#### **Educational pack Years 7-11**

GREEFFICE

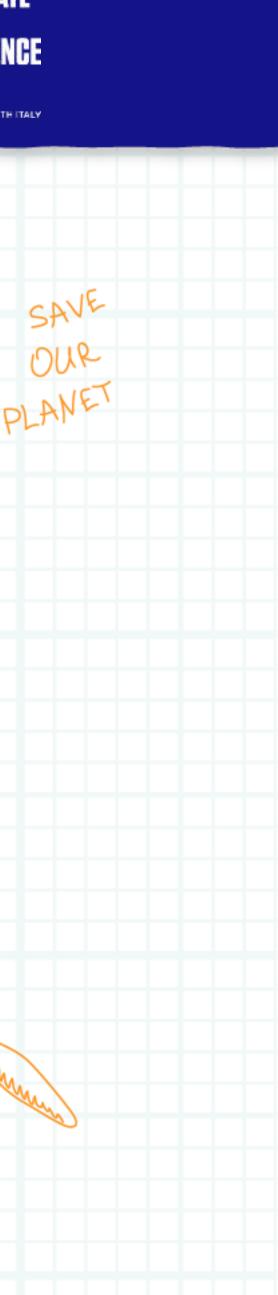
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## RINCIPAL PARTNER

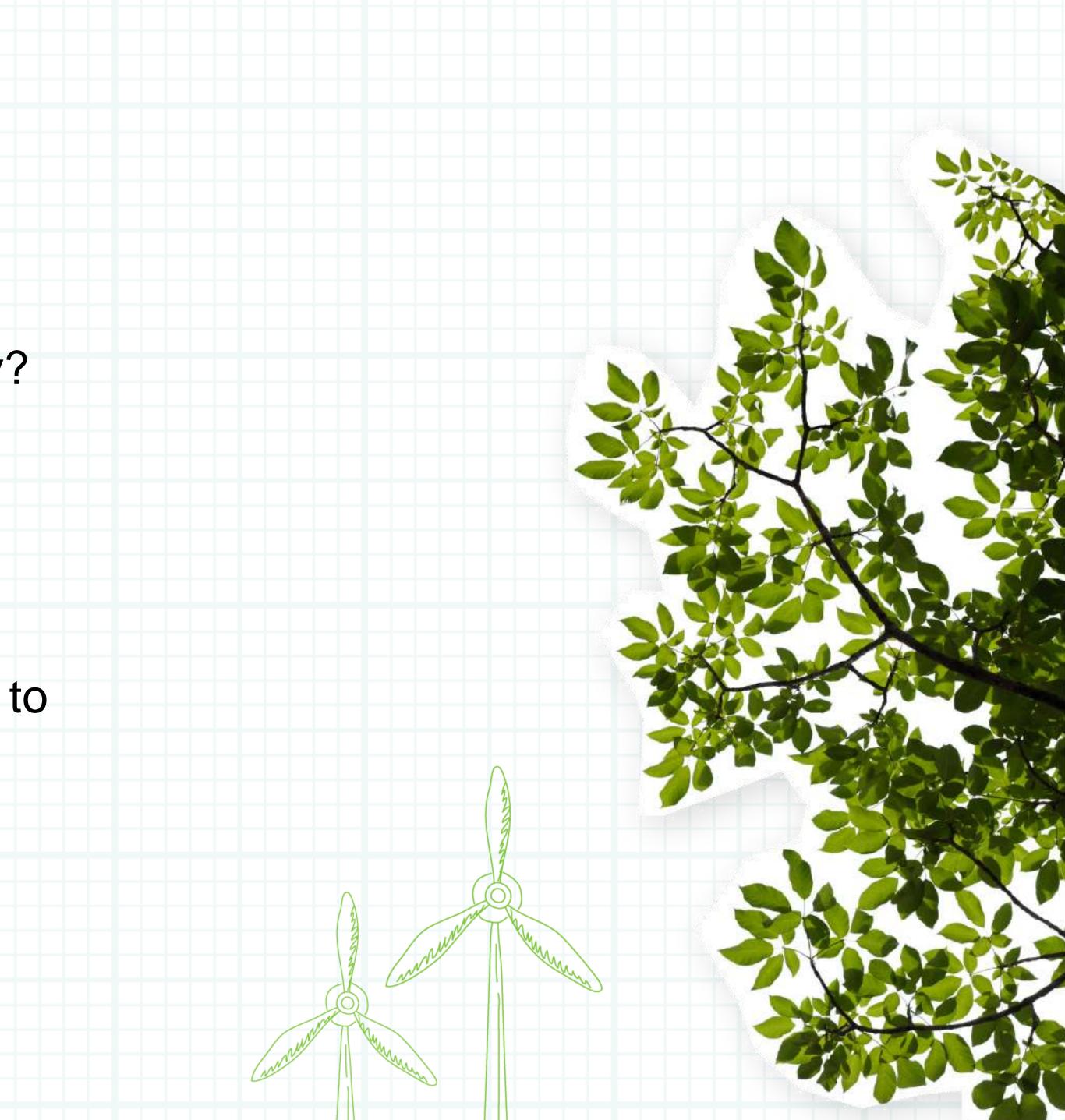
SAVE

OUR



#### What we'll cover

- 1. What is National Grid?
- 2. Why are we talking about energy?
- 3. What action are we taking?
- 4. What is climate change?
- 5. What is COP26?
- 6. Voices for a Green Future how to get your voice heard at COP26



