

CLIMATE AND ENERGY

1. Put the sources of energy into the correct category:

WIND

NUCLEAR

SOLAR

GEOTHERMAL

COAL

OIL

NATURAL GAS

WAVE

BIOMASS

FOSSIL FUELS

RENEWABLES

2. The EU and its Member States have jointly set targets to fight climate change, for example by switching from fossil fuels to clean, renewable forms of energy, improving energy efficiency, and encouraging decarbonisation of industries. In fact, it was the first major world economy to do so!

Can you guess how much EU countries have reduced their greenhouse gas emissions since 1990? Fill in the blanks:

61      20      23      40

EU greenhouse gas emissions in 2018 were \_\_\_\_\_% lower than in 1990. The EU economy continued to grow over the same period, by \_\_\_\_\_%. The EU therefore appears on track to meet its target of a \_\_\_\_\_% reduction in emissions by 2020.

However, every country in the world needs to reduce emissions and achieve climate neutrality (net zero emissions). The EU and its member countries have pledged to reduce emissions further by 2030 (to \_\_\_\_\_% below 1990 levels), and eventually achieve climate neutrality by 2050.

## CLIMATE AND ENERGY

### 3. True or false? Consider the following sentences:

Renewable energy now provides almost a third of the world's electricity. **TRUE / FALSE**

The EU's greenhouse gas emissions reduced by more than 20% between 1990 and 2016. **TRUE / FALSE**

More than four million people now work in the EU's 'green sector', meaning they have jobs that help improve energy and resource efficiency. **TRUE / FALSE**

The EU imports more than half of its energy – around €700 million a day – from Russia. **TRUE / FALSE**

Between 2014 and 2020, the EU spent a quarter of its budget on climate-related action. **TRUE / FALSE**

### 4. In the future, lots of people will have 'green jobs' because the EU has discovered it is possible to reduce our greenhouse gas emissions and make more money from doing so. Green jobs benefit both the economy and the environment, and include everything from alternative fuels to tasty foods.

As a class, brainstorm different types of green jobs – or invent some new ones! Here are some ideas:

- Wind farm engineer
- Conservationist
- Urban planner
- Solar panel installer
- Biofuels expert

Do you know anyone with a green job? Do they like it?



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**5. How energy efficient is your classroom? We often use more energy than we need, especially in large buildings like schools and office blocks.**

As a class, carry out the following investigation. Carefully note down your answers.

### Lighting

- How many lightbulbs are there?
- Are they small round bulbs, or long strip lights?
- Are they all switched on when class is in session?
- Are they all switched off when you leave the classroom?

### Electrical appliances

- How many electrical appliances are there? These can include smart whiteboards, television screens etc.
- Are they also switched on when class is in session, or are they left on standby until they are needed?

### Temperature

- Measure the air temperature.
  - The World Health Organisation's (WHO) recommended indoor air temperature is between 18 °C (64 °F) and 20 °C (68 °F) – how does your classroom compare? Is there a big difference between your classroom and the WHO's recommendation?
  - During the summer months, are the fans and/or air conditioning left on all the time?
  - During the winter months, is the heating left on all the time?
- a. Consider your answers and, as a class, come up with an energy efficiency 'grade' for your classroom.
  - b. If the grade could be better, come up with an action plan to help increase your score! What small changes can you make to improve your energy efficiency?
  - c. Whom could you talk to if you want to make even bigger changes, maybe for your whole school? Does you have a student council working on sustainability issues?

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