

LET THE WIND BLOW



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2019 will be remembered as the year something changed, when children went on strike to demand that adults take action to stop climate change.

Inspired by a conversation between two mums (a Polish wind advocate and a British journalist) and a talented young Iranian artist, this comic book tells the story of how renewable energies like wind will help lead the transformation to a cleaner, healthier world for everyone.



In 2019 children around the world went on strike.
Not because they didn't like their teachers, but to tell the adults
in charge to take action to stop climate change. They took time out
of school to call for laws to protect the Earth and give them a clean future.

Children across South Africa are also learning about
the importance and advantages of clean wind energy.



But what exactly is climate change and why is stopping it so important?

To answer this, we need to step back in time...

200 years ago most people lived in the countryside.



Then the Industrial Revolution arrived.

Factories flourished and people

moved to
work in cities.

Massive amounts of energy was
needed to power these factories
and later homes, cars and
planes.

Using machines to create products instead of working by hand on the land
generally means...

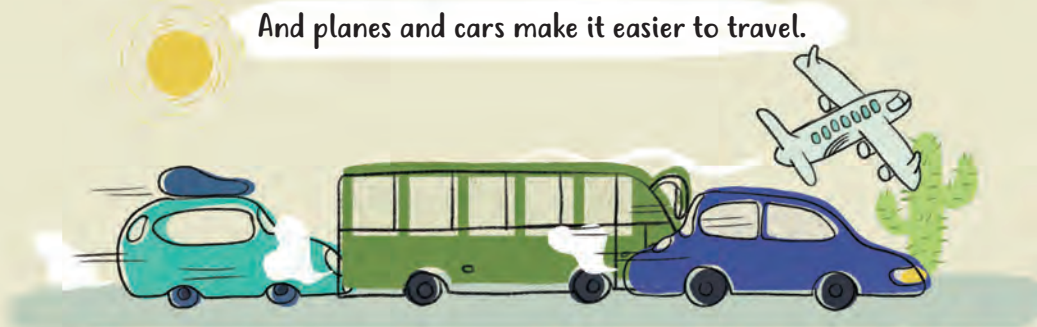
More jobs.



People earn more money, can buy more food,
and live longer and healthier lives.



And planes and cars make it easier to travel.

