

There are various kinds of winds. Winds near the equator are called "trade winds." These winds blow from the east to the west, helping ships cross the ocean easily. Winds in the Earth's mid-latitude region, are called "westerlies." These winds blow from west to east and move the weather from place to place.

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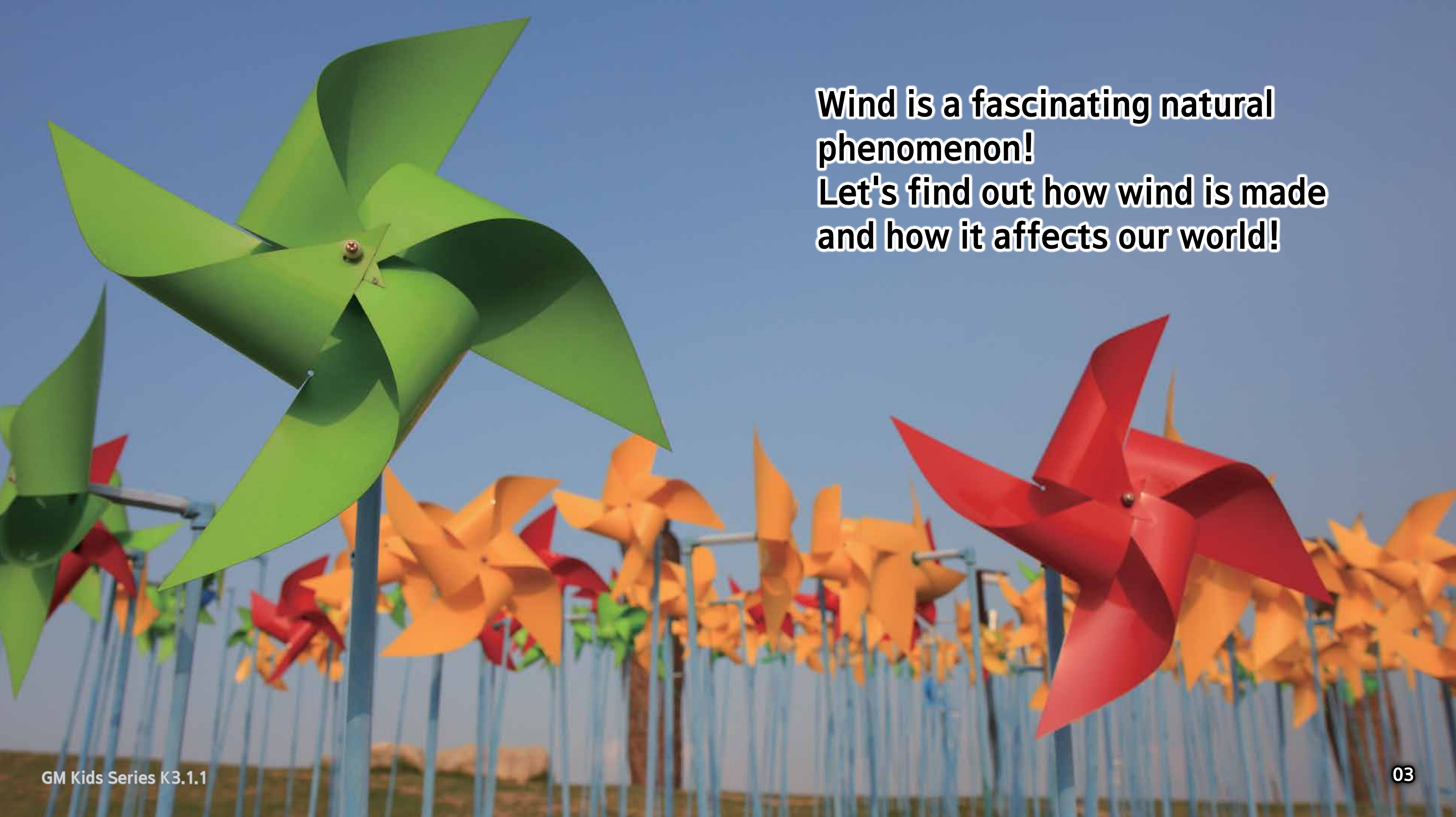
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# Why Does the Wind Blow?



A large field of colorful pinwheels is shown against a clear blue sky. In the foreground, a large green pinwheel is prominent on the left, and a red one is on the right. The background is filled with many smaller orange and red pinwheels, all mounted on thin blue poles. The scene is bright and sunny, suggesting a clear day.