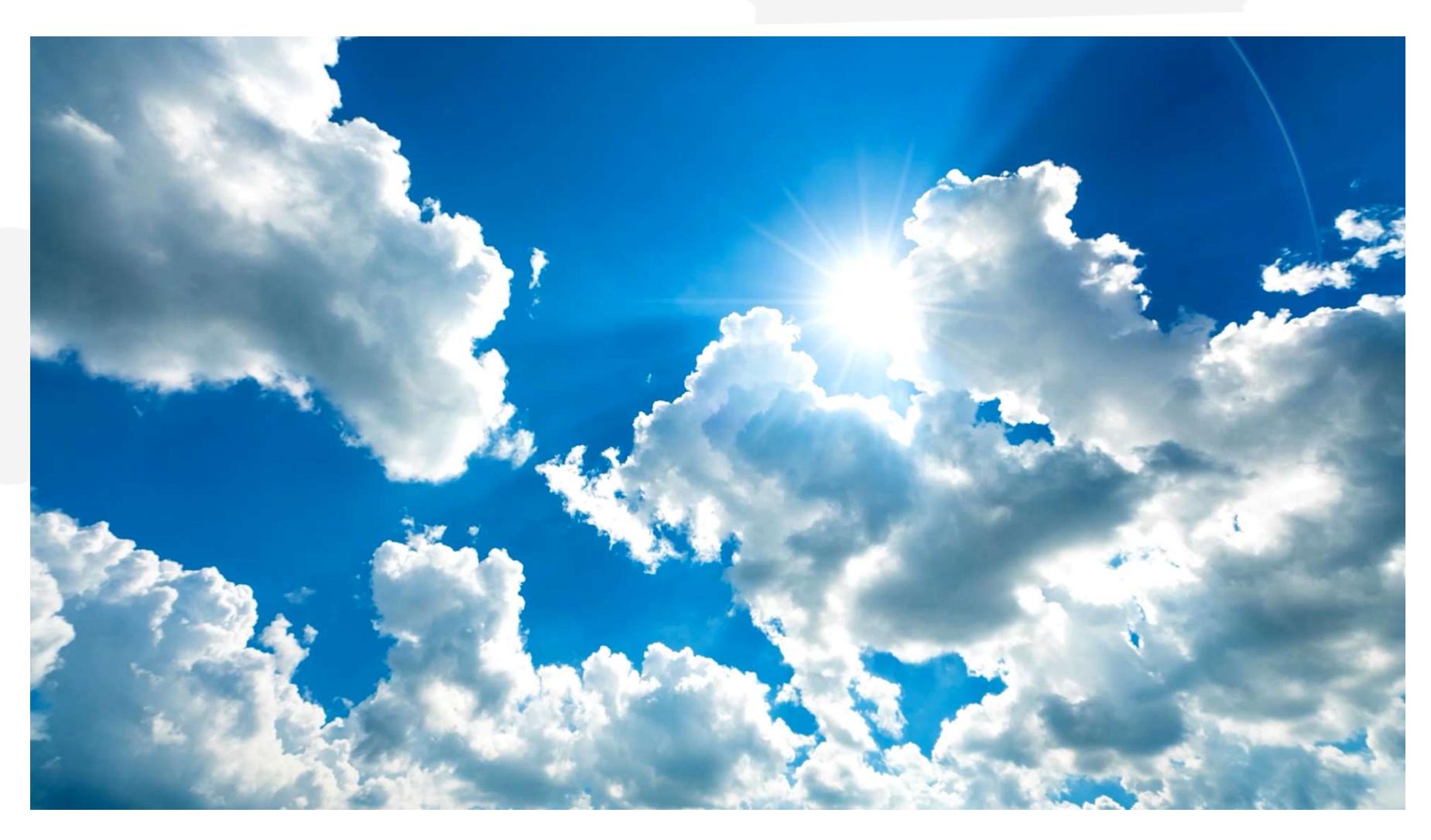
#### A question for you

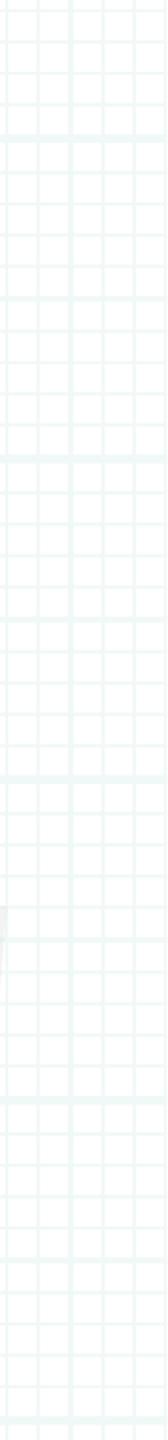


If you were in charge of the country, what would YOU do to help solve climate change and look after the planet?

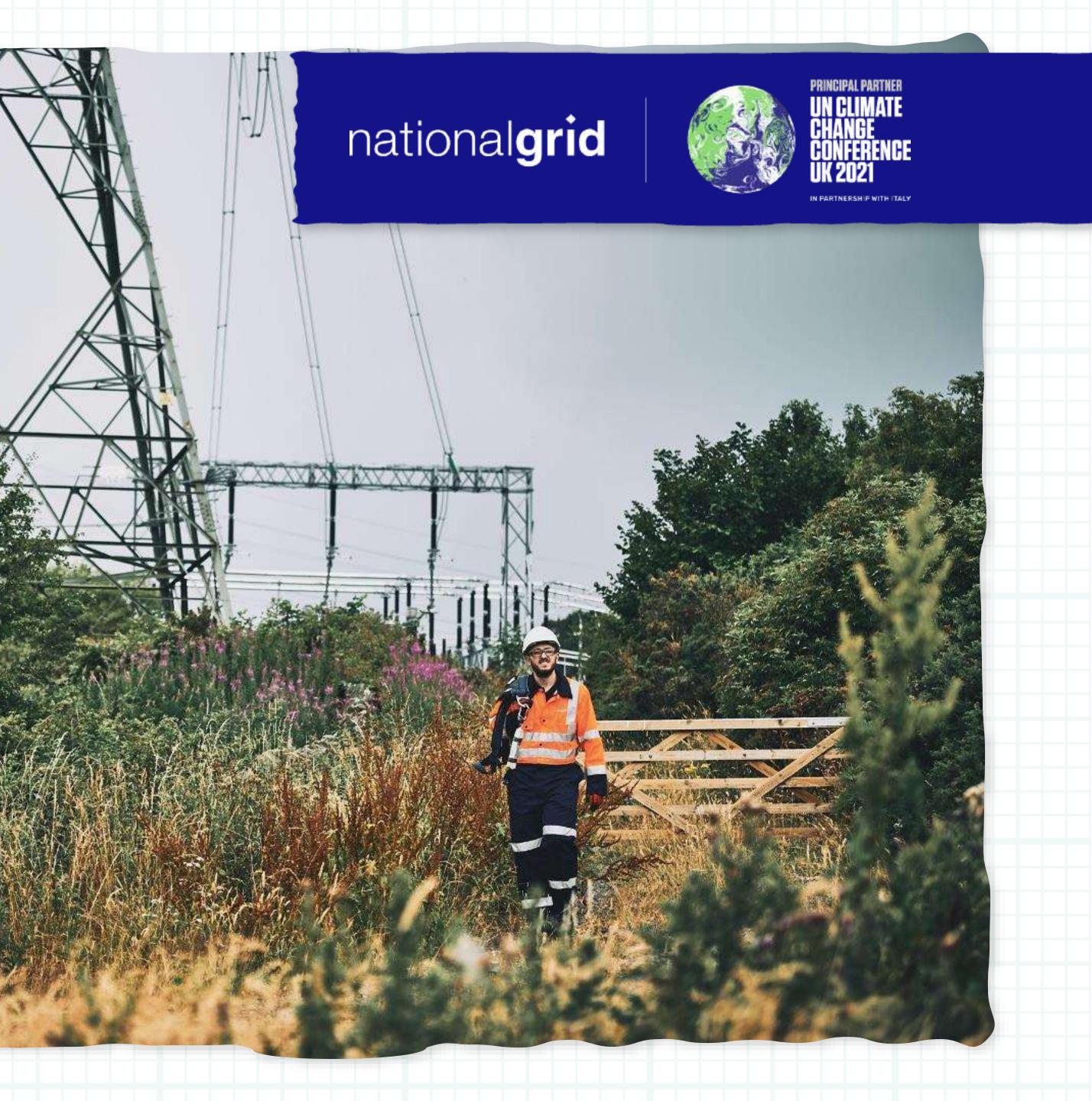


#### What would you do?





## What is National Grid?



#### Ever wondered...



#### Who sends electricity to the lights in your room?

Where the gas comes from to heat your home?

