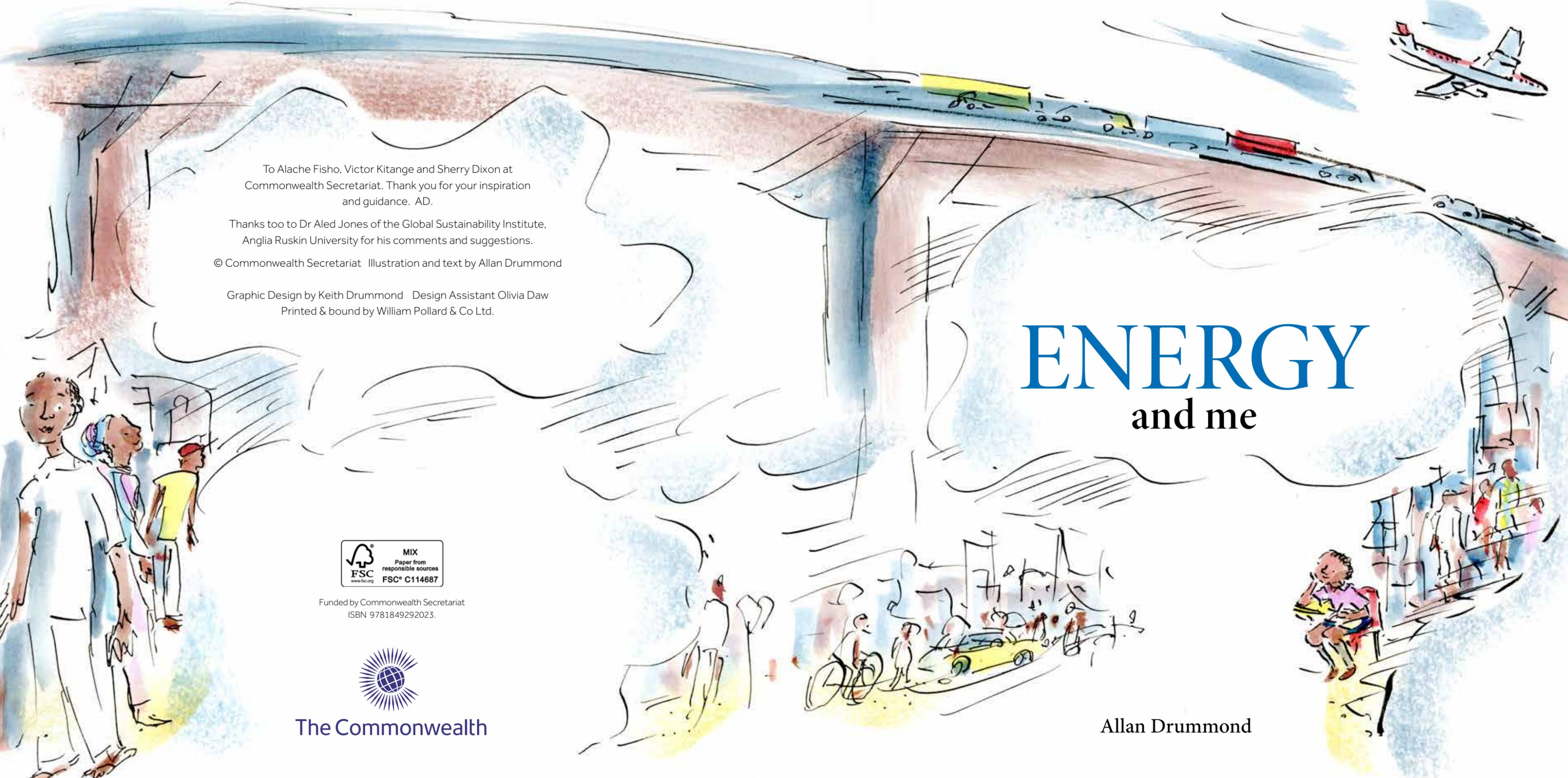


# ENERGY

and me

Allan Drummond



To Alache Fisho, Victor Kitange and Sherry Dixon at  
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# ENERGY

and me



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The Commonwealth

Allan Drummond

## Big Changes

There's a lot of excitement and news everywhere about the Global Transition to Clean Energy. The reason for it, as we have heard, is that emissions of carbon dioxide gas from burning fossil fuels are impacting the world's climate, causing Global Warming. The world has to do something about it.

Clever new energy systems are being developed and big plans are being made. But how will all of this affect everyday people around the world? What will happen to you? And what can you do?