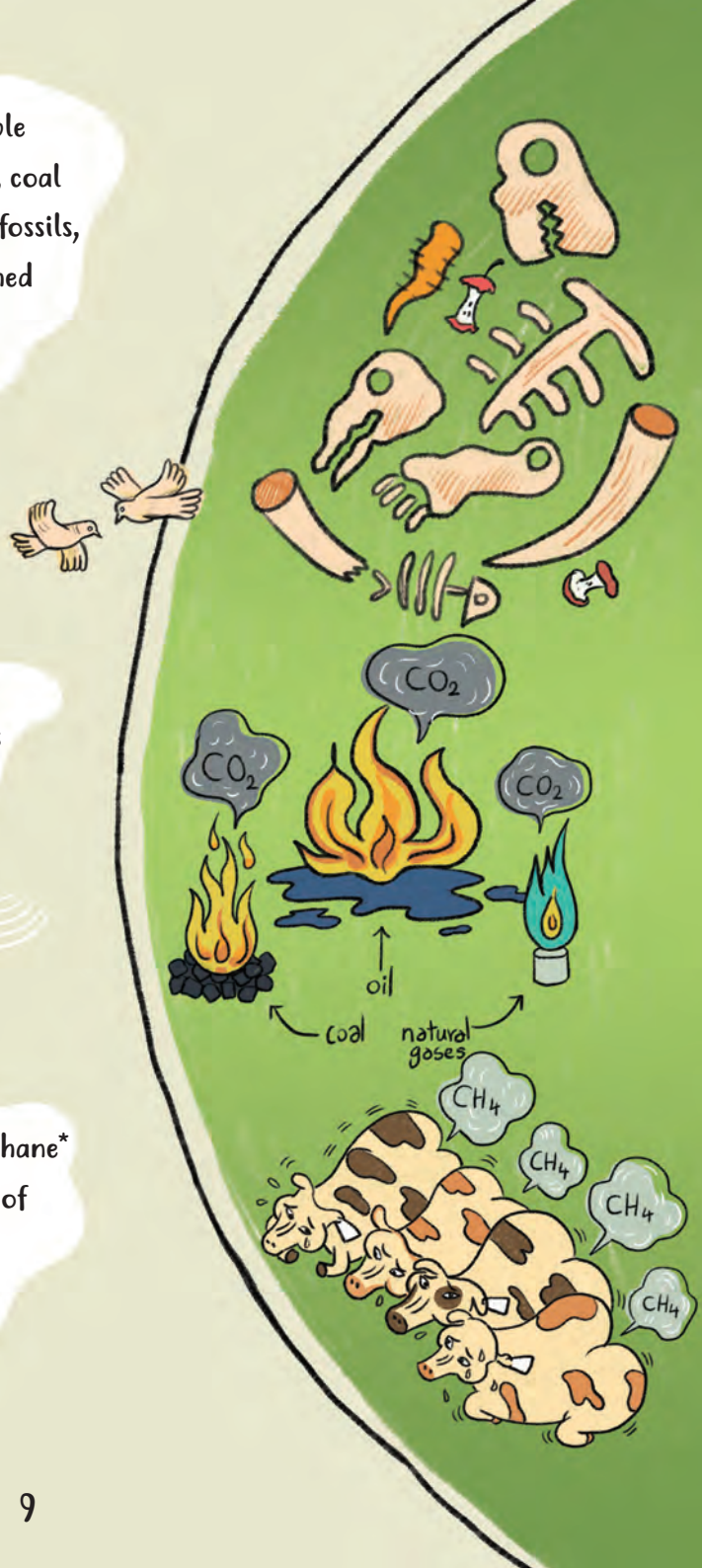


But most of this is made possible by burning fossil fuels such as oil, coal and gas. These literally come from fossils, dead animals and plants squashed in the ground for hundreds of millions of years.

When burnt, fossil fuels produce greenhouse gases such as carbon dioxide*.

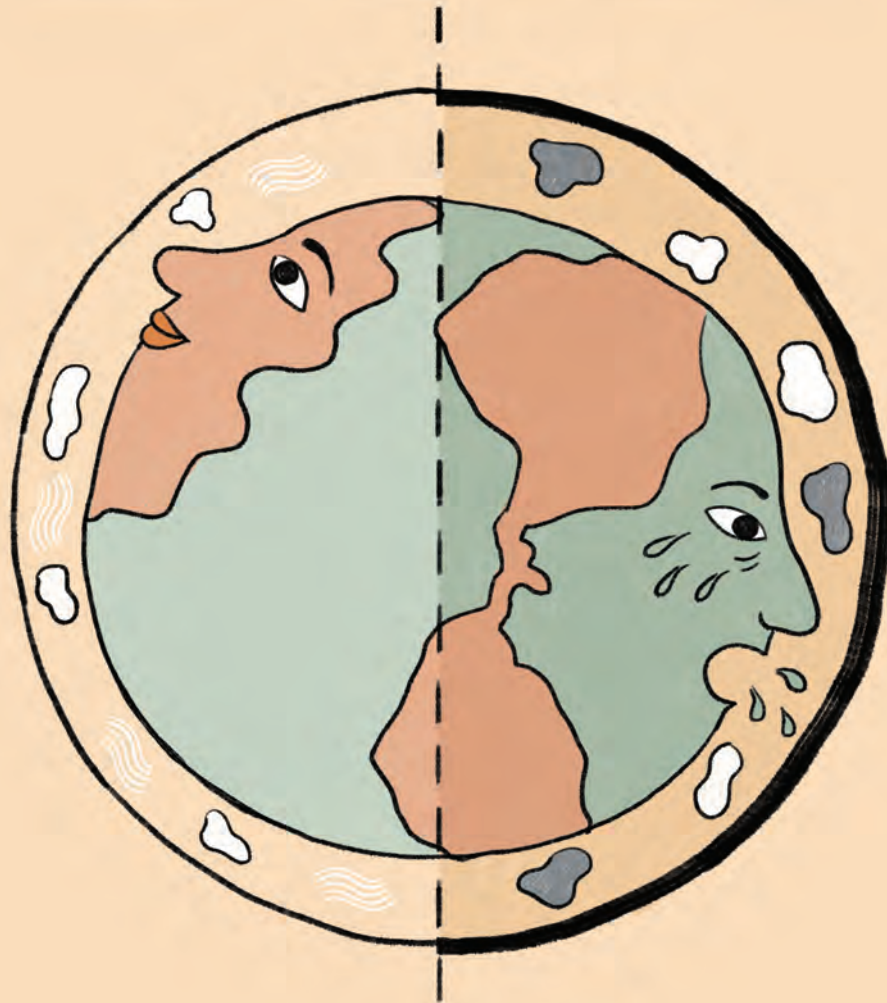
Another greenhouse gas is methane* from large farms with lots of animals, especially cows, farting and belching.