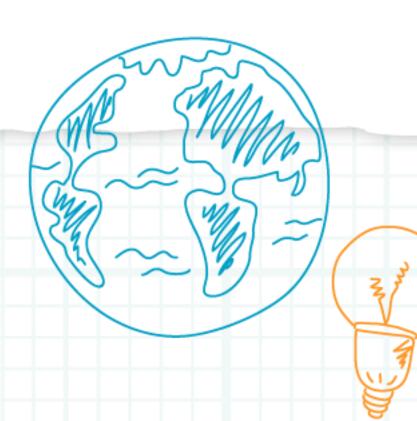


### How wind and solar power are used?



## Did you know?

Loss and



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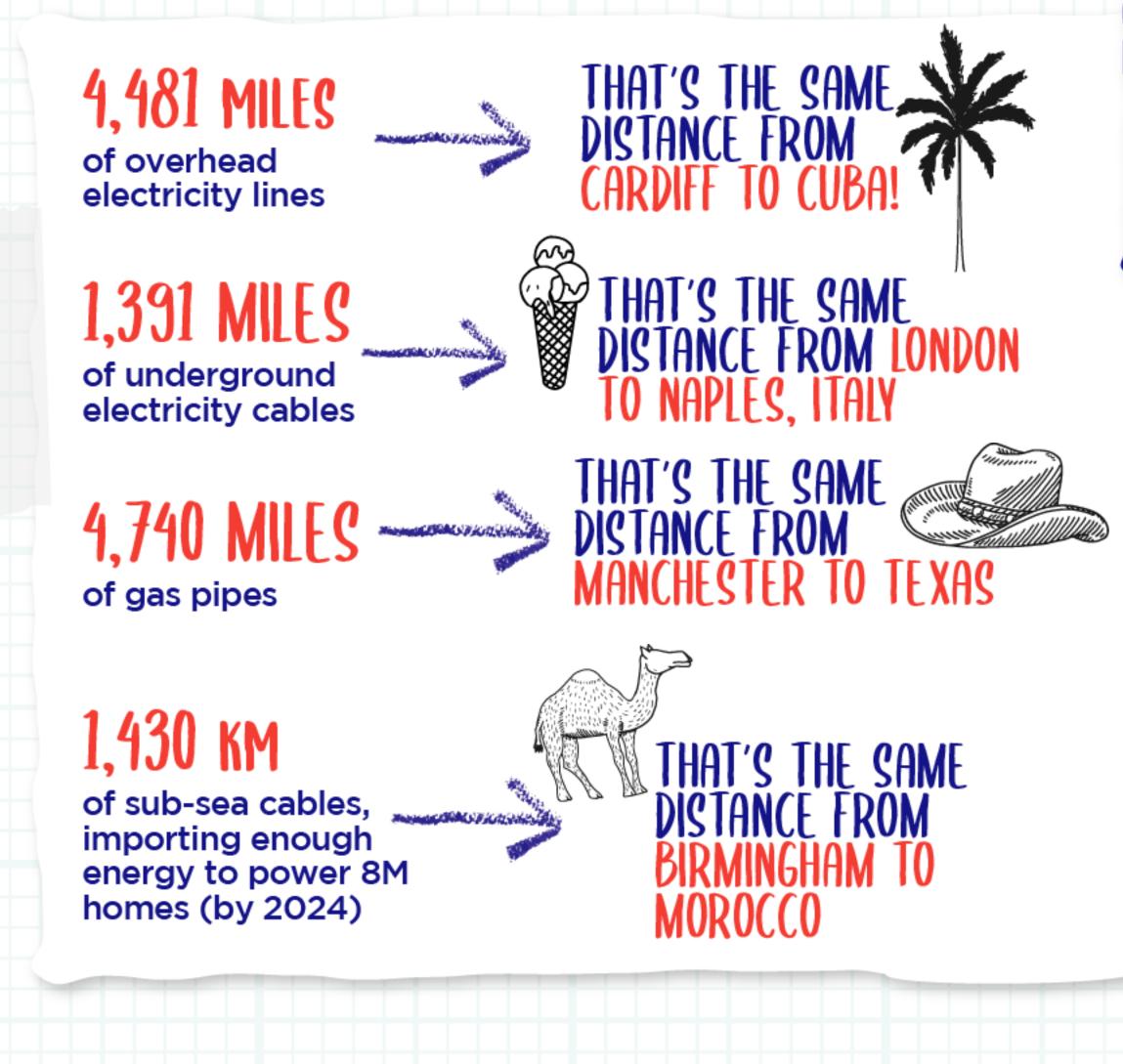




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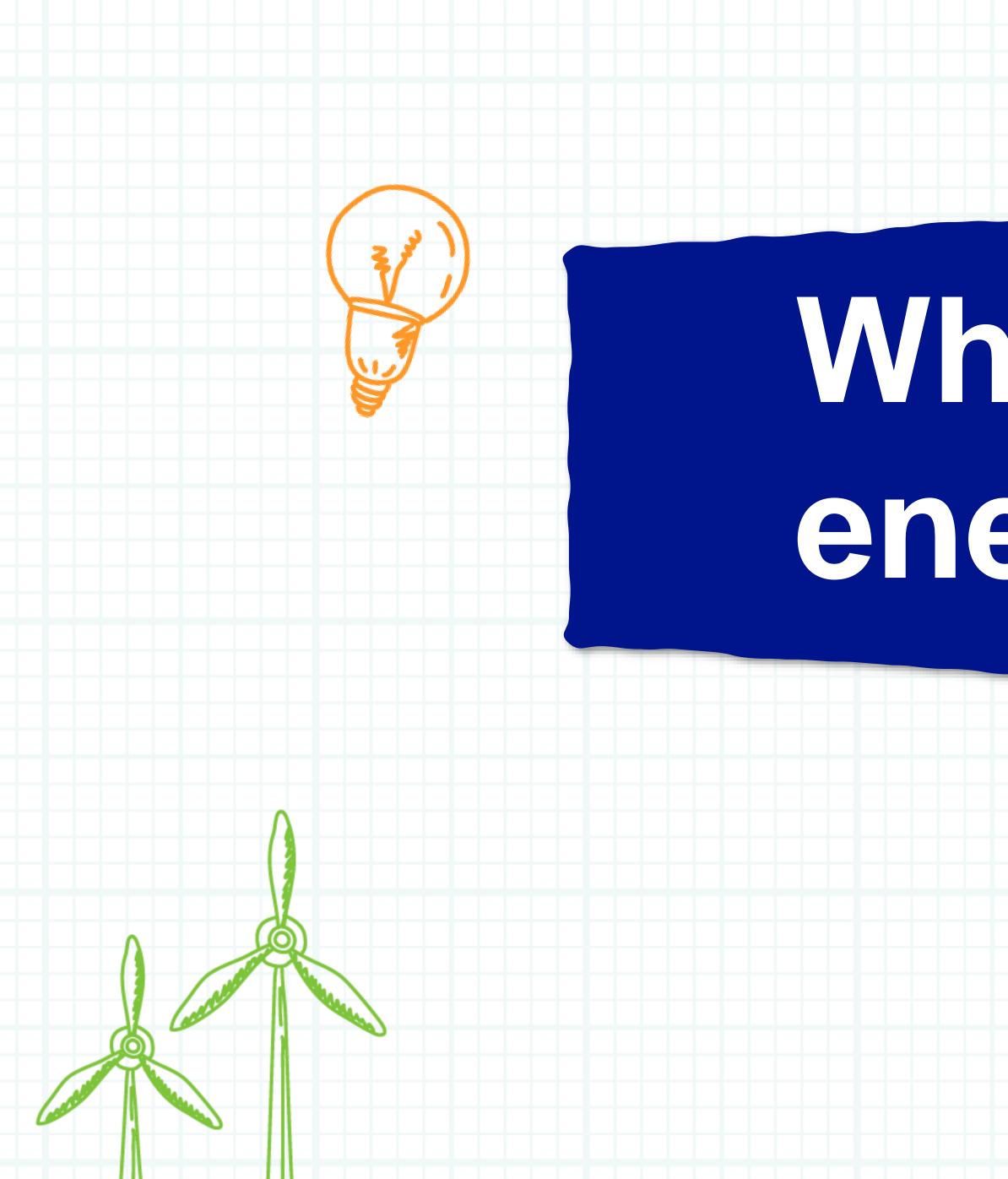
#### Did you know...



#### THE SYSTEM OPERATOR MOVES OVER 730GUH OF HIGH VOLTAGE ELECTRICITY AROUND THE COUNTRY.

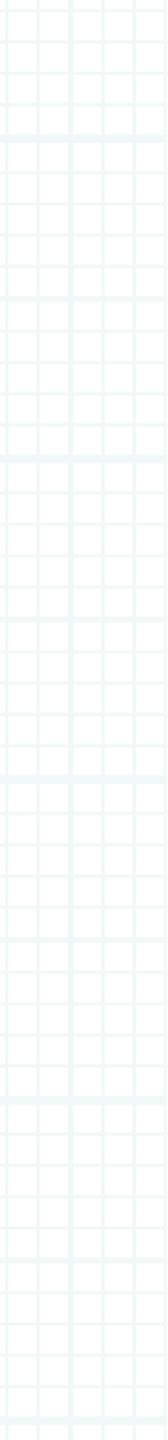
#### THAT'S ENOUGH TO POWER 146 BILLION LIGHT BULBS!