World leaders have agreed that the change to clean energy should be Inclusive (everyone must be involved), Just (it must be fair), and Equitable (people must be treated equally).

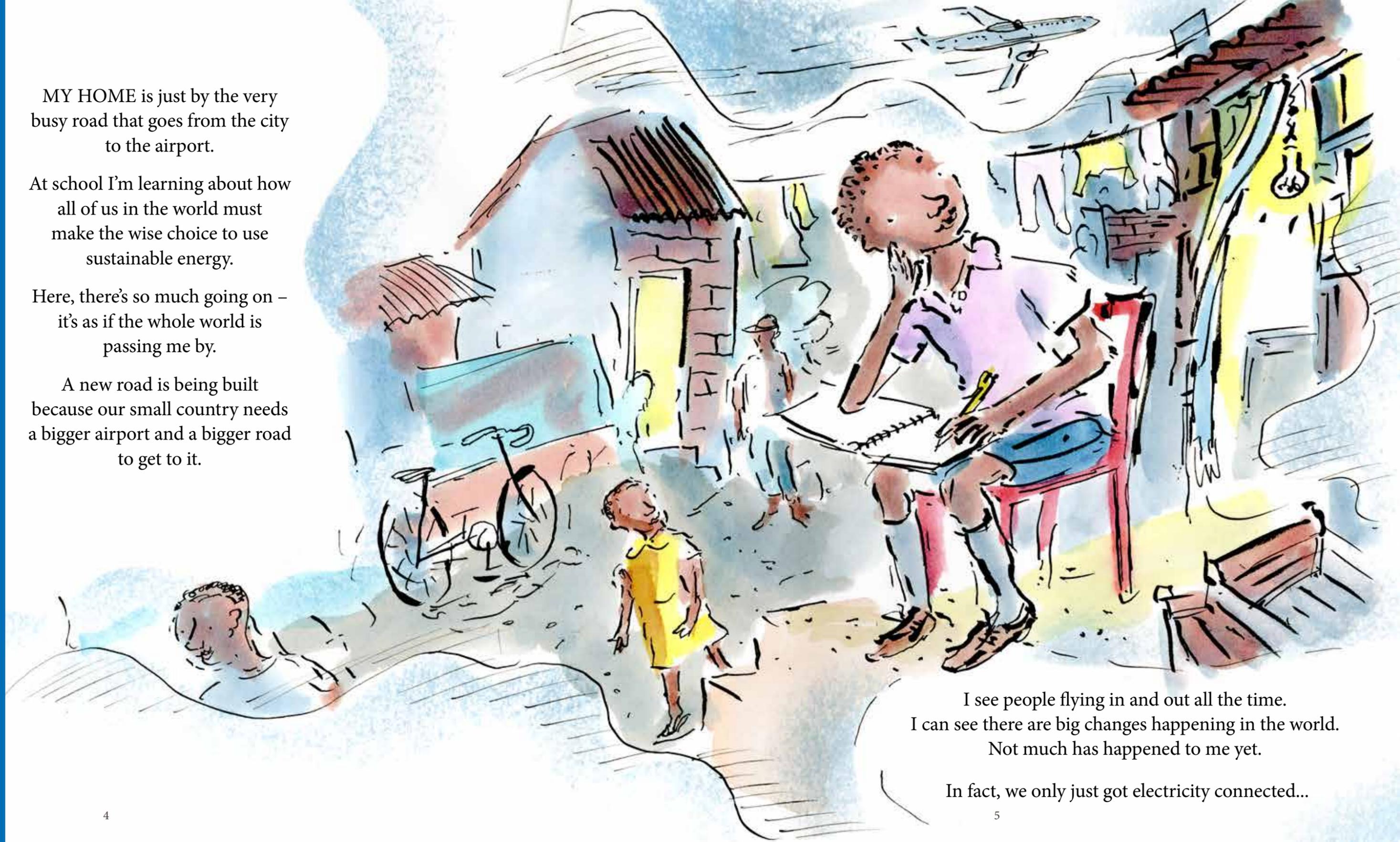
As you'd expect, the changes will be different for different people in different places...

MY HOME is just by the very busy road that goes from the city to the airport.

At school I'm learning about how all of us in the world must make the wise choice to use sustainable energy.

Here, there's so much going on – it's as if the whole world is passing me by.

A new road is being built because our small country needs a bigger airport and a bigger road to get to it.



I see people flying in and out all the time.  
I can see there are big changes happening in the world.  
Not much has happened to me yet.

In fact, we only just got electricity connected...

