SERVE THE PLANET 2018

Module 1: Study Circle Part 1

Energy is Divine
Outline

► What is Energy?
► What forms of energy exist?
► Where does energy come from?
► How does energy affect those around us, and how can they in turn influence us?
► Why is it important to conserve energy?

The purpose of this study circle is to better understand what energy is, where does it come from and how we use it.
What is Energy?

That helps in doing work is energy
What is Energy? contd.
What is Energy? contd.

Energy is divine. It permeates everything.

“Scientists, after long investigations, have discovered that the whole universe is made up of atoms. The Vedhaanthins (spiritualists) on their part, declared that everything is permeated by the Divine. The terms used are different but the meaning is the same. Energy is Brahman and Brahman is energy. The cosmos is filled with energy. All that you, see and all that you do are energy. You observe an object. You see an individual. Both the object and the individual are manifestations of energy.” — Sathya Sai Baba (SSS 30.18: July 20, 1997)
What forms of energy exist?

www.youtube.com/watch?v=Q4M-q8fiJ2I
Video duration - 5 minutes
What forms of energy exist? contd.

- **Kinetic Energy**: energy of movement
- **Potential Energy**: stored energy

**We experience energy in different ways**

- **Thermal Energy**: energy of moving particles (heat)
- **Mechanical Energy**: energy of objects in motion
- **Electrical Energy**: energy of particles moving through a wire
- **Magnetic Energy**: energy causing push or pull
- **Sound Energy**: form of energy we can hear
- **Light Energy**: form of energy our eyes can detect
- **Chemical Energy**: energy stored in food, fuel
- **Elastic Energy**: energy stored in objects that are stretched
- **Nuclear Energy**: energy stored in the centre of particles
- **Gravitational Energy**: energy stored in an object when it is above the earth's surface
Where does energy come from?

Physical
Energy for doing work

Mental
Ability or willingness to engage in cognitive work

Spiritual
All pervasive - divine power
Where does energy come from?

contd.

Physical Energy
Where does energy come from?

*contd.*

**Mental & Spiritual Energies**

\[ E = MC^2 \]
How does energy affect those around us, and how can they in turn influence us?
How does conserving & preserving different forms of energy link to ‘Protecting the Planet’?

https://www.youtube.com/watch?v=bn8R_Xqjji0
Video duration - 3 minutes
In PART 2 of this study circle, we will cover:

- Why do we need energy?
- What are various sources of physical energy?
- What is the effect of our energy use on the environment? (Importance of energy conservation)
- Are renewable sources the answer?
- Being aware of our energy footprint, how to reduce it