# What is energy?





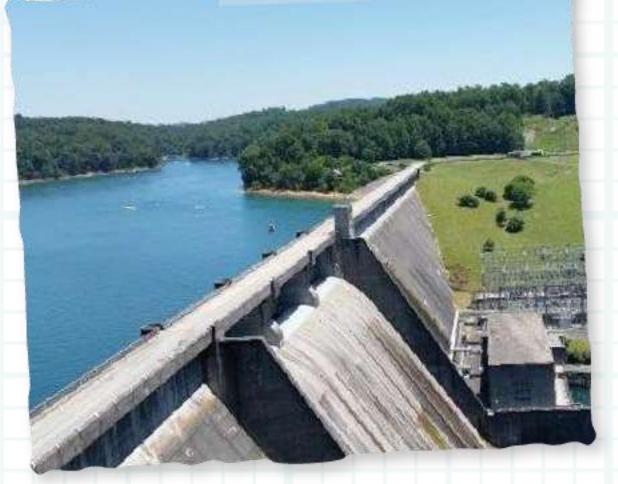
#### Our six main sources of energy



#### **Power stations** (burning oil, gas, coal)



Nuclear power (chemical reaction)



Hydro power (water)



(sun)

#### Wind power



(wood, plants, food waste)



#### Solar power



#### What are greenhouse gases?





#### **Greenhouse gases are all around us**

- Lots of things we do every day create them.
- They trap heat in our atmosphere, like a greenhouse.
- They stop our planet getting too cold, so we need a certain amount of them.
- But too much of them will make our planet get too warm.

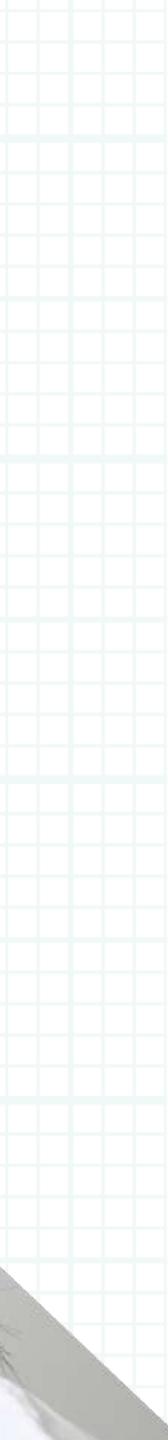


#### What is climate change?

Climate change is in the news a lot, because it's happening right now. You'll have seen how it affects penguins, polar bears and melting ice caps. But it's about much more than that...







# What does climate climate change chan

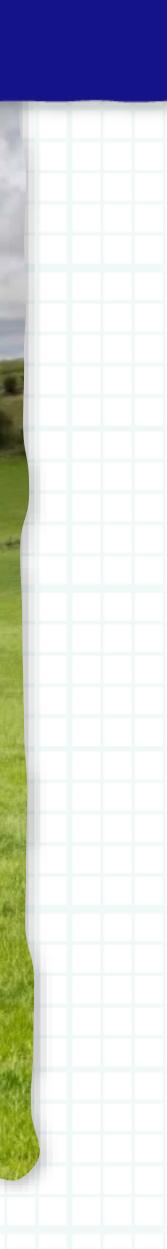


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#### UN CLIMATE Change Conference UK 2021

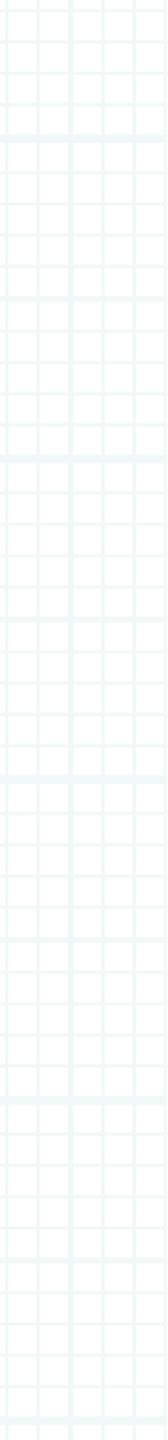
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Here are some of the things people say about climate change...

#### True or false?

#### 'The climate has always been changing. It's no different now.'

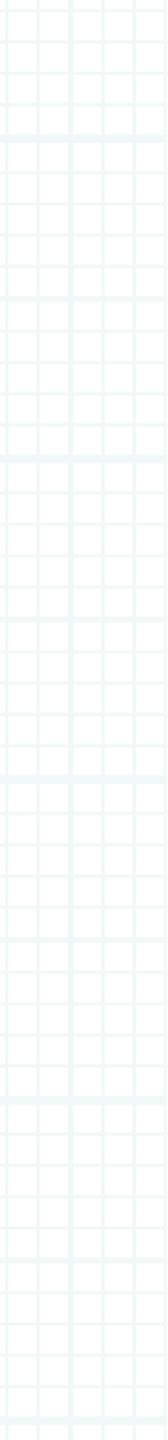


Here are some of the things people say about climate change...

#### **True or false?**



#### **'It's freezing outside – so** much for global warming!'

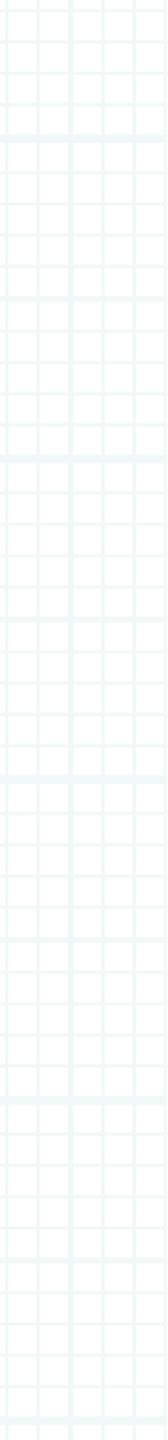


Here are some of the things people say about climate change...

#### True or false?



**'Carbon dioxide can't be** causing climate change – plants, crops and trees need it to grow.'

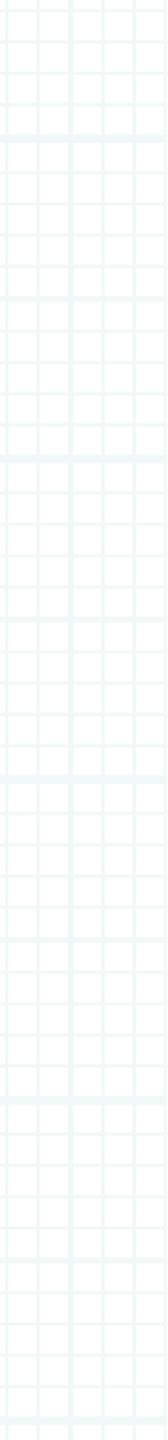


Here are some of the things people say about climate change...

#### True or false?



'There's no way humans are responsible for climate change.'

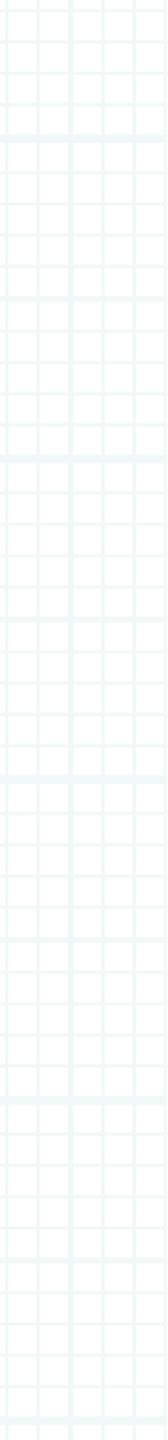


Here are some of the things people say about climate change...