Electricity can be hard to come by.

Uh Oh! It's flickering!

Mrs Okello's shop has a solar panel on the roof for charging phones. That's sustainable energy – so, I guess she's part of the change.

My battery's low!

Ok. Charge it here!

And the power in our house is always going out.

And the internet has finally arrived at school.

Cough!

Internet! Yay!

We can learn about exciting changes going on all over the world!

We can carry on because mom cooks on an open fire just like everyone else. But the fires make bad smoke everywhere. It's not clean energy. And there are also fumes from all the traffic.

But I still feel the world is passing me by. How is the change coming? What are people doing? What can I do? What can you do?

### In this story...

The changes happening mean big questions have to be asked, like, Who in the world has access to electricity? Who has access to Clean Energy? In this story the boy's family does have electricity for lighting – but that's all they can afford. And it's not a great situation because the power in the area often cuts out.

This family does not have access to clean energy for cooking – and that's a situation in many countries all over the world. This boy's mother cooks on an open fire using wood and waste. Using wood and waste for cooking releases gases and causes pollution that are harmful to people around the fires, and to the world's climate.

Mrs Okello, the shop owner, has a scheme where people can pay to charge their phones from her solar panels. This is a fairly new development in the world. Even though this is a very small-scale example, there are interesting lessons here:

She is using solar power that is a renewable and clean source of energy. It is local (her system does not depend on distant sources of power) and this makes her charging system energy independent. It's a small change but an important one when it is happening to many people worldwide.

There's a lot to think about!

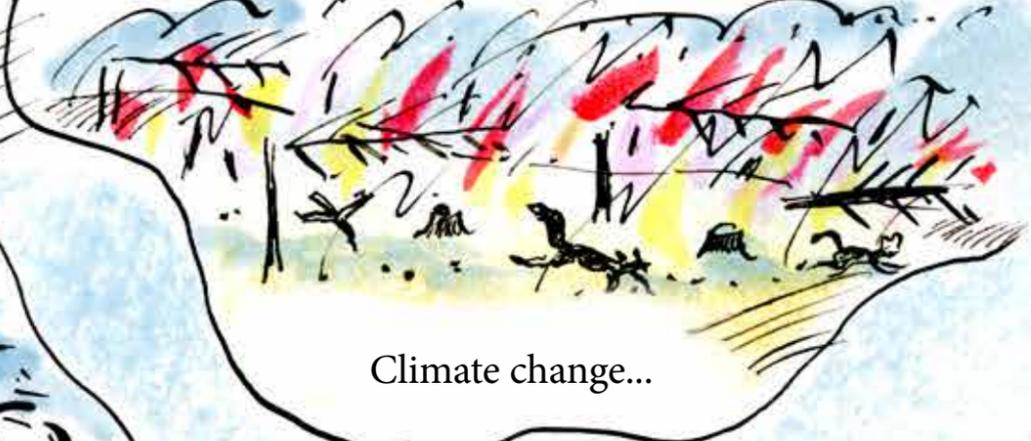
Last month our teacher told us that local leaders have agreed to put money towards new cleaner energy cooking stoves.

That's a good change – it will reduce the smoke around here. But who decides these changes?

We hear about many new things...



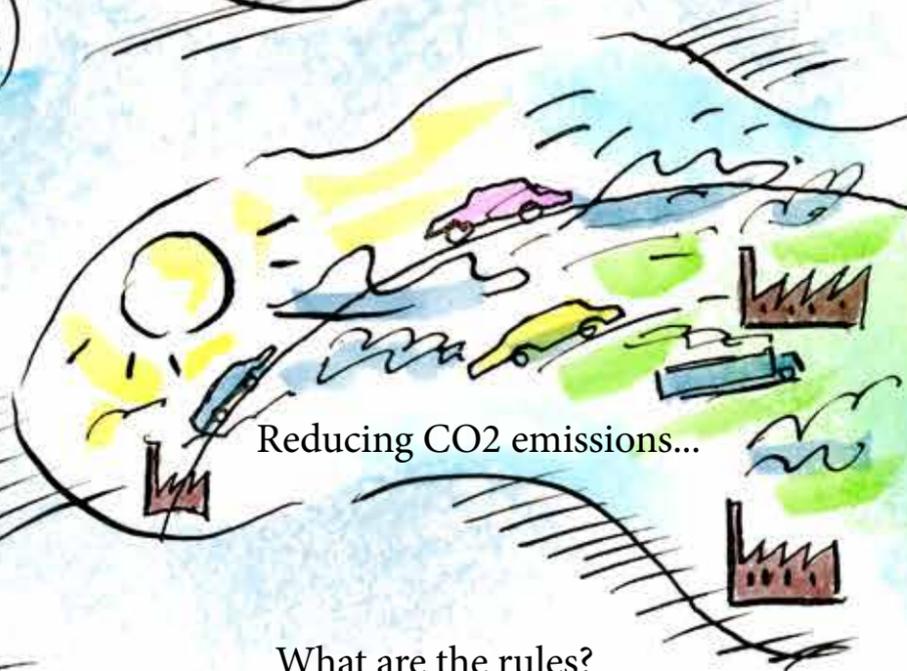
Special bike schemes...



