

## TOPIC: RENEWABLE AND NON-RENEWABLE ENERGY

CLASS: JSS1

**Introduction:** Energy has been described as the ability to do work. Energy is needed to carry out many activities. Some of the sources of energy can last forever while others can last for only a period of time.

### Meaning of renewable and non-renewable energy

**Renewable energy** is energy from the source that can last forever. Examples of renewable energy are;

- i. Solar energy (energy from the sun).
- ii. Hydroelectric dams that have generators turned by water to produce electricity ( eg., kainji dam, Shiroro dam)
- iii. Wind power, which is a source of energy used to run windmills to produce electricity.

**Non-renewable energy** is from a source that can only last for a time. Examples of non-renewable energy source are; crude oil, coal, fuel, wood, etc. Nigeria has crude oil and coal but it is known that it will only last for a period of time.

### Advantages and disadvantages of renewable and non-renewable energy

Renewable and non-renewable energy have advantages and disadvantages. These are;

Advantages	Disadvantages
1. Renewable energy last a life time.	Non-renewable energy does not last a lifetime.
2. Renewable energy is clean and does not cause air pollution.	Non-renewable energy causes pollution e.g smoke
3. Renewable energy is cheap once it is fully installed.	Non-renewable energy is expensive eg, cost of fuel.

### Uses and misuse of non-renewable energy

Use of energy makes life easier for all and sundry. Therefore;

1. Non-renewable energy (coal, petroleum, wood and gas) must be used with care and caution. Their supply is limited and will definitely finish one day.
2. Non-renewable energy constitutes pollution thereby leading to environmental degradation.
3. Careless use of non-renewable energy is discouraging to sustainable development.
4. Petrol engine (cars, generators, etc) should not be put on when their energy supply is not in use.
5. Cooking gas, coal should not be left burning carelessly.
6. Cutting down of trees should be done with replacement.
7. Careful use of electricity at home will ensure constant generation of electricity.
8. Overloaded electrical socket can cause fire hazard at home.

## **HOME-WORK**

1. What are the consequences of non-availability of energy on the society?
2. Outline any four ways energy is conserved in your home.
3. State any two new researches/discoveries on alternative way of generating energy for man's use.