**Wind is a fascinating natural  
phenomenon!  
Let's find out how wind is made  
and how it affects our world!**

**First, let's learn how wind is created.  
The Earth we live on receives warm  
energy from the sun.**

**But not all places on Earth warm up  
equally.  
For example, the ocean warms up  
slowly and cools down slowly.**

**Places like the desert get hot quickly during the day and cool down quickly at night.**

**The air moves differently depending on the difference of temperature.**

**Warm air rises because it is lighter,  
and cold air falls because it is  
heavier.**



**So, the air then moves here and  
there, creating wind.  
It is just like when we fan ourselves  
with our hands.**



**There are various kinds of winds.  
Winds near the equator are called  
"trade winds."**

**These winds blow from the east  
to the west, helping ships cross  
the ocean easily.**



**Winds in the Earth's mid-latitude region, are called "westerlies."  
These winds blow from west to east  
and move the weather from place  
to place.**



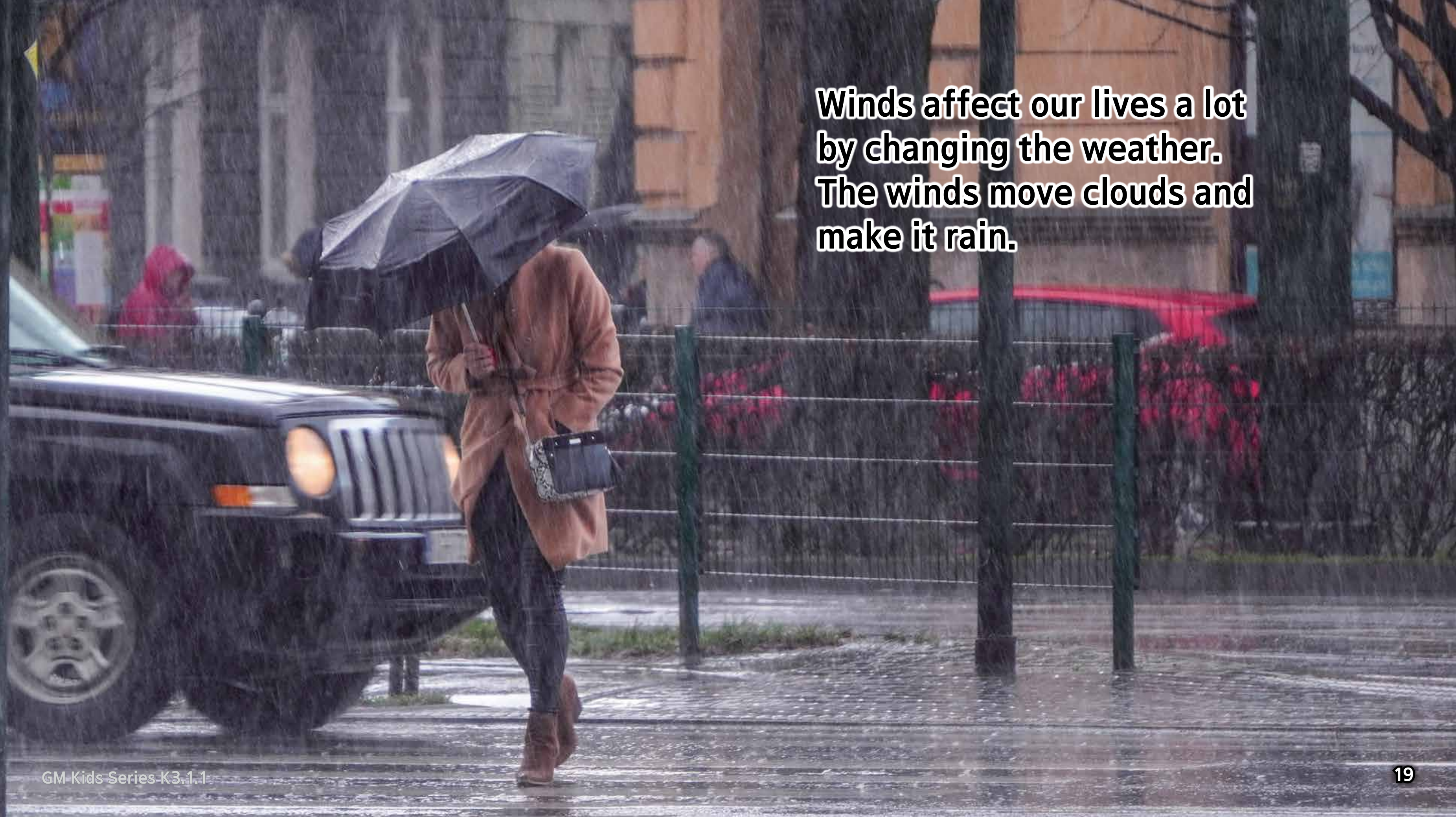
These winds are called  
"valley breezes."