Climate change...



Electric cars...



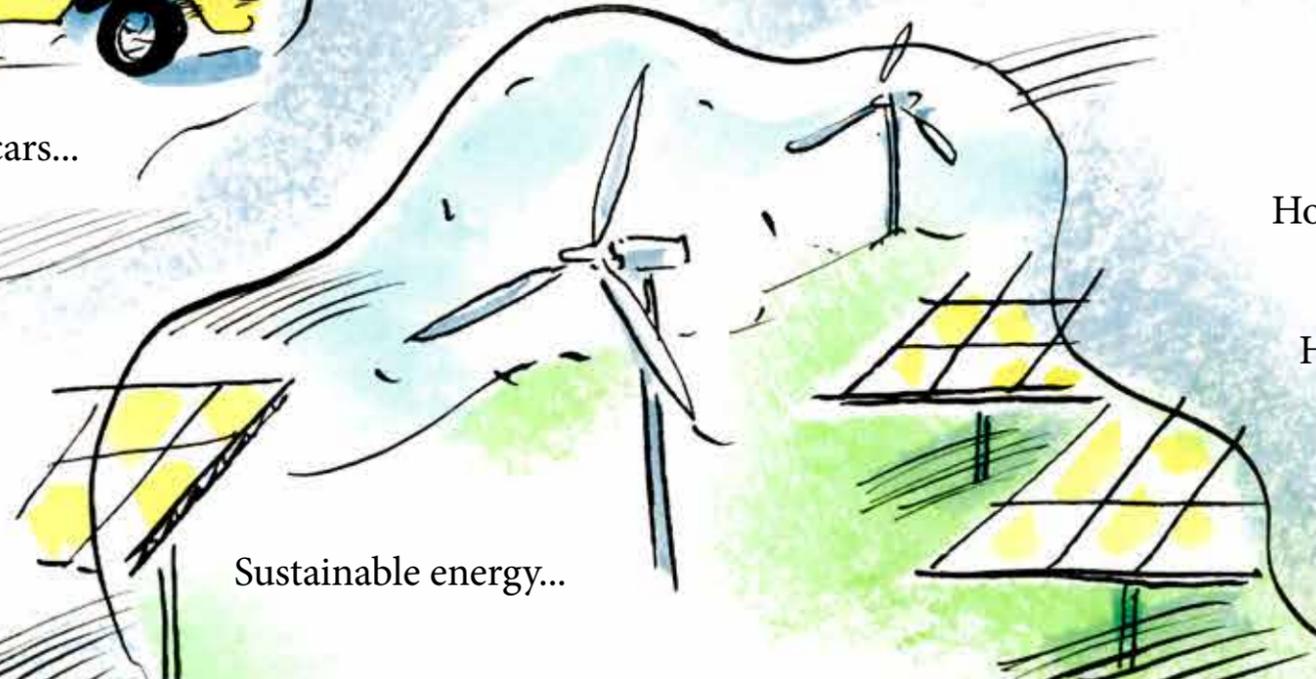
Reducing CO2 emissions...

What are the rules?

Who makes them?

How can I learn to take part in the Transition to Clean Energy?

How can we get everyone in all countries working together?



Sustainable energy...

## Small steps are important

The change to Clean Energy is happening whether we like it or not. It's a challenge, but an exciting one. You might be asking, 'The change is so big, what can I possibly do?' And if, for example, you live in a small country you might say, 'We're too small. Let the other bigger countries take on the challenge.'

But small steps are important, especially if they are taken by people all over the world at the same time. In Africa for example, mobile phone technologies powered with renewable energy such as solar panels have become powerful tools for change. This technology, combined with simpler ways of transferring money digitally between people, enables individuals and businesses, educators, medical workers and others to work together very effectively without having to rely on traditional big energy suppliers or distant banking facilities.