#### True or false?



#### 'The sun changing is what's making the earth warmer, not us.'

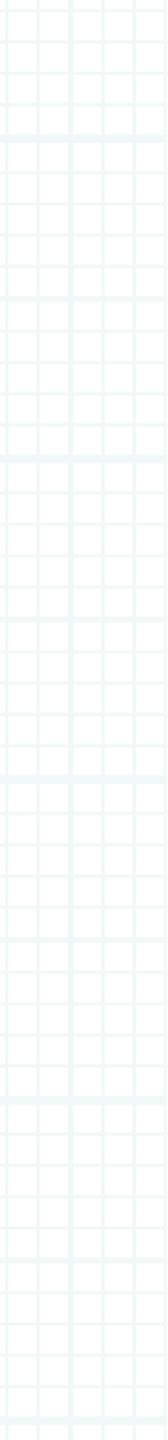


Here are some of the things people say about climate change...

#### True or false?



#### 'There's no point doing anything now. It's all too late.'



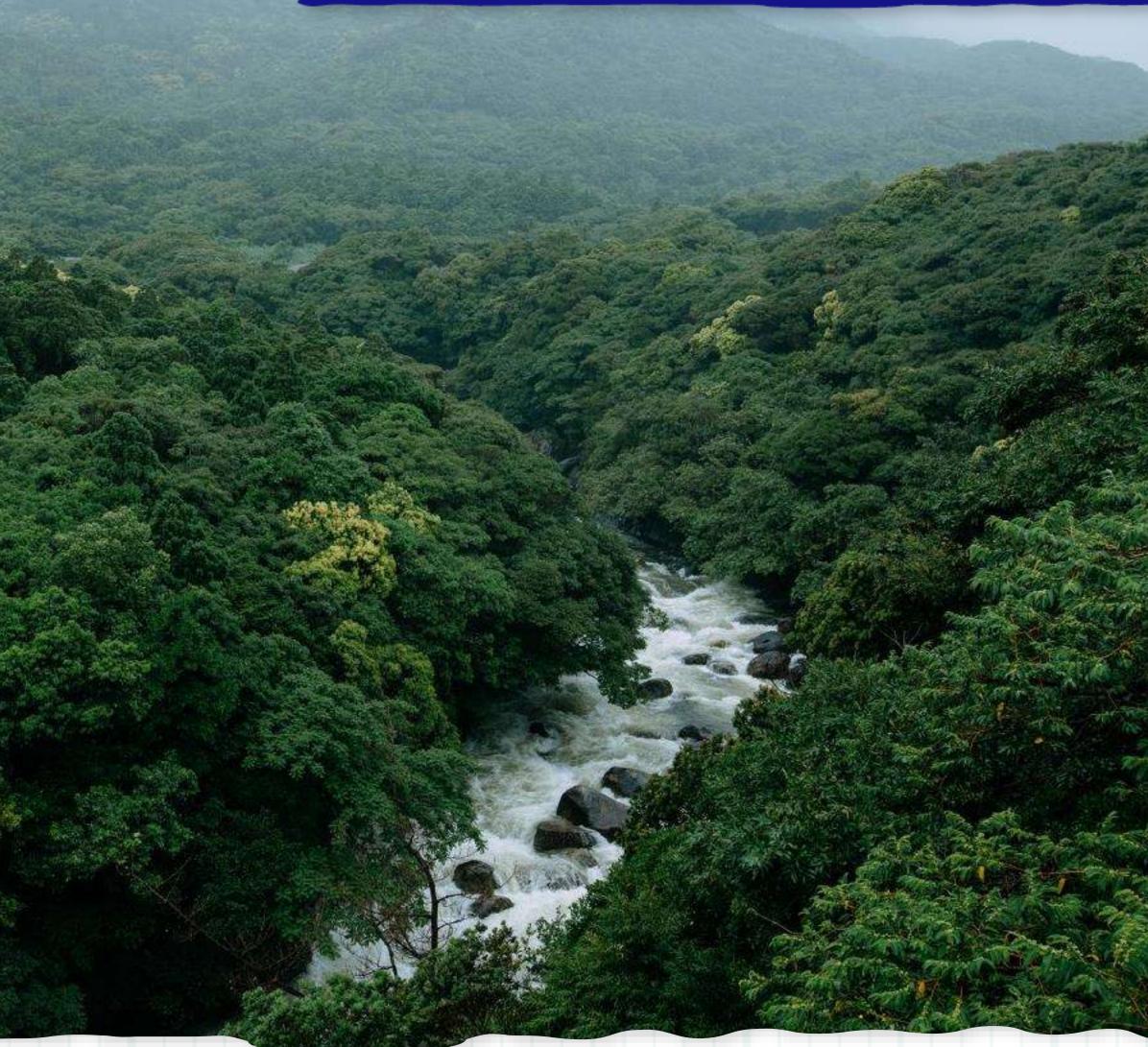
## What's happening around the world?

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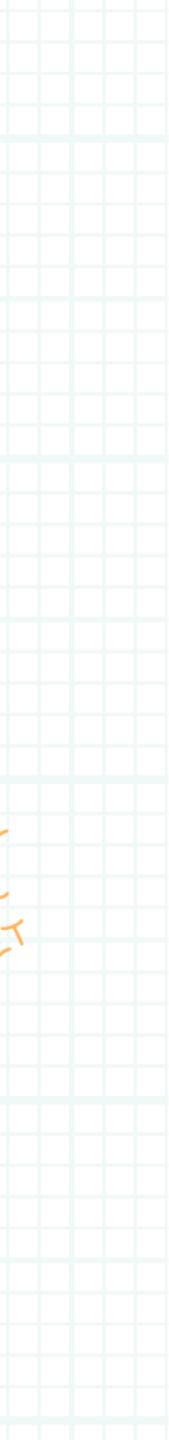
# The whole world needs to act fast to tackle climate change

Climate change is affecting every country on every continent. It's upsetting their economies and people's lives.

The weather is changing, becoming wetter, windier and warmer, and sea levels are rising.



Covid-19 slowed down climate change a little, but it's only temporary. We haven't pressed 'pause' on climate change.



#### The whole world needs to act fast to tackle climate change

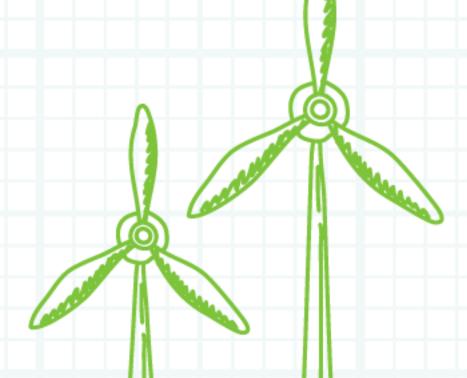
**People everywhere are** starting to take steps to make sure we leave the planet in better shape.

World leaders are also making commitments to control the rise in global temperatures.

