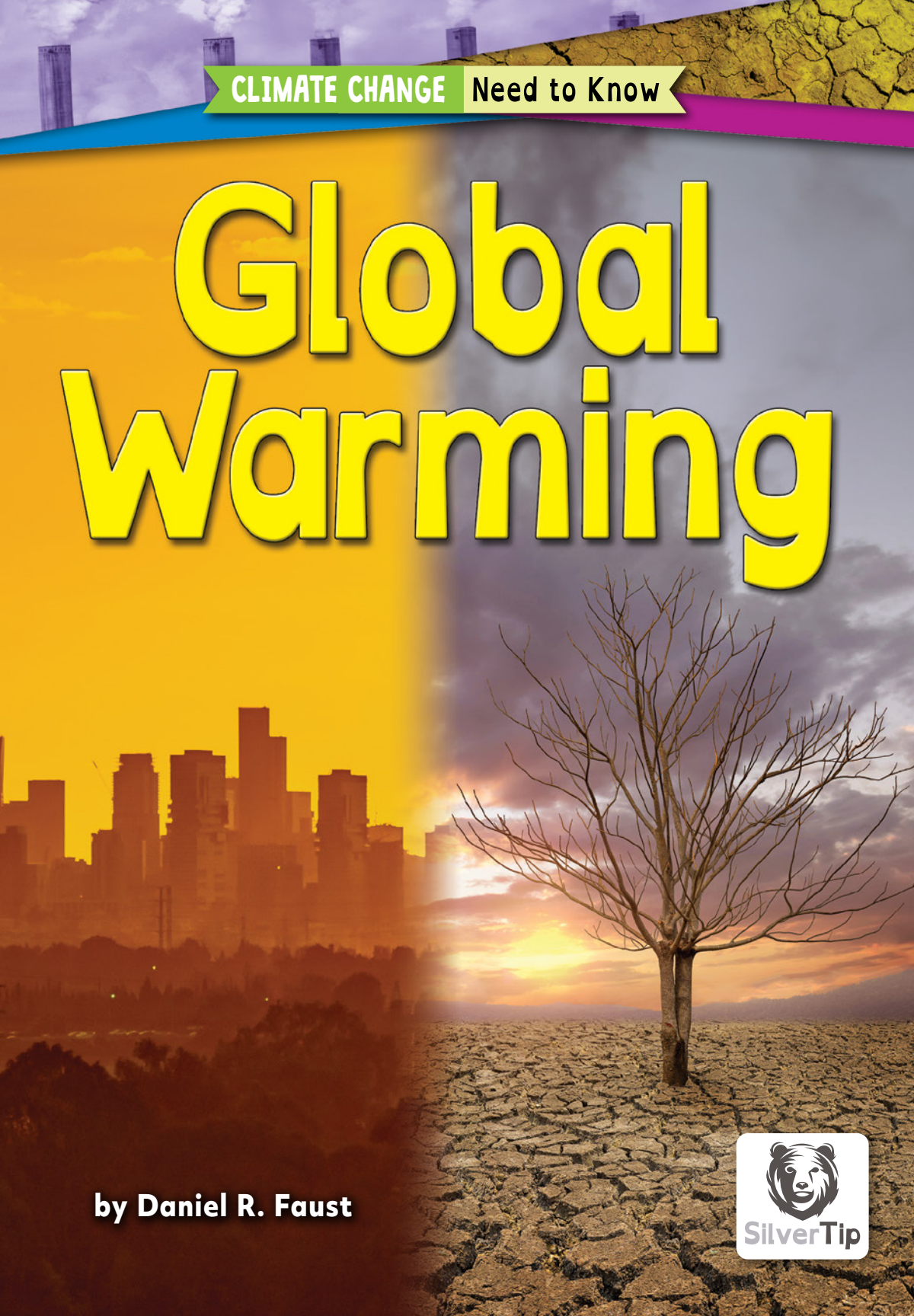
CLIMATE CHANGE Need to Know

Global Warming



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SilverTip

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Sun and Sweat

The sun shines down on another scorching summer day. The streak of superhot weather has been going on for days. It's a heat wave!

For some, it can be hard to beat the heat. But we might have to get used to it. The world is getting warmer.

Heat waves are stretches of extra hot weather that last for more than two days. They can be very dangerous. Extreme heat is the deadliest kind of weather event.

Buildings and roads hold in heat, making cities even hotter.

Planet Greenhouse

Where does the world's warmth come from? It starts with the sun. Sunlight travels to Earth through a layer of gases called the **atmosphere**. The light makes its way to the surface. Dark-colored things, such as trees, land, and oceans, **absorb** sunlight. This makes heat.

Our atmosphere is key to life on Earth. It lets in light but stops other harmful rays from the sun. The atmosphere also keeps water on Earth.

Light-colored ice and snow bounce sunlight away. They send some of the sun's energy back toward space. But the atmosphere doesn't let it all out. Some is trapped around Earth as heat. This process of trapping heat is known as the **greenhouse effect**.

Because of the greenhouse effect, Earth's average temperature is about 59 degrees Fahrenheit (15 degrees Celsius). Without it, our planet would be about -0.4°F (-18°C).