*carbon dioxide CO_2
*methane CH_4



Together these gases create an invisible blanket around the Earth and trap heat from the sun. Like a greenhouse.

This normally makes Earth a nice place to live. But the blanket has got too thick, causing overheating and climate change.



The world has already warmed by 1°C since the first factories appeared.

This may not sound like a lot. But in the same way you feel ill and feverish when your temperature rises a little, things are not working too well on Earth.



Extreme weather like floods and heatwaves are becoming more common. Animals and plants are suffering and even becoming extinct as their habitats change and disappear.



And people are falling ill and dying because of air pollution caused from factories and cars.



We can all take action.



Switching off lights saves energy and produces less carbon dioxide.



Walking, cycling, taking the bus or train creates less pollution than going by car or plane.



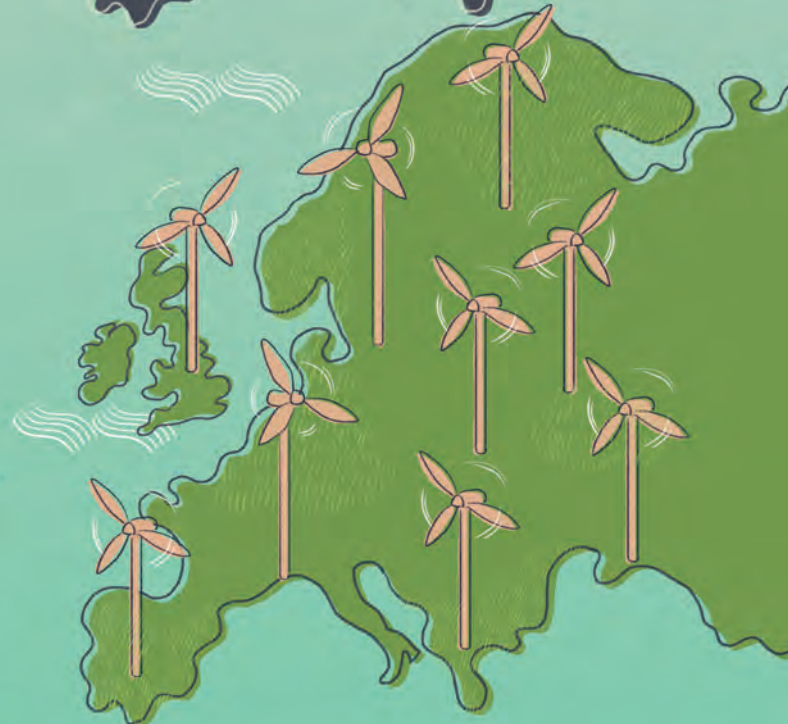
Eating less meat means less methane.



But this isn't enough. Burning fossil fuels for energy is the greatest cause of greenhouse gases.



We urgently need to change to using clean sources of energy like the wind and the sun, which South Africa has in abundance.



People have used wind energy for a long time. The earliest use was probably to sail boats across lakes and seas.



The first windmills were built around 2000 years ago to pump water and to grind flour.



In the late nineteenth century, scientists, including Poul la Cour, a Danish meteorologist, created the first turbines to produce electricity.

By 1918 there were already over 120 wind turbines producing electricity in Denmark. But it was not until 1978 that engineers in Denmark revealed the world's first three-bladed wind turbine that inspired those we use today.

South Africa's first wind turbines started producing clean wind energy in 2014.



So, how does a wind turbine work?

