

Divina Infantita  
(Almería)

# NATURAL SCIENCE

UDI 4. Somos responsables en la calle  
¿ Y tu?

## 6. ENERGY

# 1. THE ENERGY AROUND US

We need energy to many different things. We consume lots of energy in our day lives. For example:

- **IN THE COUNTRISIDE:** tractors need petrol
- **IN OUR HOMES AND OFFICES:** need electricity to power the TV
- **FACTORIES AND POWER PLANTS:** machines need electricity to work
- **TRANSPORT:** motorbikes, car and buses need petrol



## 2. ENERGY AND ENERGY TRANSFORMATION

### A) TYPES OF ENERGY: energy makes things change and move

• heat energy



• light energy



• chemical energy



• electrical energy



• kinetic energy

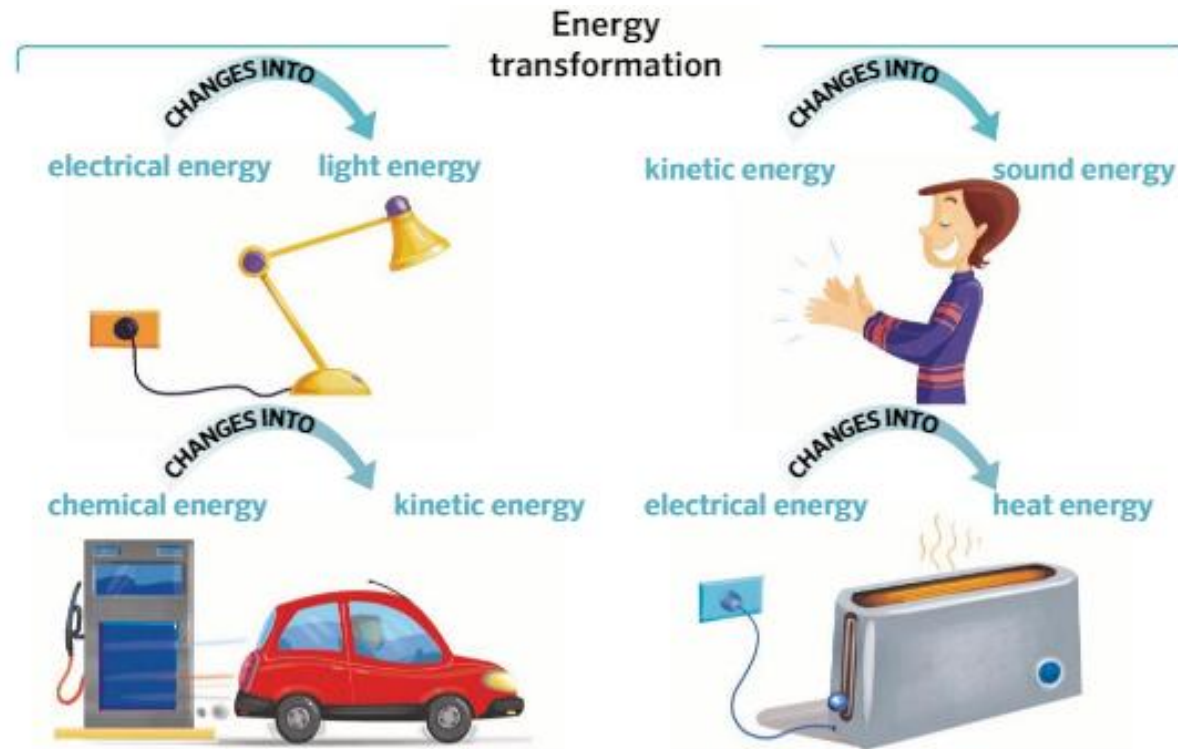


• sound energy



## 2. ENERGY AND ENERGY TRANSFORMATION

**B) ENERGY CHANGES:** energy continuously changes form one form to another

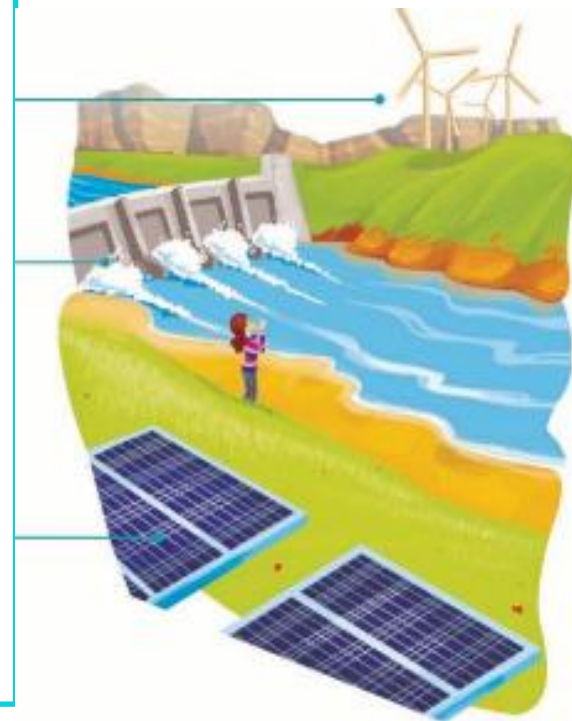


### 3. SOURCES OF ENERGY

Sources of energy can be **RENEWABLE** or **NON -RENEWABLE**

#### A) RENEWABLE ENERGY SOURCES: **never run out**

- **WIND ENERGY:** we use wind turbines to transform wind into electricity
- **HYDROELECTRIC ENERGY:** water flows through turbines to produce electricity