Interesting winds also blow in  
mountains and valleys.  
During the day, the tops of the  
mountains warm up more quickly.  
The warm mountain air rises up,  
and the cooler valley air moves up.

**On the other hand, at night, the top of the mountain cools down more quickly. So, the cold mountain air moves down, while the warmer air from the valley rises, cools, and goes down again.**

**These are called "mountain breezes."**

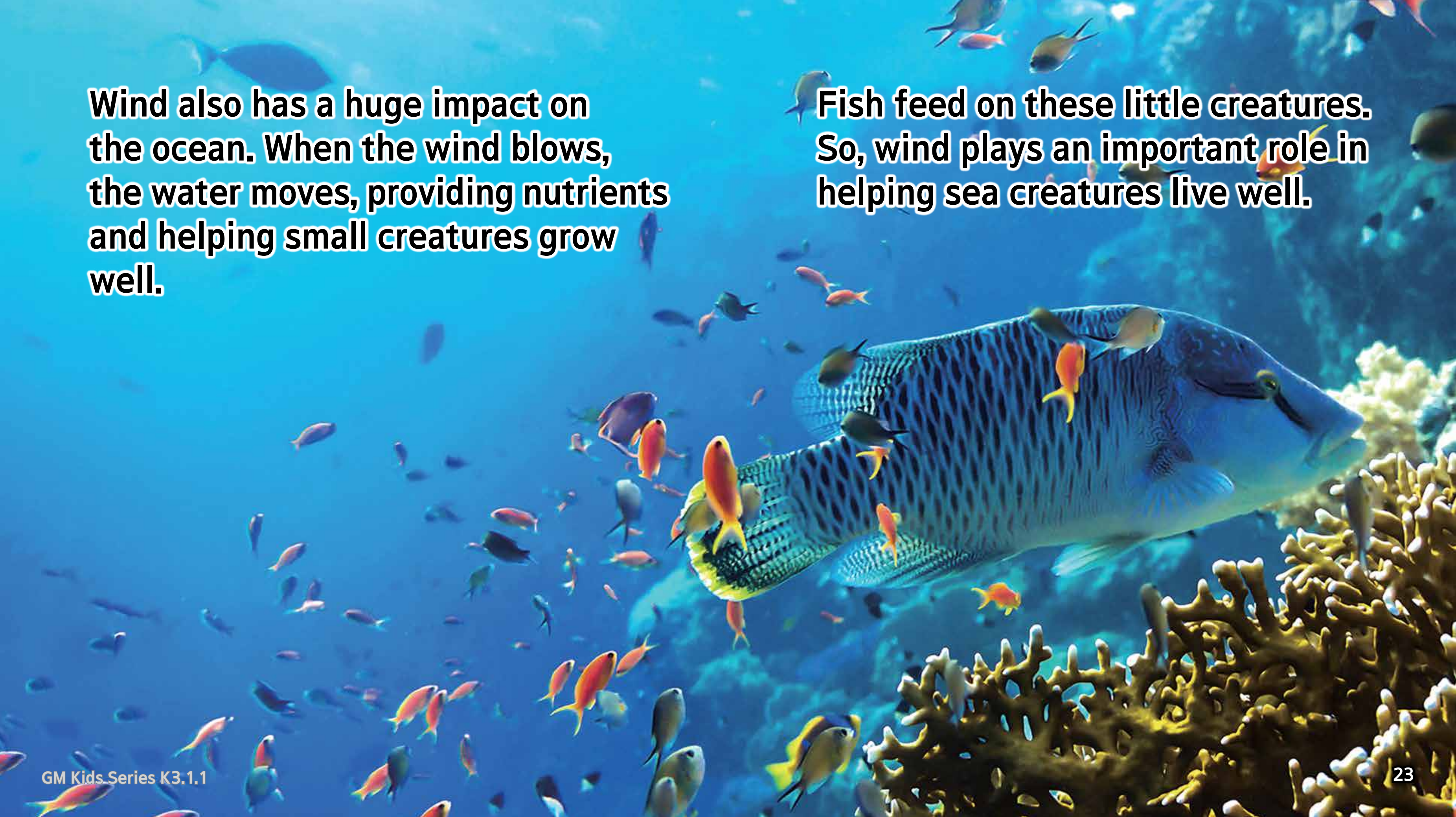