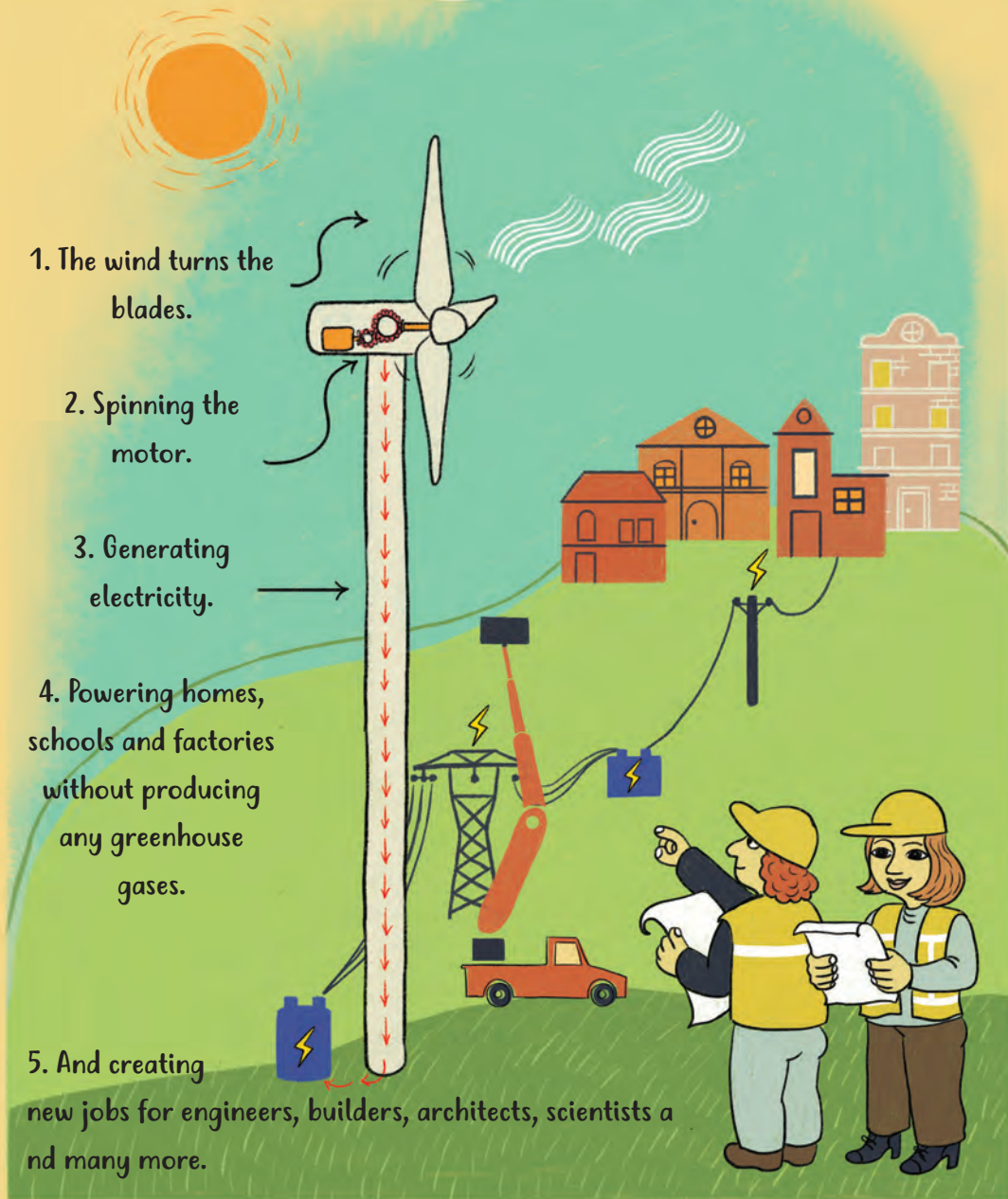
1. The wind turns the blades.

2. Spinning the motor.

3. Generating electricity.

4. Powering homes, schools and factories without producing any greenhouse gases.

5. And creating new jobs for engineers, builders, architects, scientists and many more.



The first wind turbines were not much bigger than their nineteenth century cousins.

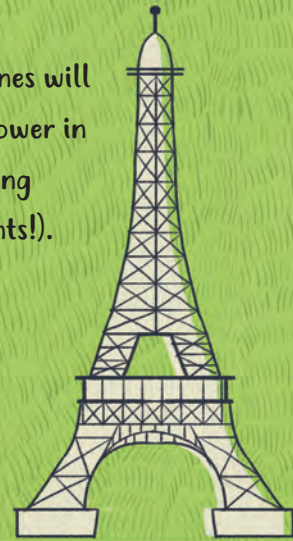


Today's turbines are higher, better, slower and stronger, and can be found on land or at sea.



The energy produced by one rotation of the world's most powerful turbines could power your home for a day.

By 2025, many wind turbines will be higher than the Eiffel Tower in Paris (each one weighing more than 100 elephants!).



Over 1,500 wind turbines are already helping to power South Africa. From the shores of Cape Town to the borders of Namibia and across the Karoo, we are using wind to create clean energy. Together with solar panels, electric cars, and changes in our behavior to save energy and pollute less, wind energy is creating a cleaner, healthier future for us all.



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