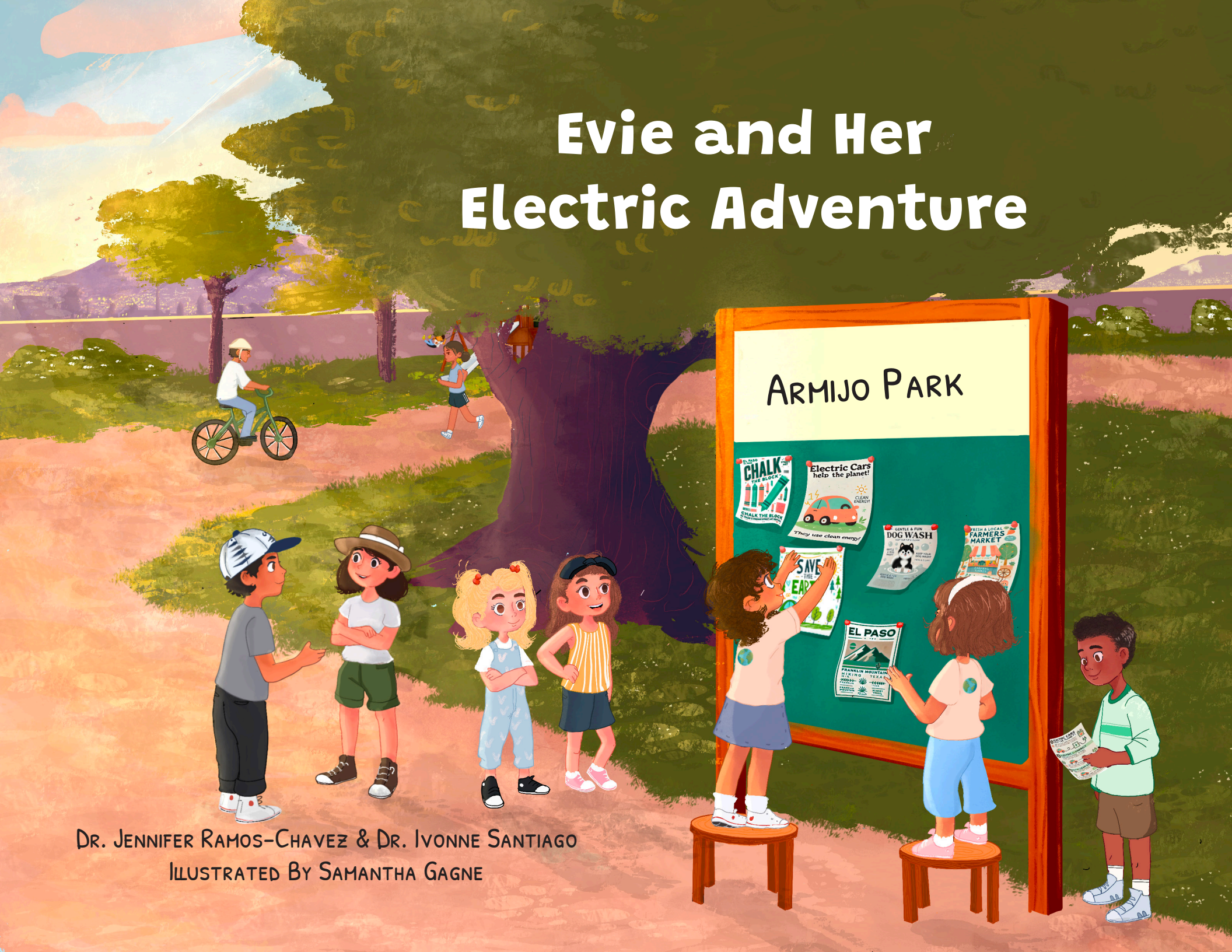


Evie and Her Electric Adventure

DR. JENNIFER RAMOS-CHAVEZ & DR. IVONNE SANTIAGO
ILLUSTRATED BY SAMANTHA GAGNE



Authors:

**Dr. Jennifer Ramos-Chavez, ASPIRE Engineering Research Center
Dr. Ivonne Santiago, ASPIRE Engineering Research Center**

Collaborators:

**Jennifer Taylor, Director of Pre-College Engineering, CEAS, University of Colorado Boulder,
Dr. Diane Elisa Golding, Yes SHE Can!, Minority Science & Engineering
Improvement Program, University of Texas at El Paso
Dr. Lucero S. Macias, Director of Upward Bound/ Upward Bound Math Science,
University of Texas at El Paso**

Funding Acknowledgments:

This work was supported in part by the National Science Foundation (NSF) through the Advancing Sustainability through Powered Infrastructure for Roadway Electrification (ASPIRE) Engineering Research Center under Award # 1941524[b].

The University of Texas at El Paso's Yes, SHE Can! Program proudly supports this publication and recognizes its significance in promoting STEM education. We are deeply grateful for the support of the Minority Science and Engineering Improvement Program (MSEIP) and Dr. Bernadette Hence at the U.S. Department of Education.

**Illustrated original artwork by
Samantha Gagne**

**Copyright © 2025 by Dr. Jennifer Ramos-Chavez & Dr. Ivonne Santiago
All rights reserved. This book or any portion thereof may not be
reproduced or used in any manner whatsoever without the express written
permission of the publisher except for the use of educational purposes**

Evie and Her Electric Adventure



The background of the entire image is a repeating pattern of green cars, charging stations, and nature icons on a light yellow background. The pattern includes stylized green cars, charging stations with lightning bolts, and various nature elements like trees, mountains, and cacti. The text is centered in a white rectangular box.

To all the Evies who dream, learn, and thrive—
and who will one day change the world

Once upon a time in a small town, there lived a clever and curious girl named Evie. Evie loved playing with dolls, dressing up, and exploring her big questions about the world. One day, she noticed something that made her think differently.



Evie often visited her grandma, Aba, who had asthma. Curious, Evie asked Aba why the air sometimes made her cough. Aba explained, “Mi hija, the air isn’t always clean, and that can make it hard to breathe.” This sparked a big idea in Evie’s mind.