What small changes are happening near you?

Big decisions have already been made on a global level.

But this doesn't mean local people don't matter.

One important agreement was made in 2015 when almost all the leaders of the world met in Paris, France and agreed to lower carbon dioxide levels in an effort to prevent the the continued rise in global temperature.

This is called the Paris Agreement.

The Paris Agreement is a big step with clear signposts, and it has set us all on the road to clean energy.

Guidelines and rules like these help national leaders, local leaders and everyday people like you and me to make clear plans and to set goals.

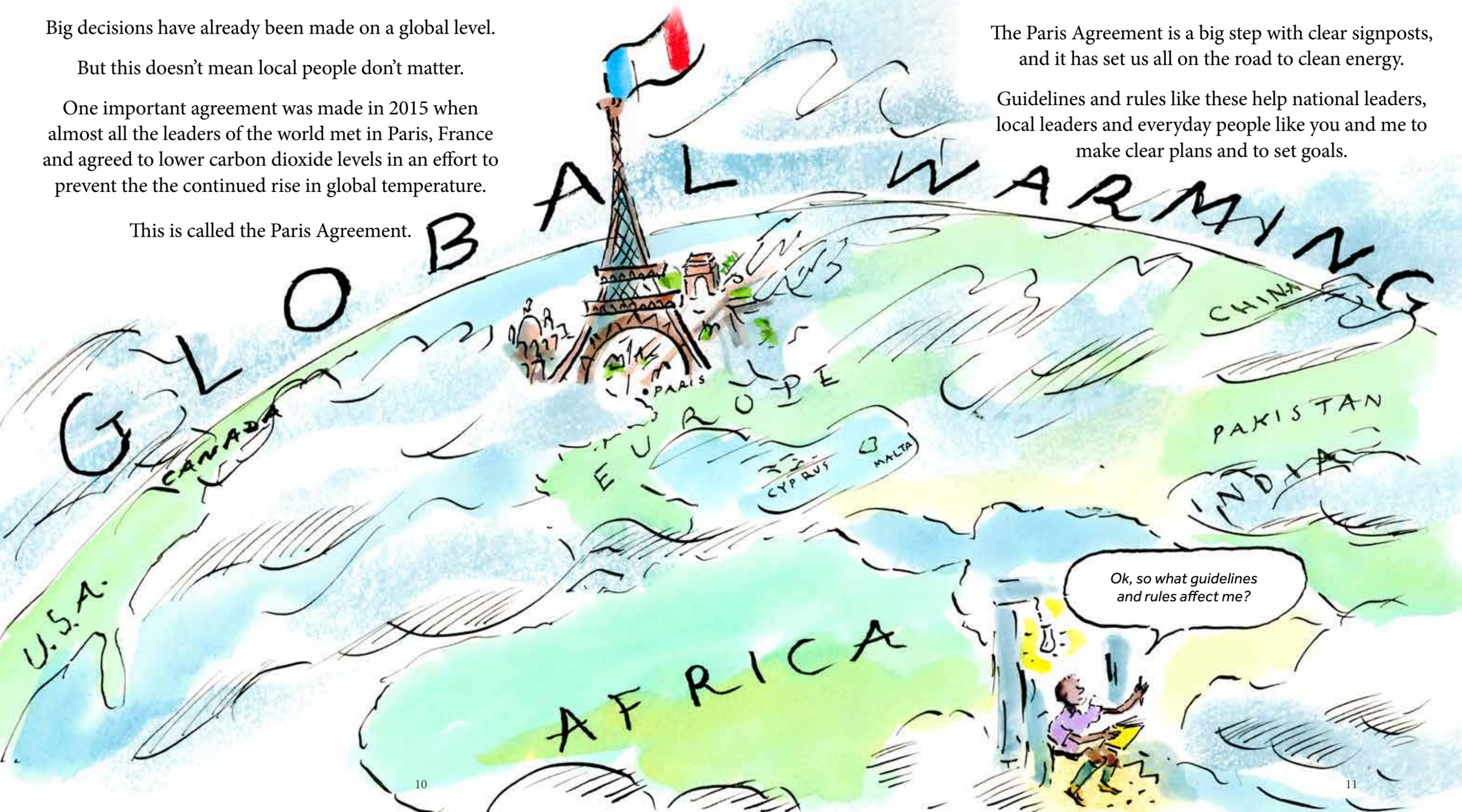
## The Paris Agreement – a great start

You may have heard of the Paris Agreement, which happened in 2015 when a group of 195 countries all agreed to lower greenhouse gases (mainly CO<sub>2</sub>) in a world effort to slow global warming. They set important goals that are shaping the changes we see around us.