A person wearing a brown coat and carrying a black bag is walking on a wet sidewalk in the rain. They are holding a black umbrella. To their left, the front of a dark-colored SUV is visible, with its headlights on. In the background, there are trees, a fence, and other people walking. The rain is falling heavily, creating a blurred effect in the background.

**Winds affect our lives a lot  
by changing the weather.  
The winds move clouds and  
make it rain.**

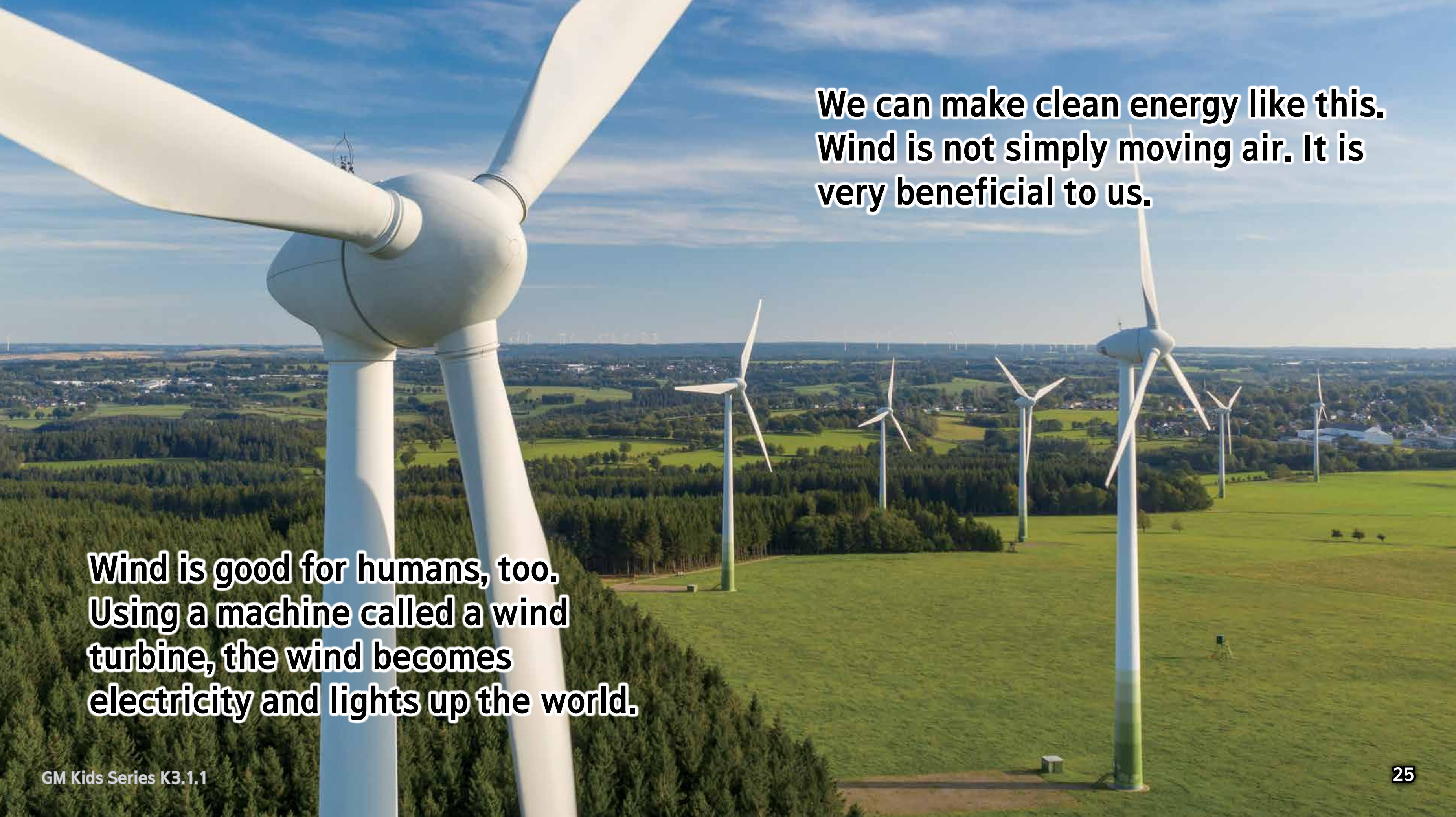
**"Jet streams" are strong winds that blow high in the sky. They move the weather around and help planes fly fast.**