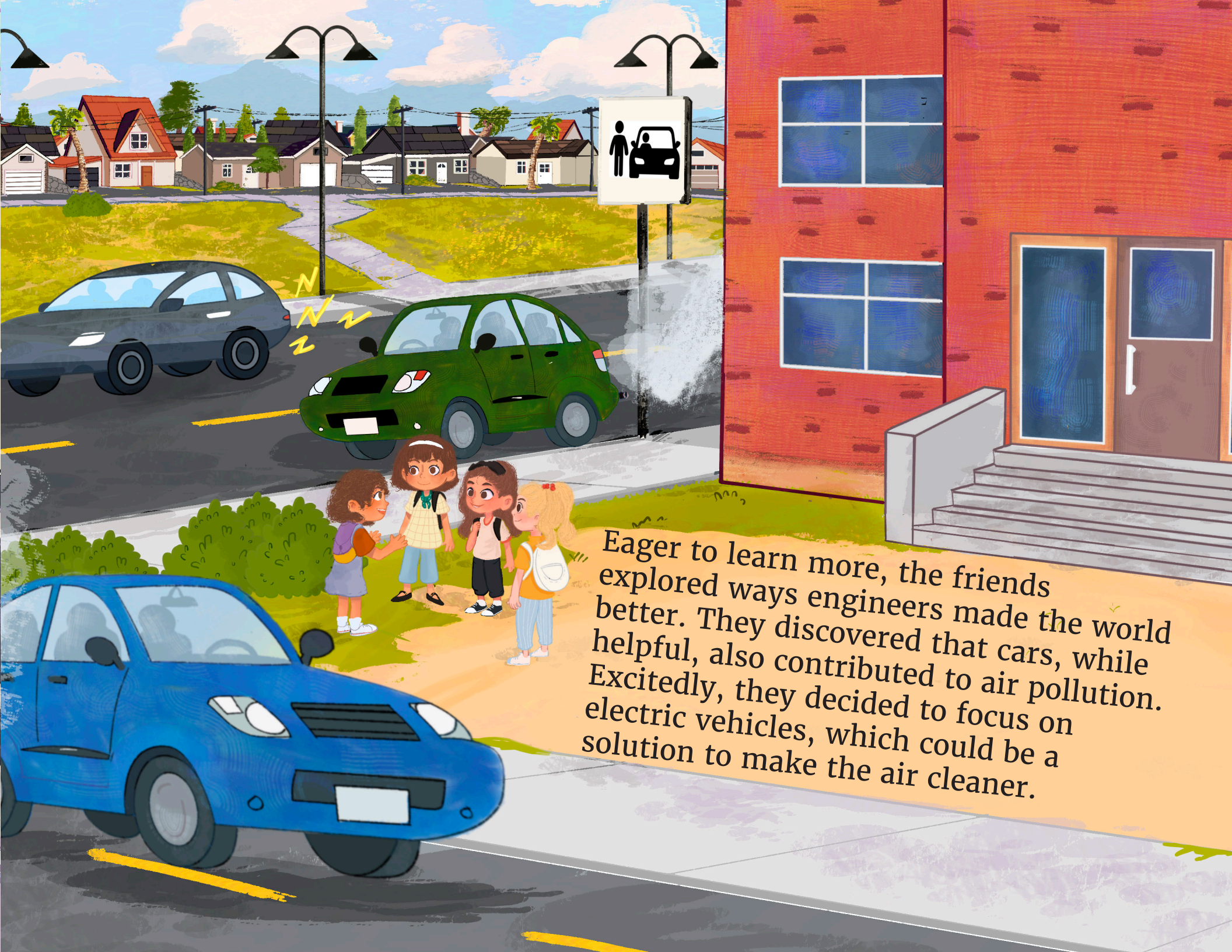




Evie decided to take action. She noticed the bad smells from passing cars and the haze that covered the beautiful mountains near her home. Determined to make a change, Evie set out on a mission, with her friends Jennifer, Lucero, and Ivonne by her side.



The friends gathered at the library, where they discovered amazing women engineers who changed the world. Evie was inspired by Ada Lovelace, Mary Anderson, Hedy Lamarr, Beatrix Shilling, Margaret A. Wilcox, and Margaret Wu. "Let's change the world like these incredible women!" Evie exclaimed.