But how can countries, leaders and individuals like us change our old habits and move forward?

Along with the Paris Agreement have come other enabling frameworks such as Laws and Regulations (rules and orders). Lots of these are local laws about things like traffic control, car fumes, building rules and waste. There are also new Standards (grades and levels) to guide and measure things such as how energy is used to make and distribute things. Again, looking at the boy, we can see there is a lot more to be done in his situation to make his world equal to others.

How could you help?



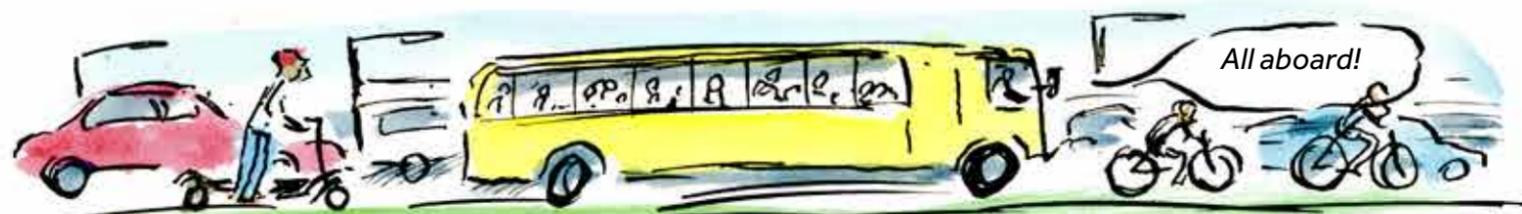


There will be policies - rules and laws that will eventually change the picture we see of this boy's life.

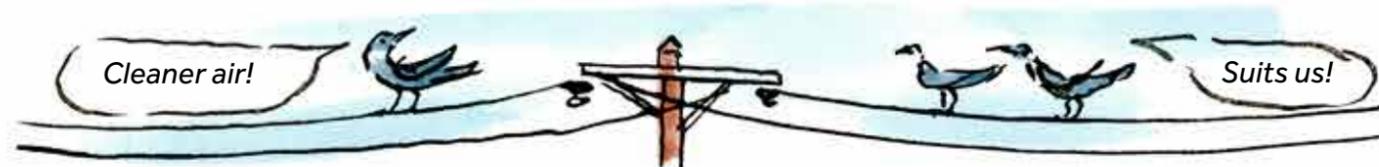
When rules are set in his country for low emission cars and trucks, then the traffic pollution will reduce dramatically.



People will be encouraged to travel by public transport...



...and in cleaner ways such as pedal cycles, electric bicycles and electric scooters.



Electricity will become key to many of the changes.

We can expect changes to aircraft efficiency and emissions.



All the smoke from open fires is bad for peoples' health. It creates pollution and contributes to global warming. There will be clean air policies.



Power to heat and to cool homes will be considered. There will be rules about how much energy is used. And how efficient these systems are.



The picture we see will change - eventually. It seems a long way off. But people are working towards positive change.

Good policy will enable the change.

## Ways to make things happen

The busy road in this story is well known for its traffic jams and the pollution these bring. And of course, the road leads to and from a busy airport where planes fly in and out from all over the world. The cars, trucks and the planes all use non-renewable energy such as oil for fuel. They are using this up, and making a lot of CO2 gas at the same time.

Many countries have now committed to policies that state that no more new oil powered cars can be sold by a certain year. This policy will mean people will have to change to electric cars, electric trucks and so on.

Imagine how different this scene would be if these changes happen. But how could the change happen in such a poor country? Could this policy work? How can it be made fair?

Could you play a part in making new policies Inclusive, Just and Equitable?

## Positive change

It is well known that people find it hard to accept change.

But there are so many positive benefits to be gained from the Transition to Clean Energy. Hopefully, if policies, new rules, rewards, penalties and so on are seen to be fair, just and equitable, then positive change will happen.

For example, how we heat and cool our houses and work places, how we use transport, how we use power, and how industry works with energy are all areas of change that governments can help us to address.

Clean Energy will also benefit everybody's health not just because of the focus on eliminating pollution. Aiming for a Fair, Equitable and Just transition will have a positive effect on energy poverty – those people who have limited access, or no access to electricity. Poorer areas will see overall improvements in health.

What positive changes have you seen?

It will be all about positive change.

Yes, people will have to change their behaviour.  
But there are policies in place to ensure  
the changes will be fair for everyone.