**Wind also has a huge impact on the ocean. When the wind blows, the water moves, providing nutrients and helping small creatures grow well.**

**Fish feed on these little creatures. So, wind plays an important role in helping sea creatures live well.**

A large white wind turbine dominates the left side of the frame, its three blades extending towards the top. In the background, several other similar turbines are scattered across a rolling green landscape under a clear blue sky. The scene is bright and sunny, with shadows cast on the grass.

**We can make clean energy like this.  
Wind is not simply moving air. It is  
very beneficial to us.**

**Wind is good for humans, too.  
Using a machine called a wind  
turbine, the wind becomes  
electricity and lights up the world.**

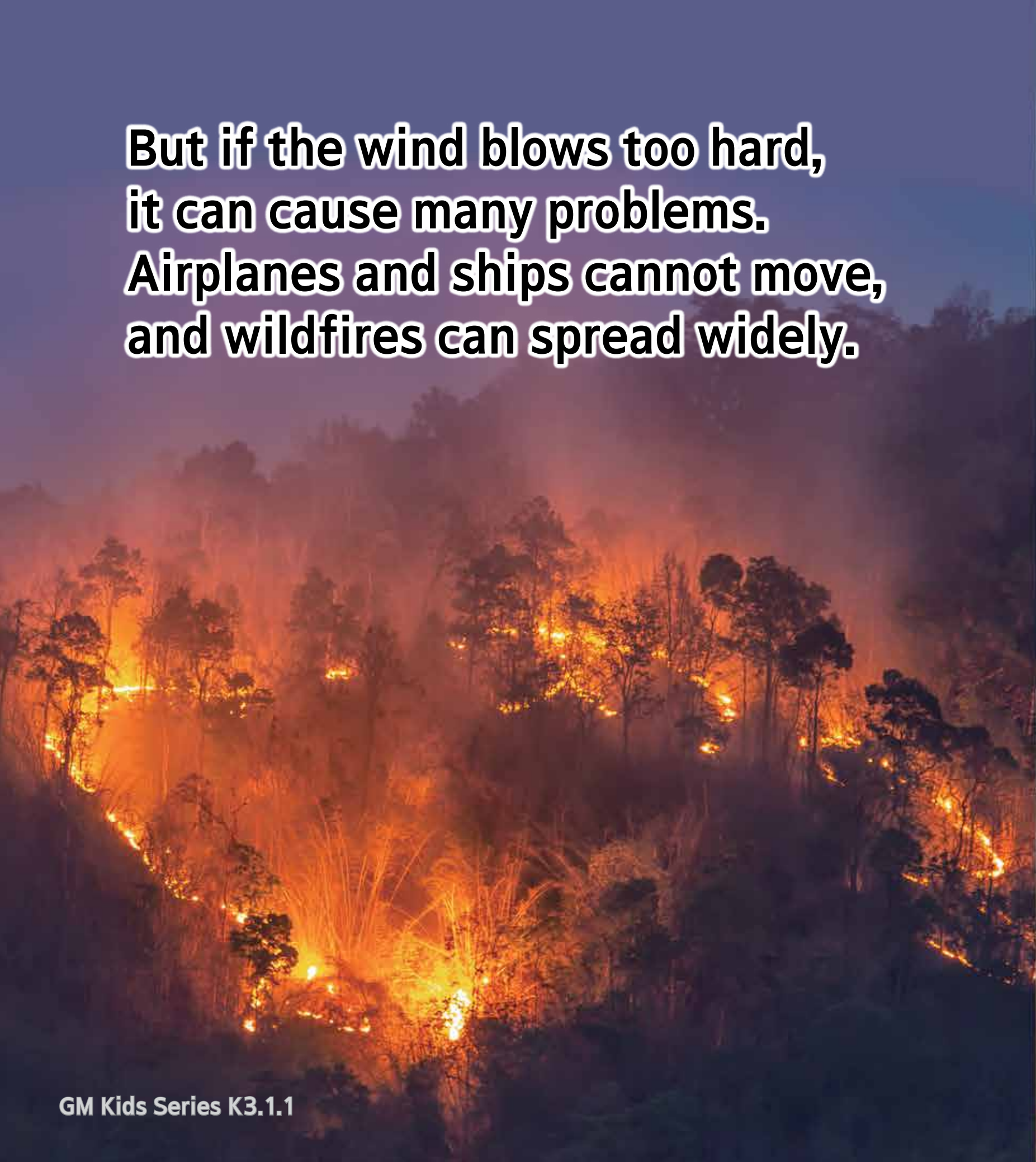
**Winds allow plant seeds to spread far away, creating abundant nature.**



