

# GOAL 7: AFFORDABLE AND CLEAN ENERGY

7 AFFORDABLE AND CLEAN ENERGY



1 HOUR+

**Ensure access to affordable, reliable, sustainable and modern energy for all**

## PURPOSE

To understand how sources of energy can be renewable.

## PLACE

If you have a fire pit and woods near your meeting place, this activity can be run at a meeting night, but it also works well at camp.

## MATERIALS

A saw and firefighting kit

## ACTIVITY (1 HOUR+)

Ask the young people to gather fallen wood for your campfire. Try to only gather fallen wood.

Saw through pieces of various sizes and count the number of rings in each piece. Note how thick the pieces are, and how many rings they have – each year represents a year of growth.

As you add these bits of wood to the fire, check how long it takes them to burn.

## DISCUSSION

Is this wood a sustainable source of energy? 'No' may be the first answer, because the pieces of wood are used up.

However, the trees in the wood are still growing. The young people didn't damage the environment while collecting it, so the source will renew naturally. Next year there will be more fallen wood in the forest.

Relate this to the burning of gas and oil to make electricity. It takes millions of years to make more oil and gas. We take more out of the environment than it can renew. Other sources like wind, solar, and hydroelectric are sustainable because they don't use up or destroy anything in the natural environment.

Explain that for people in some countries wood is their only source of energy. What might happen when their supply of wood is used up?

**SUMMARY**



# Summary

## GOAL 7

Our everyday lives depend on reliable and affordable energy whether it's to power our household appliances, help us learn at school or keep us safe and warm at night. A well-established energy system supports all sectors: from businesses to medicine and education to agriculture. Without these energy supplies it is difficult for countries to progress and meet many other SDGs such as targets for health, poverty reduction and economic growth.

### TARGETS

- Ensure access for all to affordable, reliable and modern energy services through new infrastructure and better technology.
- Promote energy efficiency – more quickly developing technology that wastes less energy.
- Increase the use of renewable energy sources globally compared with other sources of energy.
- Work together to research and develop renewable and other clean energy resources.

- By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries.

### ACTIVITY

Explore sources of sustainable energy with an outdoor activity.

### TAKE IT FURTHER

> Find your ecological footprint using this helpful calculator and compare it with other young people's ecological footprints from around the world:

<http://cdn.worldslargestlesson.globalgoals.org/2016/06/Understanding-Sustainable-Living.pdf>

**GO TO GOAL 8**