- **SOLAR ENERGY:** the heat of the sun is collected by solar panels and transformed into electricity



### 3. SOURCES OF ENERGY

#### B) NON-RENEWABLE ENERGY SOURCES: **run out**

- COAL**: is extracted from mines. It produce heat and elecricity
- GAS**: we get gas by digging a hole in the ground. It produces heat and electricity.
- OIL**: we use oil to produce petrol needed for cars and machines

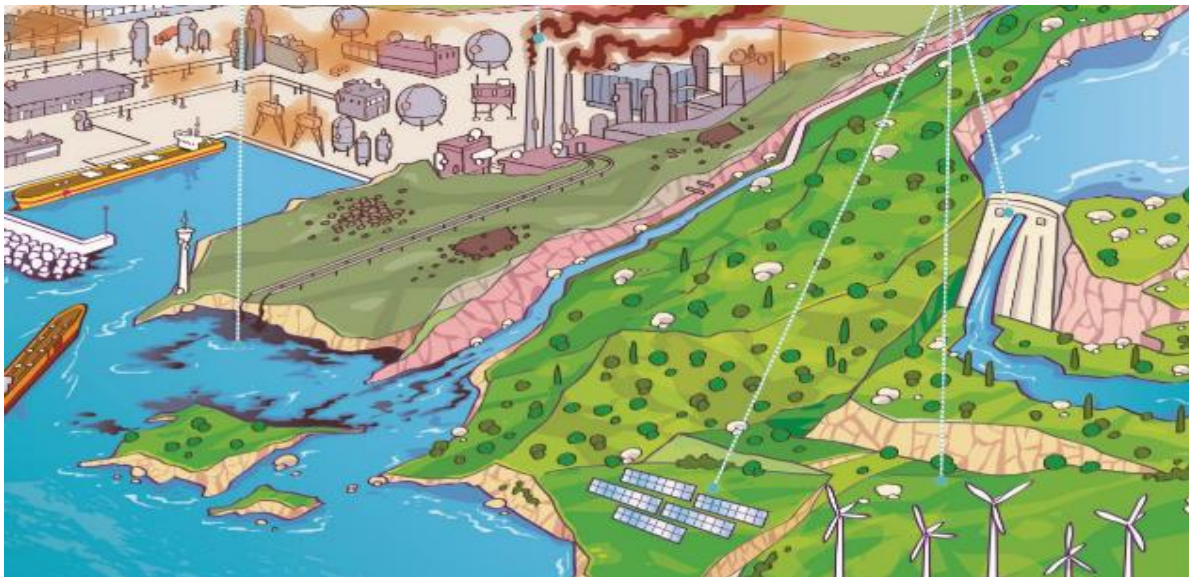




## 4. ENERGY AND THE ENVIRONMENT

### A) CONSEQUENCES OF WASTING ENERGY

- **OIL:** spills into the sea and contaminates the water
- **FOSSIL FUEL:** we release harmful chemicals into the air
- **SOLAR PANELS** and **WIND FARMS** change the natural landscape



## 4. ENERGY AND THE ENVIRONMENT

### B) HOW CAN YOU HELP TO SAVE ENERGY?

Saving energy can help to reduce the harmful effects on the environment

How can you help save energy?



Turn off any electrical equipment after using it.



Close the doors and windows at home when the heating is on.



Turn off the lights when nobody is in the room.



Whenever possible, walk, cycle or take the bus instead of using the car.