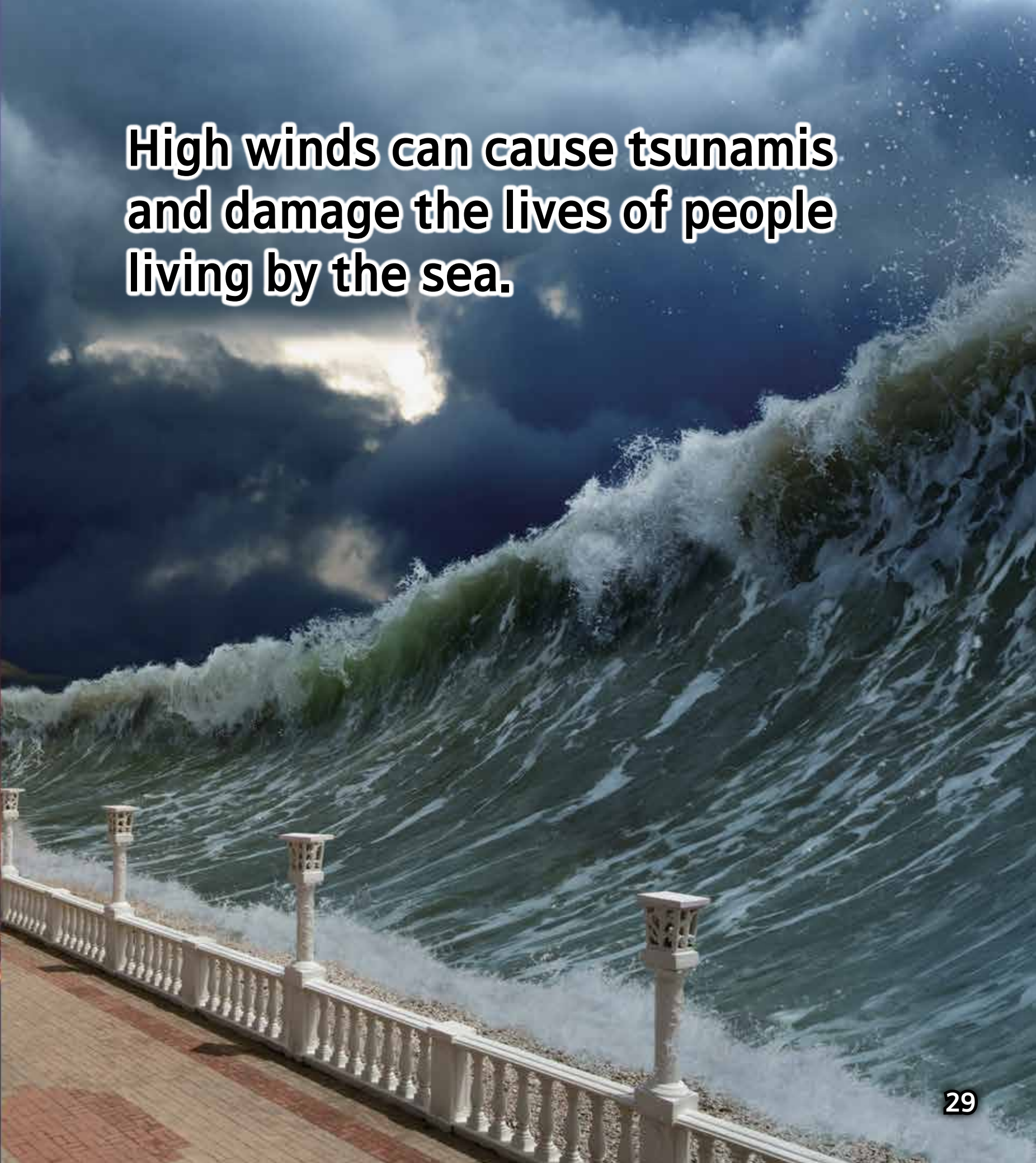
**Birds also use the wind to fly. Migratory birds that travel long distances must use the wind.**