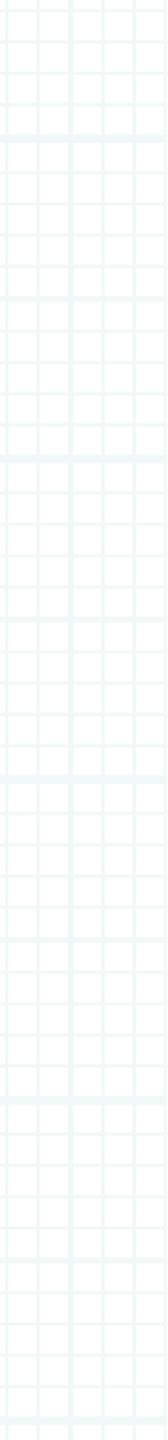








# Why 1.5°C?



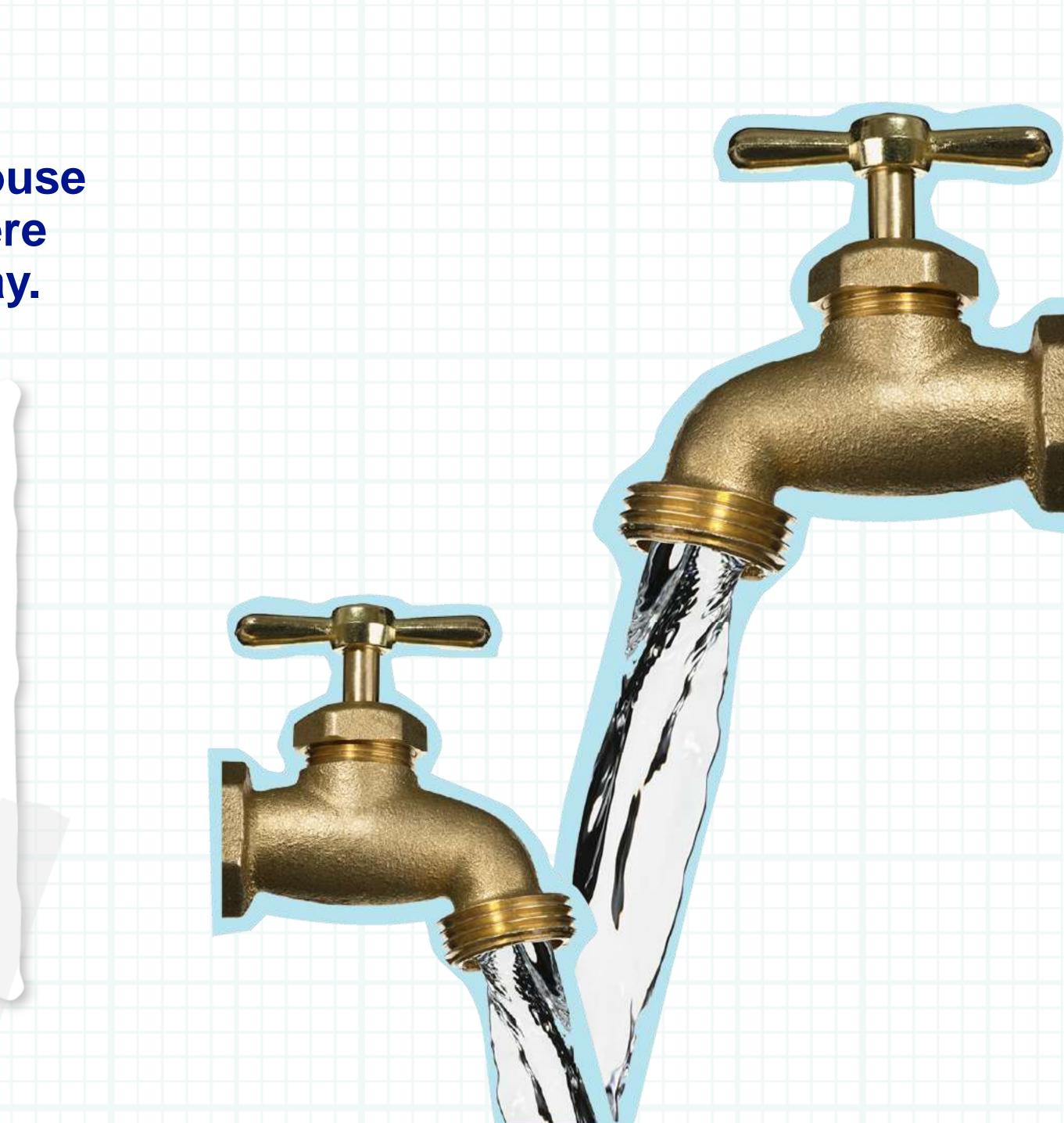
#### **Getting to net zero**

Net zero is when the amount of greenhouse gases a company adds to the atmosphere is no more than the amount it takes away.

#### Think about it like this...

Climate change is like a bath filling up with water – we must not let it overflow.

Slowing down the water helps, but it will still splash over the sides. The only way to stop it is to turn off the tap, and pull out the plug.

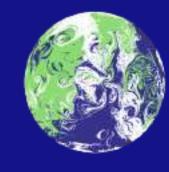


# What can we do to tackle climate change?

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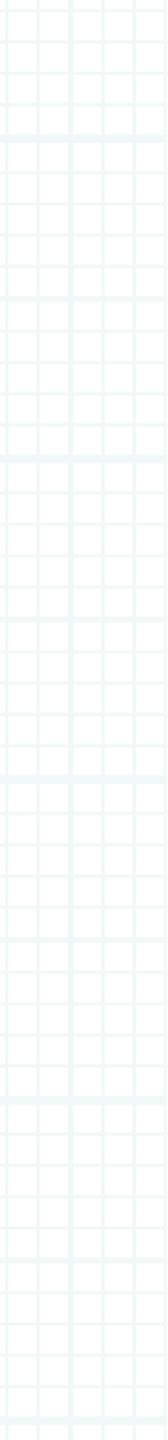
#### What is a 'carbon footprint'?

Your carbon footprint is the amount of greenhouse gases your day-to-day activities release into the atmosphere.

You can use the <u>WWF calculator</u> to work out your carbon footprint.