Information and know-how will have to be shared  
equally – all over the world!



Leaders will have to know  
what they are talking about.



People who buy and sell things like oil and coal, and who make  
things like plastic made from oil will have to change their policies.



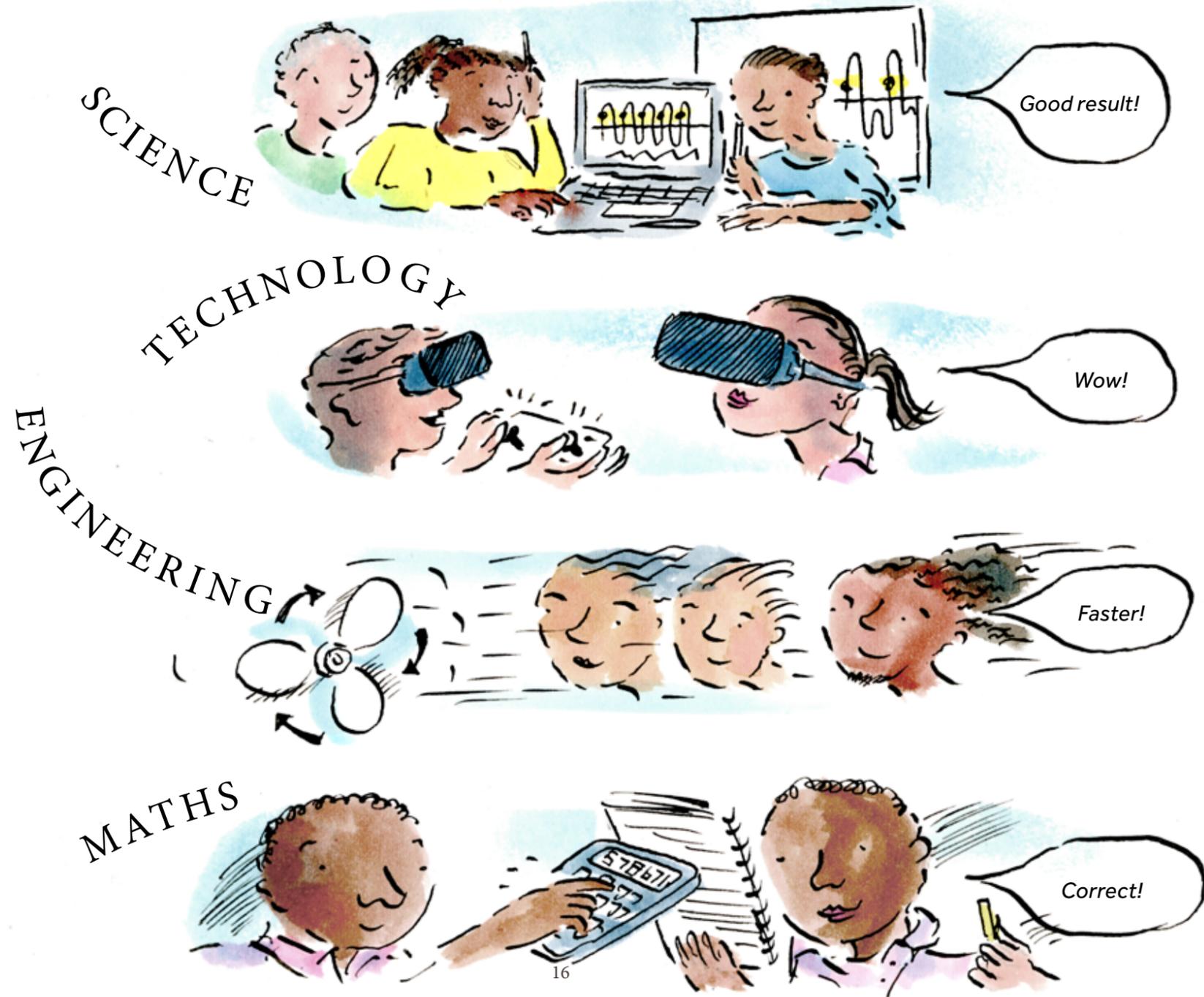
And the way all these changes are paid for  
by banks will have to change.



It's exciting! To play our part we'll have to get studying....



What we learn at school and later at college and university, if we get to go, will be so important. We can help develop new solutions. Some important subjects to study are...



But skills will be needed in lots of other areas too. For example...



And people whose jobs change during the transition will also need new skills..



So, in the Transition to Clean Energy, young people are a powerful new force.

