



NEWS DETECTIVES

TODAY'S NEWS STORY

The 'trees' that could light up your home

KEYWORDS

- ☐ **Flutter:** Move up and down in the wind
- ☐ **Turbine:**
A machine that rotates
- ☐ **Capable:**
Able to
- ☐ **Kilowatt hours:**
The unit we measure electricity in



BUILD YOUR KNOWLEDGE

Windmills have been around for hundreds of years. But the modern wind turbine, which turns the energy of the wind into electricity was invented in the 1880s. They have become ever more important to energy supplies because they do not contribute to climate change.

A new wind turbine, designed to look like a tree, could help bring green energy to cities and homes.

A new leaf

This tree's leaves don't **flutter**, they spin. And while spinning they can generate enough electricity to keep the lights on for a family of four.

The WindTree is a wind **turbine** that might not look out of place in a city square, or even in your back garden.

It looks like a metal tree, with leaf shaped

mini-turbines that turn the wind into power.

Branching out

While wind power is a vital part of the UK's energy supply, some people complain that giant wind turbines are ugly. Others worry about the danger to birds who might fly into them.

At about five metres tall, these smaller WindTrees solve both problems. They also run silently. You might not even notice they're there.

Power up

New World Wind, the company behind the "wind tree", is set to release a new design in January that will be able to generate three times as much power.

One leaf will be **capable** of producing up to 1,000 **kilowatt hours** (kWh) per year. So the 36 leaf WindTree has a maximum annual output of 36,000 kWh.

Running in normal weather, a family with a WindTree in their garden could save 12 tonnes of CO2 a year.





INVESTIGATION OF THE DAY

WOULD YOU WANT A WIND TREE NEAR YOU?

WHAT
is a wind turbine?

WHO
is New World Wind?

WHERE
would you put WindTrees?

WHEN
are the new models of WindTrees to be released?

WHY
are there not more wind turbines in the UK?

HOW
much CO2 could a single Windtree in a garden save?

1 TAKE ACTION

Renewable energy is one of the most important ways we have of reducing carbon emissions. But reducing energy use is just as important. Learn what you can do to save power at home or at school.



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2 SHARE YOUR IDEAS

What have you found out in your investigation? Write, present or even record a piece that offers energy saving tips! Share what you've learned with your family and friends. What do they think? We want to hear your ideas too! Your teacher can share your reports with us too by sending them to editorial@theday.co.uk.

3 Build THE Change



CREATE YOUR DESIGN

What kind of at-home power plant would you build if there were no limits?

STEP 1:

Think about your design! Do you want something that blends in with your back garden, or stands out? Will it be like something from the natural world, or a new design?

STEP 2:

Build the change! Draw your home power plant. If you have time, why not make it out of LEGO® bricks or other craft materials?

Share your genius
Show your work to your class!



Upload a photo of your work to the **Build the Change** gallery by scanning the QR code and have your work displayed to inspire real-world change.

4 BUILDER OF THE WEEK

Every week we handpick one of the most inspirational designs from our online photo gallery to be our **BUILDER OF THE WEEK**. To get your creation featured here, ask your grown up to take a photograph and upload it to our Build the Change gallery, using the QR code on this page.



This week we have a house with a full rooftop garden with lots of places for nature.

"GREAT WORK!"