#### Things you can do right now!

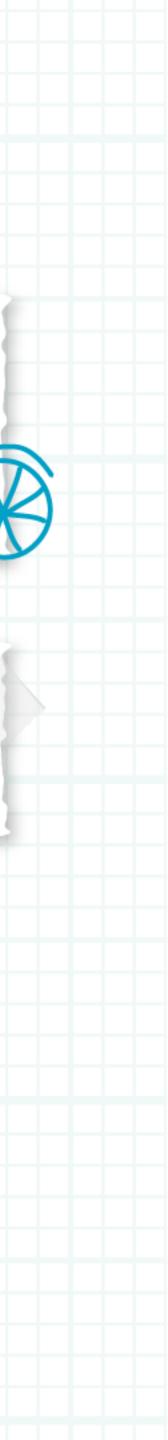
#### **Unplug!**

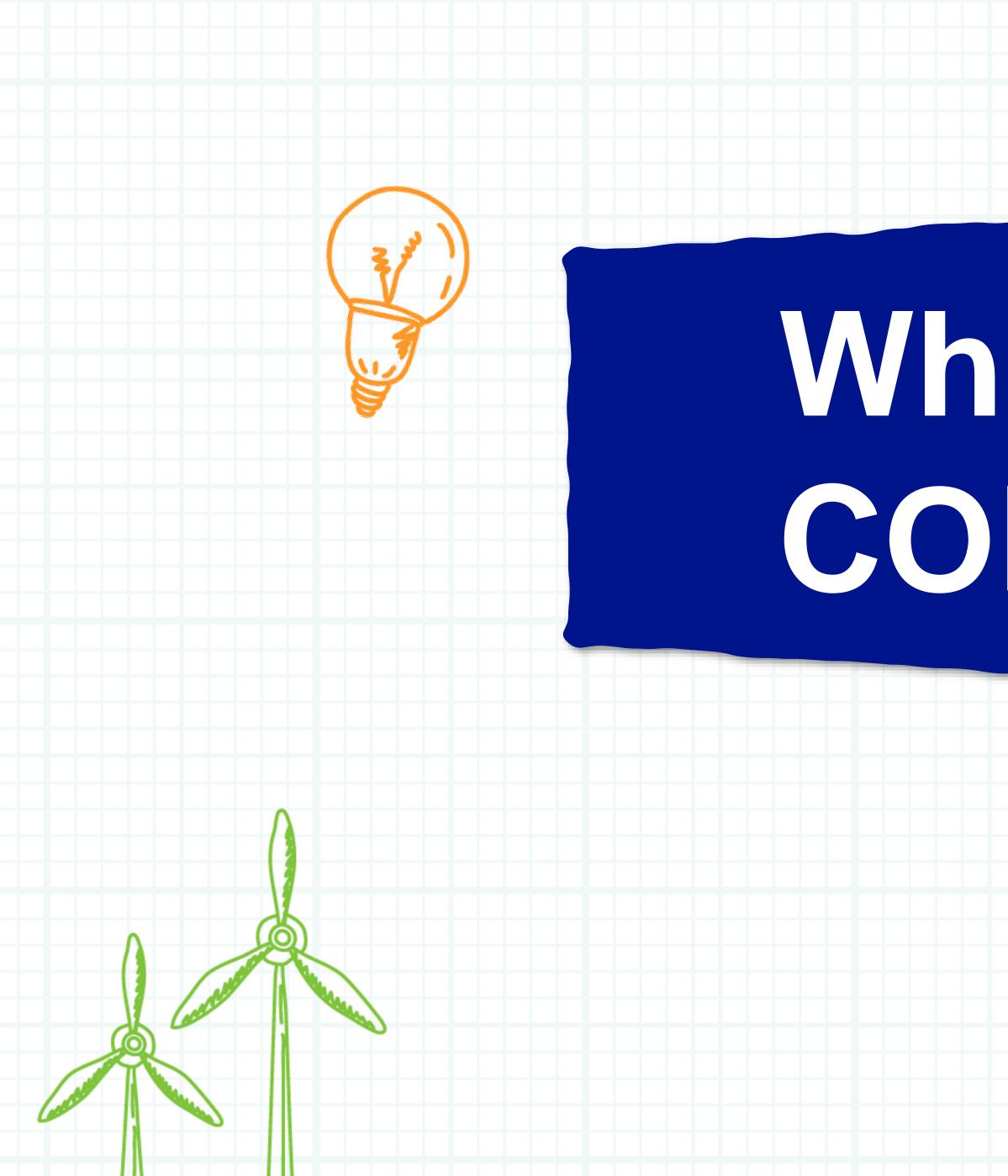
**Turn off lights, TVs and** computers when you're not using them.

Think about what's in your garden – maybe plant a tree, or even try growing your own fruit and vegetables.

#### Walk, ride or scoot to school instead of going in the car.

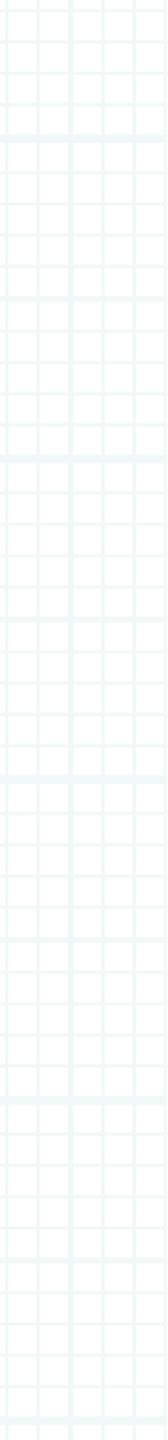
#### Switch to energy-saving bulbs in your home.





# What is COP26?





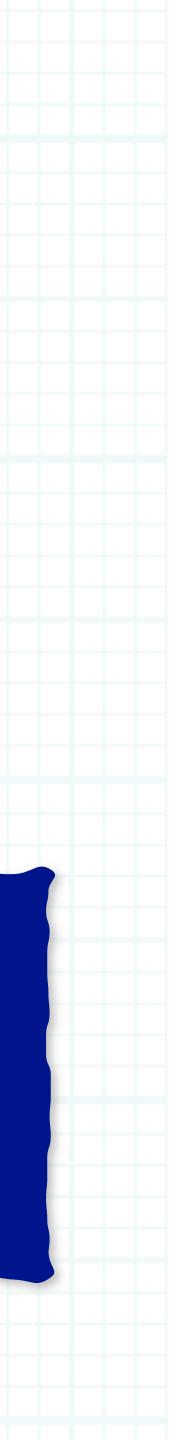
#### COP26 takes place: 1 – 12 November 2021

At COP 2015 in Paris the parties adopted an international climate change treaty that agreed to limit global warming to well below 2 degrees each year

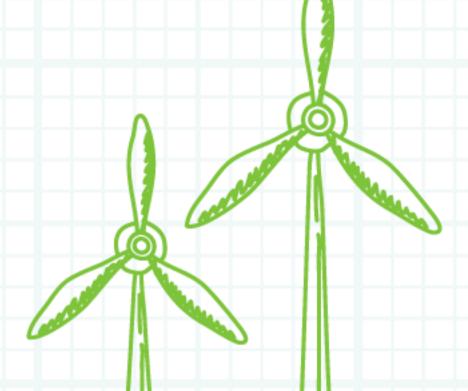
World leaders are meeting this year to assess the progress made so far and agree a process going forward

#### 30,000 people are expected to attend

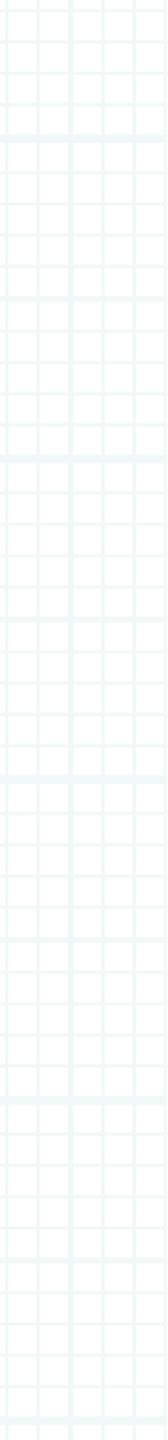
Note to teachers – add your resources from the teacher guide for further information on COP26 COP26 is a huge event where leaders, scientists and experts from around the world all meet to agree how to take action to fight climate change