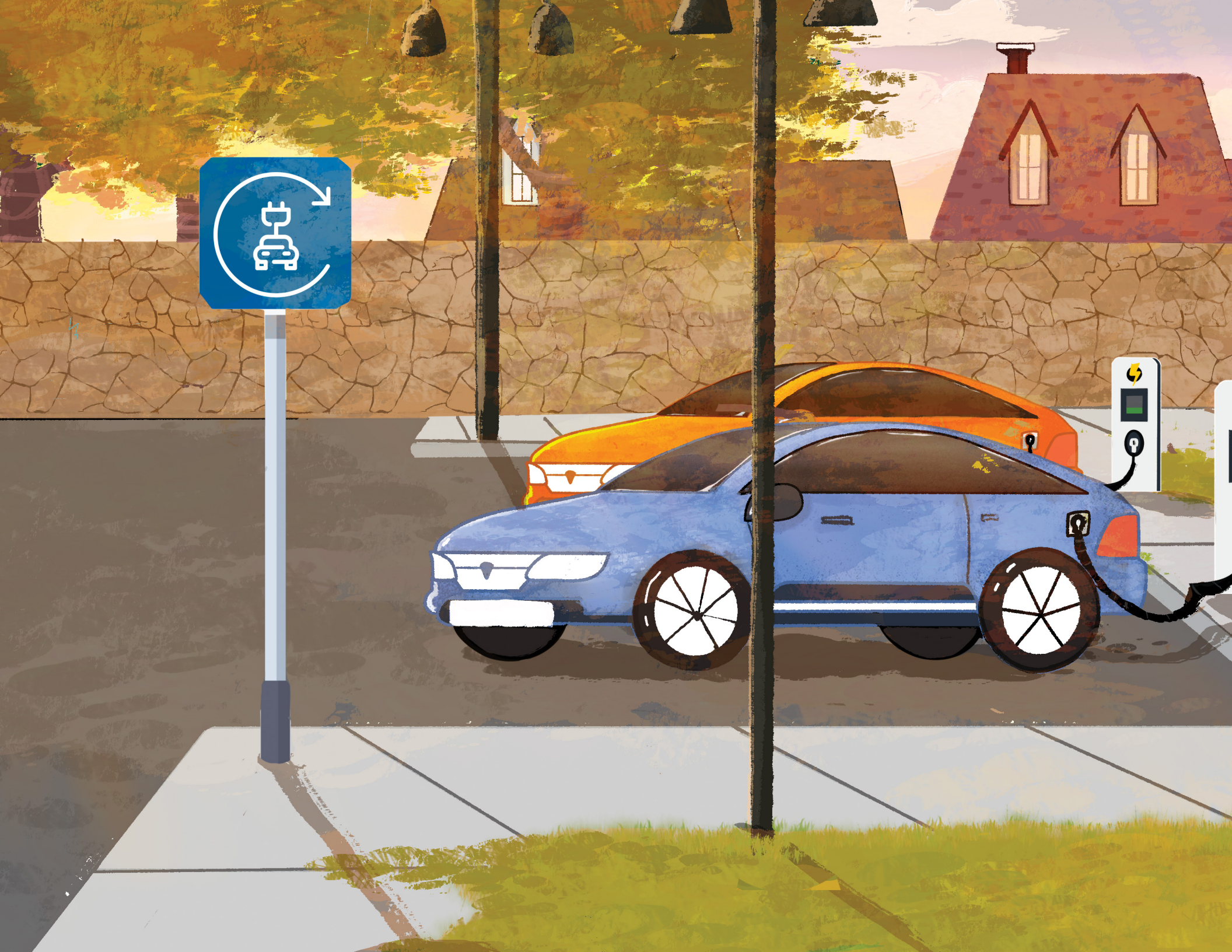
Eager to learn more, the friends explored ways engineers made the world better. They discovered that cars, while helpful, also contributed to air pollution. Excitedly, they decided to focus on electric vehicles, which could be a solution to make the air cleaner.



During career day at school, Evie's friend Ivonne brings her mom who is a mechanical engineer to class. Her mom explained how gas-powered cars give off harmful gasses like carbon dioxide making the air unhealthy and also causing the Earth to be warmer. Ivonne's mom described how carbon dioxide is a natural gas that helps keep our planet warm, which is important for life. Carbon dioxide itself isn't bad, but when we burn things like coal and gas, we make too much of it and this extra carbon dioxide is the cause of poor air quality and changes in Earth's weather.

The friends decided they needed to find a better way to ensure clean air for everyone and decided that electric cars were a starting point. As they learned more about electric cars, the friends discovered that these types of cars produce fewer pollutants, helping keep the air clean. Lucero shared her mom's expertise in air quality testing stating that it is important to use technologies that help provide clean air so their families won't get sick.







Learning from her mom, Ivonne taught the friends about charging stations for electric vehicles, and they learned that switching to electric cars could have a positive impact on the environment. Elisa, whose family has a hybrid car – meaning it runs on both a gas engine and electric motor, also joined the conversation, and the friends realized that there were different options that are better for the environment.