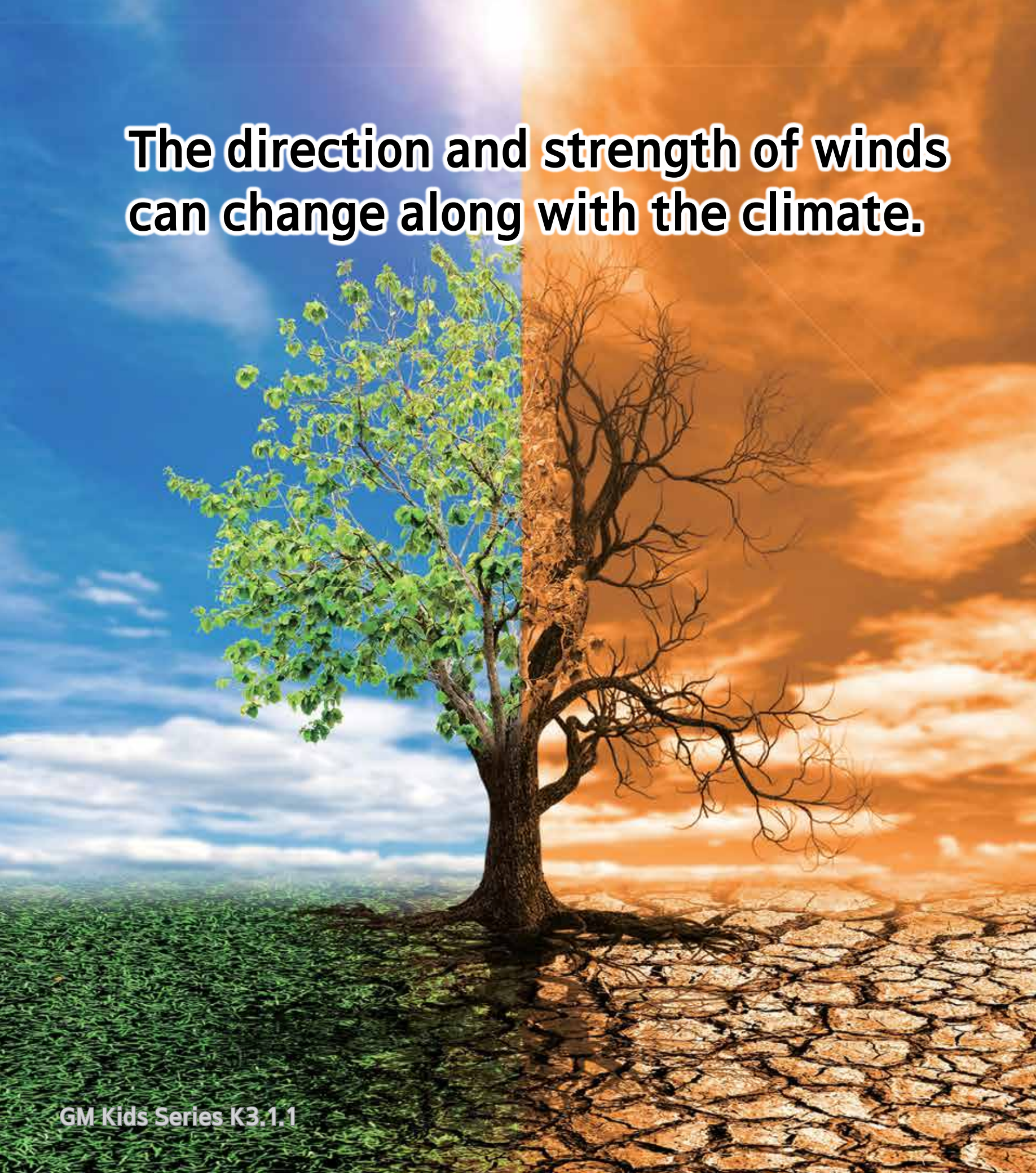
**But if the wind blows too hard,  
it can cause many problems.  
Airplanes and ships cannot move,  
and wildfires can spread widely.**