Some have proved that already....

## Young People

The new ideas and new technologies involved in the Transition to Clean Energy are exciting. Input from keen young people who are curious, puzzled and excited by the problems and possibilities is vital to the change.

Studying science, technology, engineering and math is a good start for girls AND boys who are interested in thinking up new ideas for clean energy.

The sky really is the limit when it comes to dreaming up new ideas and new methods. Just as important will be the creative minds interested in design and problem solving. And because people and policies are involved in the changes, those interested in law, politics and how society works can also have a role.

Which subjects are you interested in?

A lot of the change we see happening has been boosted by the voices of youngsters.

Some refused to go to school on Fridays, and instead went out demonstrating about the Climate Emergency – they want a positive change to happen now.

You may have seen these youngsters on TV.

You may even have taken part in the protests.

Whatever you may think of protests and demonstrations, there is no doubt that public opinion has influenced governments and driven some of the **Transition Towards Clean Energy**.

Often people have made positive changes locally, or regionally.



## It starts with school

The classroom is the perfect place to look at the Transition to Clean Energy. Exciting new ideas, important new policies, crucial goals, and a worldview of what is going on – teachers and students can explore all of these together.

First, it's important to discover what is happening and why it is happening. What are the Roads to Clean Energy?

Then it's important to realise that renewable energy sources surround us. Knowing this helps us to understand how the new technologies can be used to harness the energy around us. Learning about all of this is the first and most important thing we can do. School is the place where we can work together on these ideas.

Individually we can take small steps ourselves by being aware of where our energy comes from and how we can use it carefully and effectively. What steps can you take?

So I guess that makes young people like us very important.

Sometimes it may seem that not much is happening to us, but things are changing.

The world is not passing us by. We are in it.

Young people are actually very important in the Transition to Clean Energy.

We all love technology.

We are great communicators inside and outside the school.

We need to encourage each other to understand the changes, and to help make them work.

It starts with school. We are the ones who will make all of this work.





Children walking to school in a city in central Africa. Some of these houses are close to the road to the airport.

Photographs by Allan Drummond.

#### AUTHOR'S NOTE

Our energy, where it comes from, and how we use it plays a big part in how we live our lives. It always has done. Today more than ever and it is important for teachers and students to consider the big picture... how the emerging new energy systems impact people's lives, and the exciting opportunities that this transition offers to everyone in the world. A massive movement is happening all around us. And it has the potential to benefit everyone equally.

I have visited several countries around the world and been into schools where students are learning about many aspects of Sustainability and the Transition to Clean Energy. I am always amazed to hear just how much children already know about the subject.

For this book I imagined just a few scenarios developed from personal experiences on my travels. My aim is to start discussions and to encourage students and teachers to think about the part they can play in the Transition to Clean Energy.

#### PUBLISHER'S NOTE

This book is published under the Commonwealth Sustainable Energy Transitions Agenda; a platform for collaboration amongst Commonwealth member countries to accelerate action in the transition to low carbon energy systems and towards achievement of SDG 7. With more than 60 per cent of the Commonwealth's population under the age of 30, the Commonwealth Secretariat is committed to investing in children and young people, placing them at the centre of sustainable and inclusive development. Please contact [sustainableenergy@commonwealth.int](mailto:sustainableenergy@commonwealth.int) to find out more about this exciting initiative to grow energy literacy and innovation amongst school age children across the Commonwealth.

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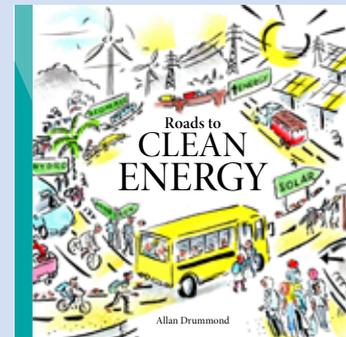
We can all see that big changes are happening in World Energy. This book looks at who is leading this change, and how we can all learn to take part in the Global Transition to Clean Energy.

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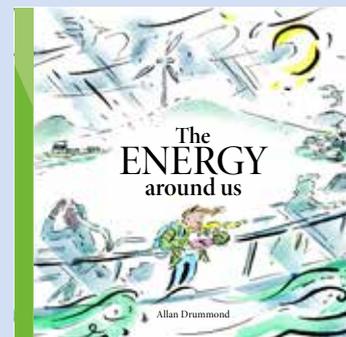


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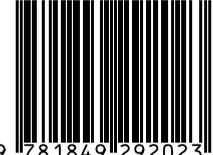


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