

# Energize with REG and KB2

Suitable  
for years  
**3&4!**

What is electricity?  
Where does it come from?  
REG and KB2 are here  
to explain!



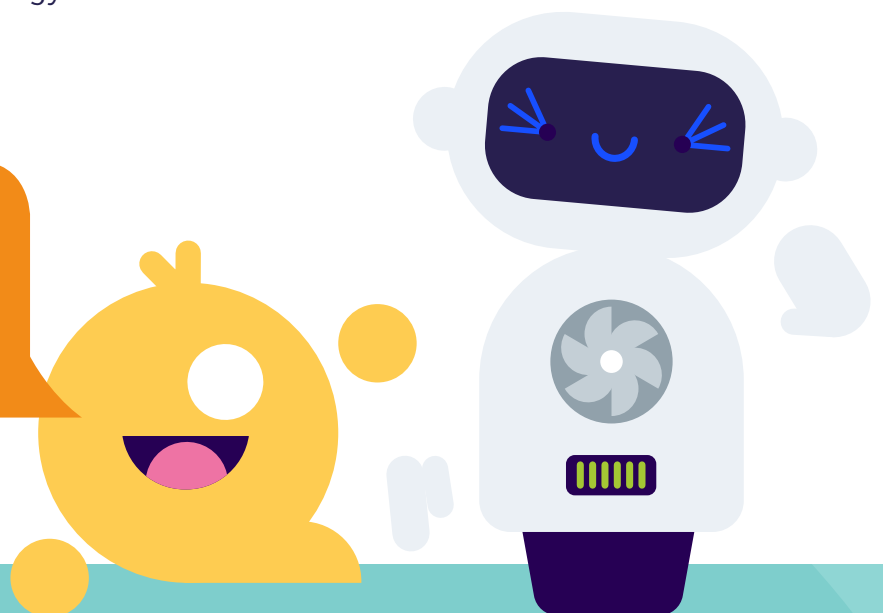
## Renewable Energy Sources

- Renewable energy comes from the power of **water** (hydro energy), the **wind** (wind energy) and the sun's rays (**solar** energy).
- These sources of energy are called '**renewable**' because they won't run out and come from natural sources, so do not damage the planet.

## Non-Renewable Energy Sources

- Non-renewable energy comes from burning fossil fuels like coal, natural gas and oil, or using nuclear energy. These sources of energy are called '**non-renewable**' because they will run out.
- Non-renewable energy sources like natural gas are cheaper to make electricity with. They are also more reliable than renewable energy sources. For example, wind turbines need wind to spin, if there is no wind, the turbines won't spin and generate electricity.
- The national grid, which provides electricity to all the homes in the country, uses a mix of renewable and non-renewable energy.

Do you know who prefers  
renewable energy sources?  
Watch the video to find out!



**SIEMENS**

# Task 1

Using the image clues, find 3 renewable energy sources in the word search.

Q P F W X W D R P A Y A O Q X  
D L A O C S Q B P Z M T B U T  
T C F H D A Y C P H L N B Z K  
H A J R S T D H Q T Q Q J H N  
W L P W W R N Q O J G T L A N  
D T I S Z A P N S S O J T X H  
W V W Y S L N C N V N U A S E  
T E N Q B O O P V P R E T A W  
D Y E V C S F G P A O T I G U  
J I H Q P M J A L Z X Q G T Z  
D P W W I N D G V D N G L I V  
S W D Y H R A E L C U N I O D  
T O L D R S D T O N N A O V A  
Y J R V S W F X W Z V W U S I  
U R V A F N C O F B S U K R L

NATURAL GAS  
COAL  
OIL  
WATER

SOLAR  
WIND  
NUCLEAR

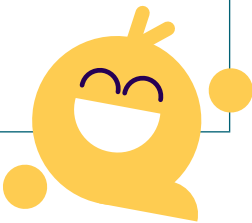


As well as natural gas, there are **4 other non-renewable energy sources** to find starting with N, C and O. **Can you find them?**

# Task 2

Now you've found the energy sources, can you organise them into **renewable** and **non-renewable** energy?

| KB2's non-renewable energy | REG's renewable energy |
|----------------------------|------------------------|
|                            |                        |



# Bonus Task

Which **2 energy sources** are REG's favourite and which **1 energy source** is KB2's favourite?