**High winds can cause tsunamis  
and damage the lives of people  
living by the sea.**

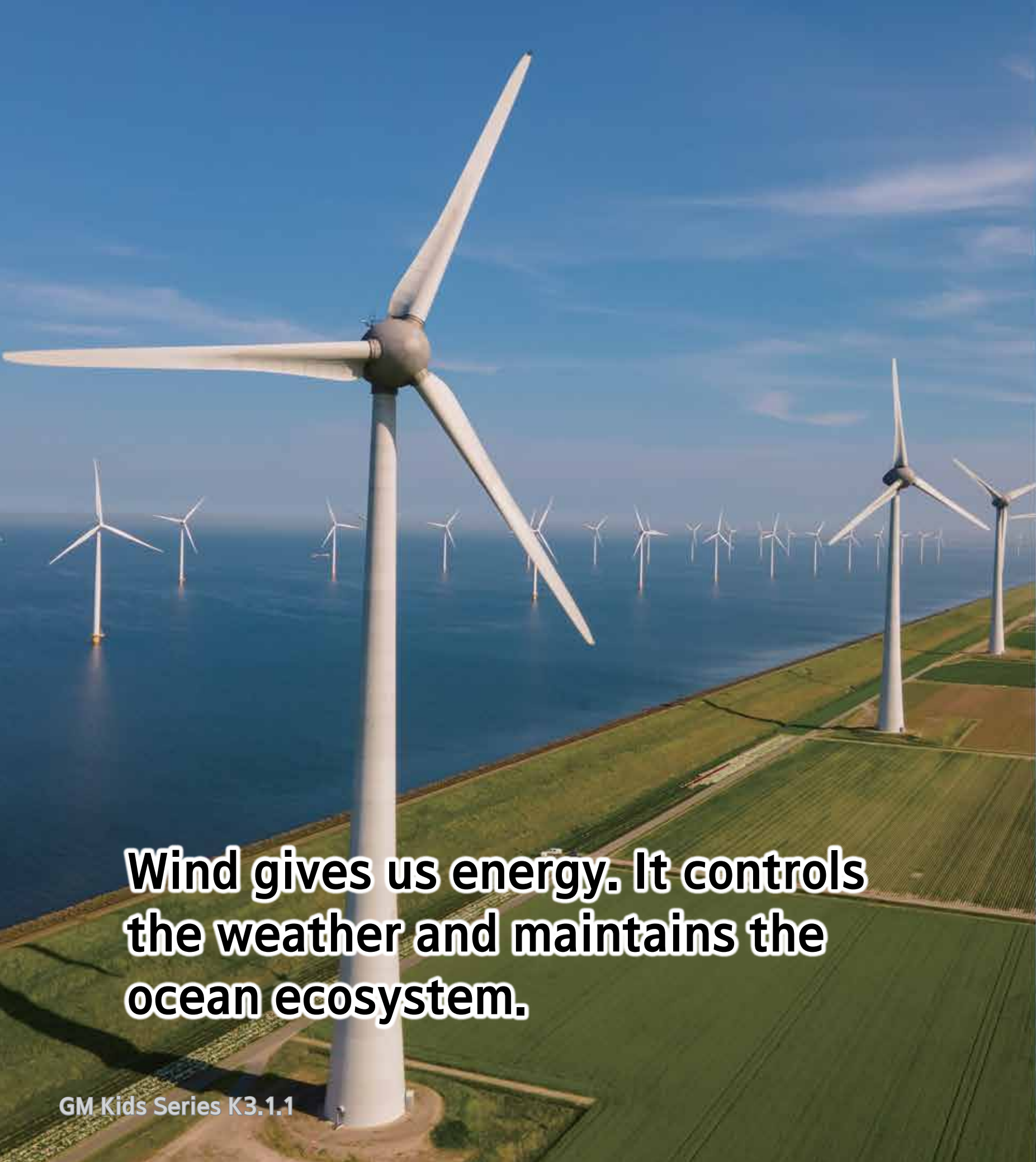


**The direction and strength of winds can change along with the climate.**




**So, we must watch the movement of the winds and use the information wisely.**





Wind gives us energy. It controls the weather and maintains the ocean ecosystem.



We need to study the wind well and learn more about this phenomenon. We need to work even harder to respond appropriately to climate change.