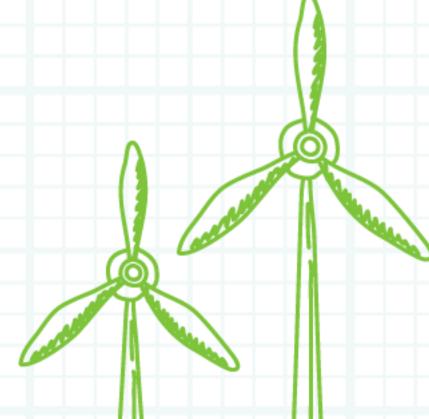


# And you!



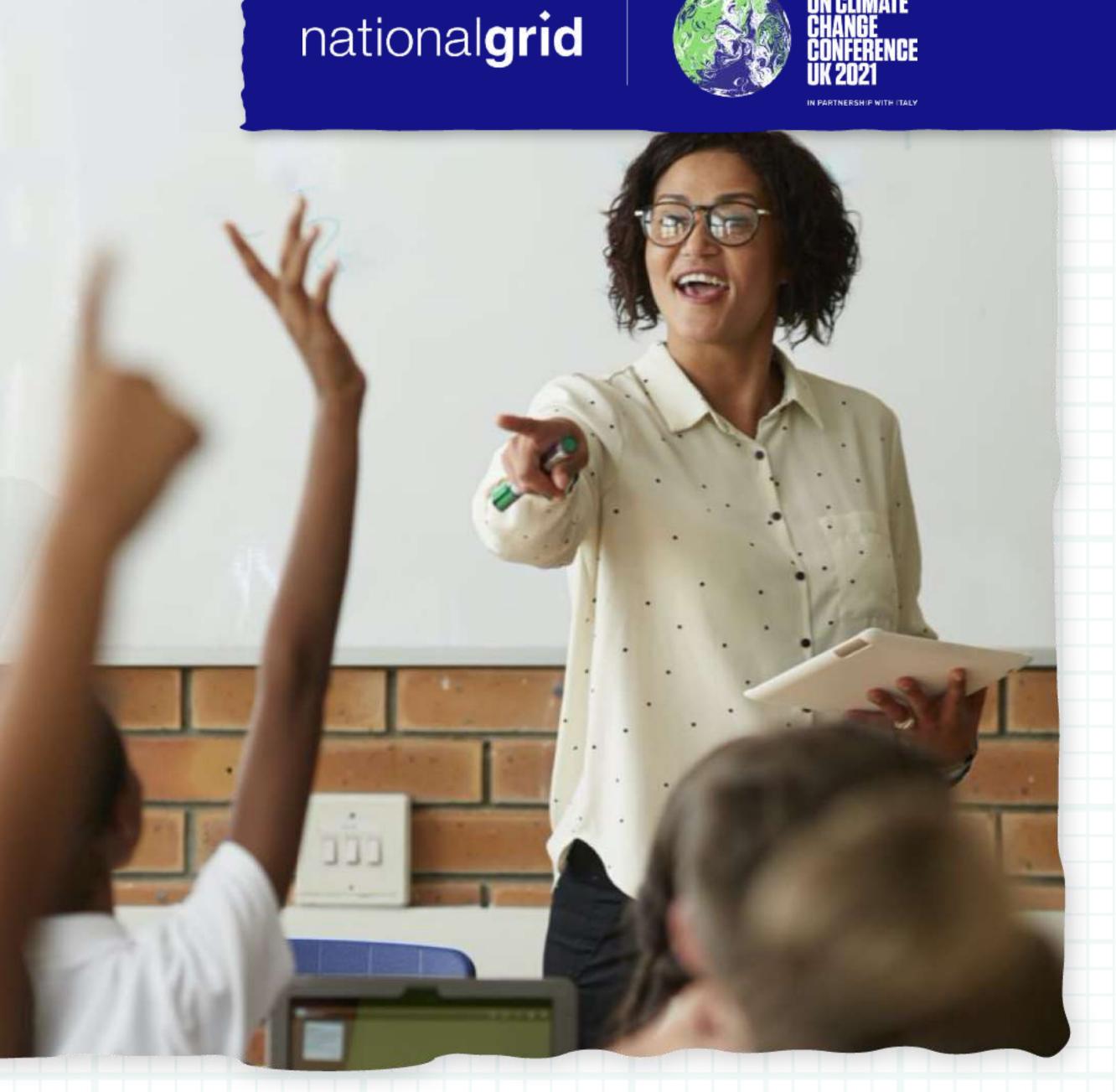


## Voices for a Green Future...





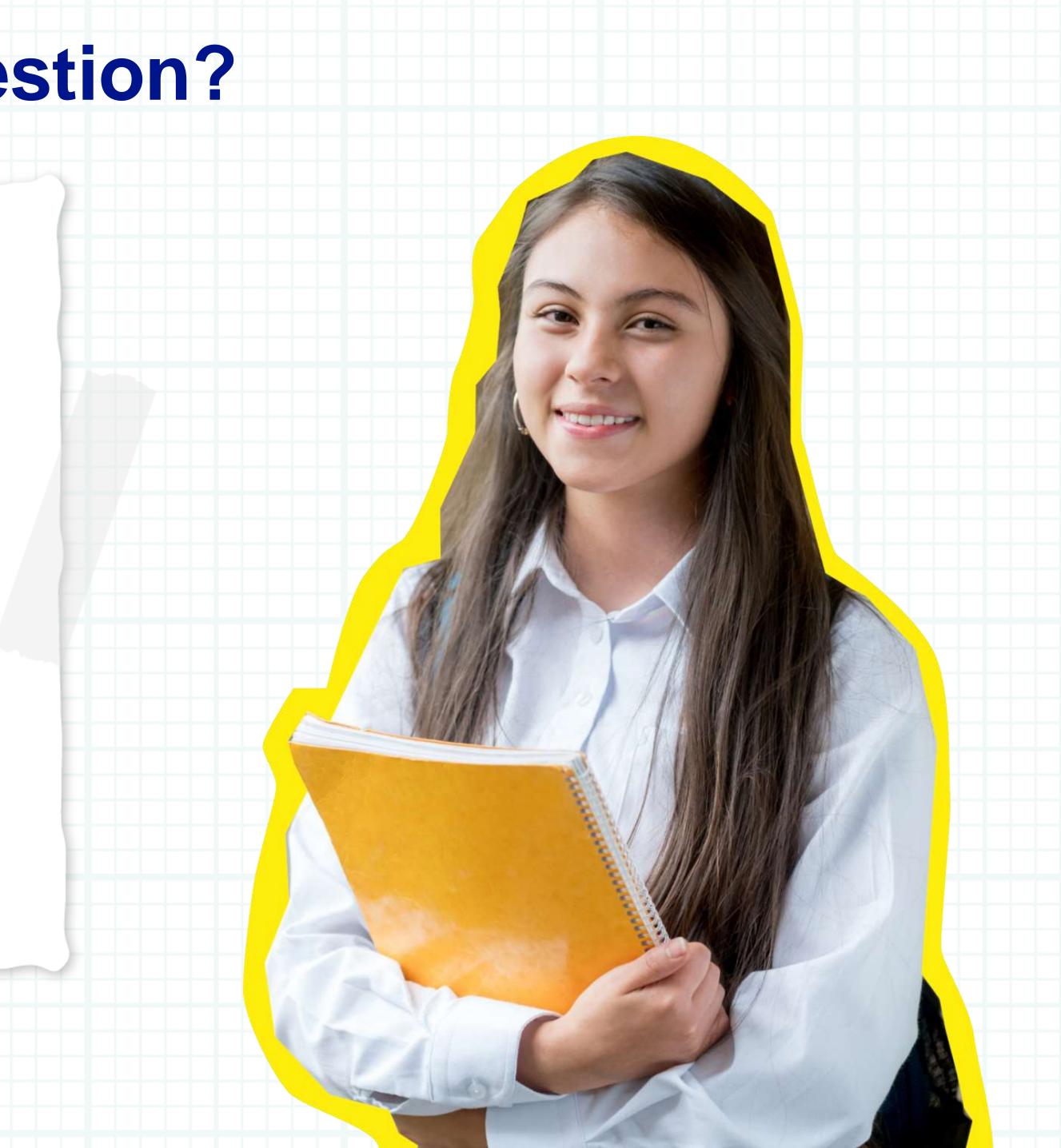
## PRINCIPAL PARTNER



#### **Remember our earlier question?**

#### If you were in charge of the country, what would YOU do to help solve climate change and look after the planet?





#### Getting to net zero



What is renewable energy?

What sources do we have?

Can you convince someone to switch to a greener source of energy?



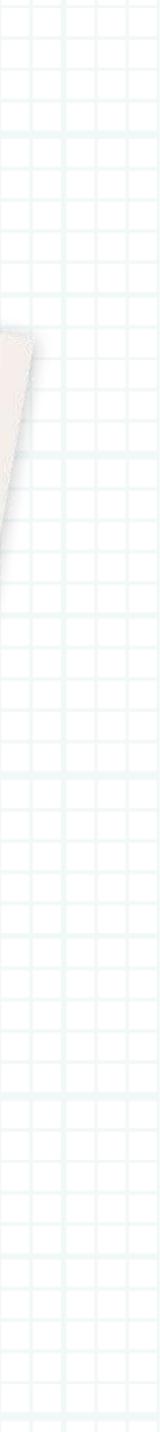


#### What will your 200 words say?

- What's your original idea?
- How is it different?
- How will it inspire people to change?







#### Enter the competition

Every voice matters in the fight against climate change, but it's young people like you who will be most affected by the decisions and actions we all take today.

You could win a grant for the school and whole heap of prizes for yourself!











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