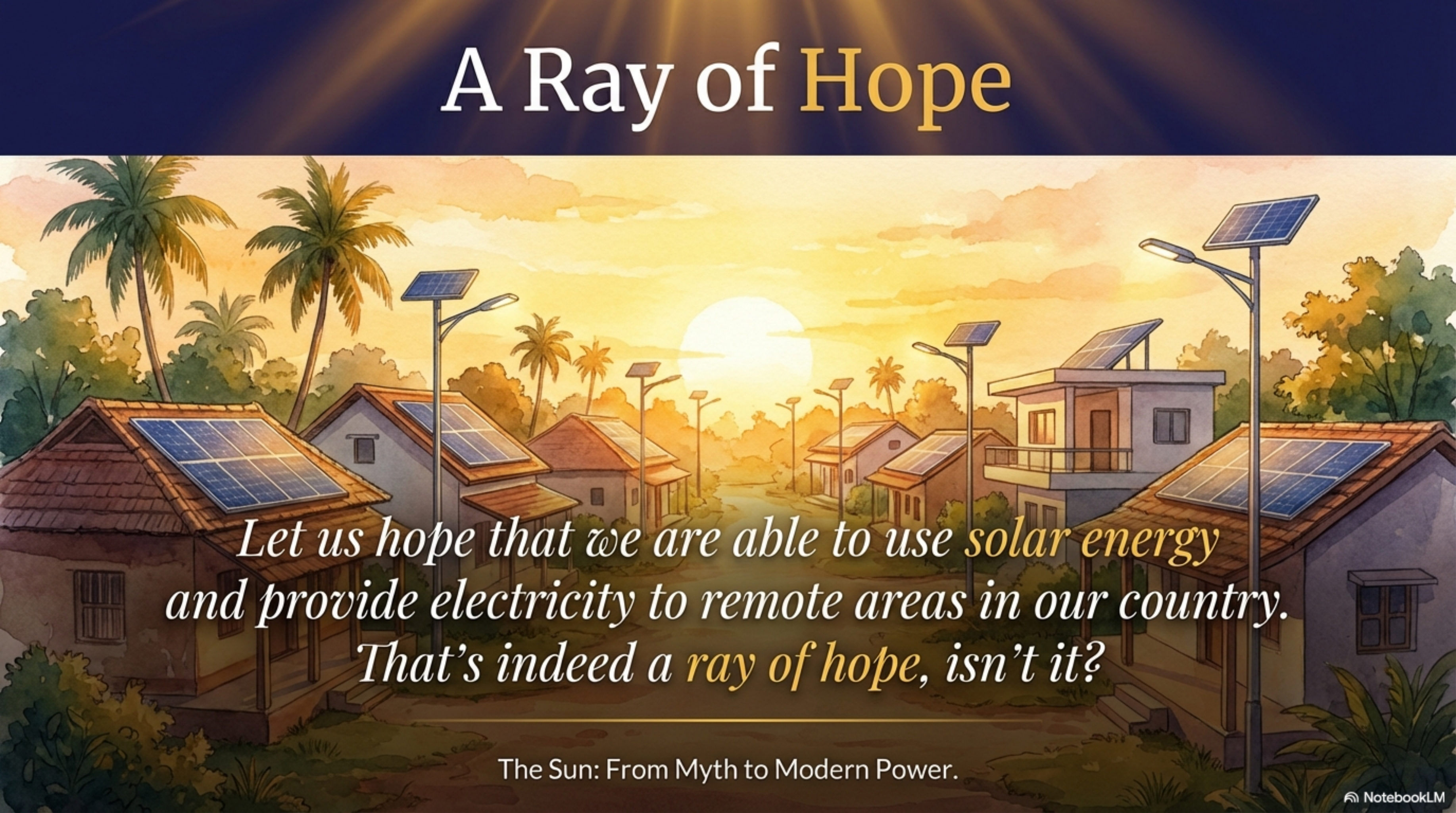
Coal, petrol, water, & wind are also sources.



**TRUE**

There is a ray of hope that the sun will solve our problems.

# A Ray of Hope



*Let us hope that we are able to use solar energy and provide electricity to remote areas in our country. That's indeed a ray of hope, isn't it?*

The Sun: From Myth to Modern Power.