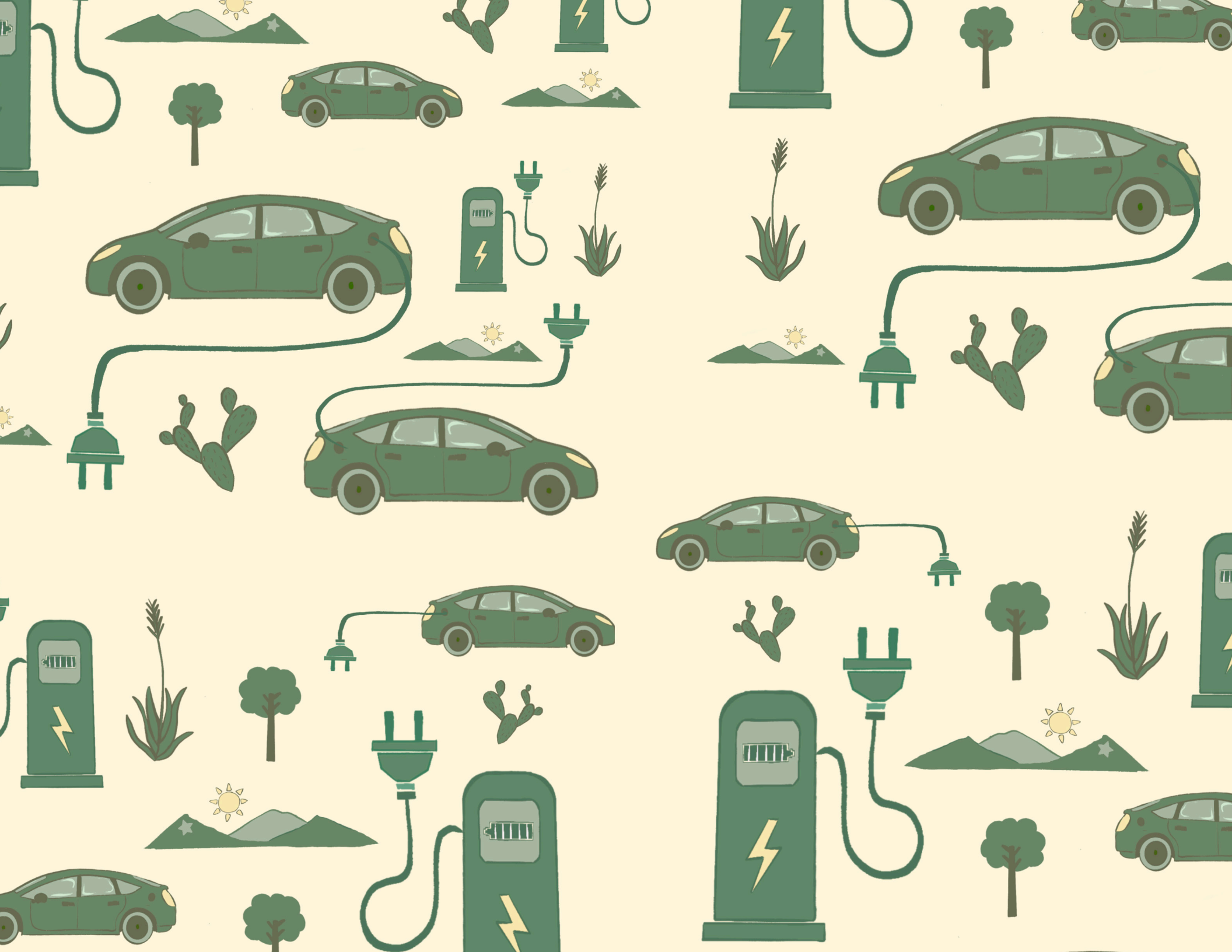
Excited by their newfound knowledge, the friends decided to share their discoveries with others. They organized a community event to educate people about the benefits of electric vehicles for cleaner air.

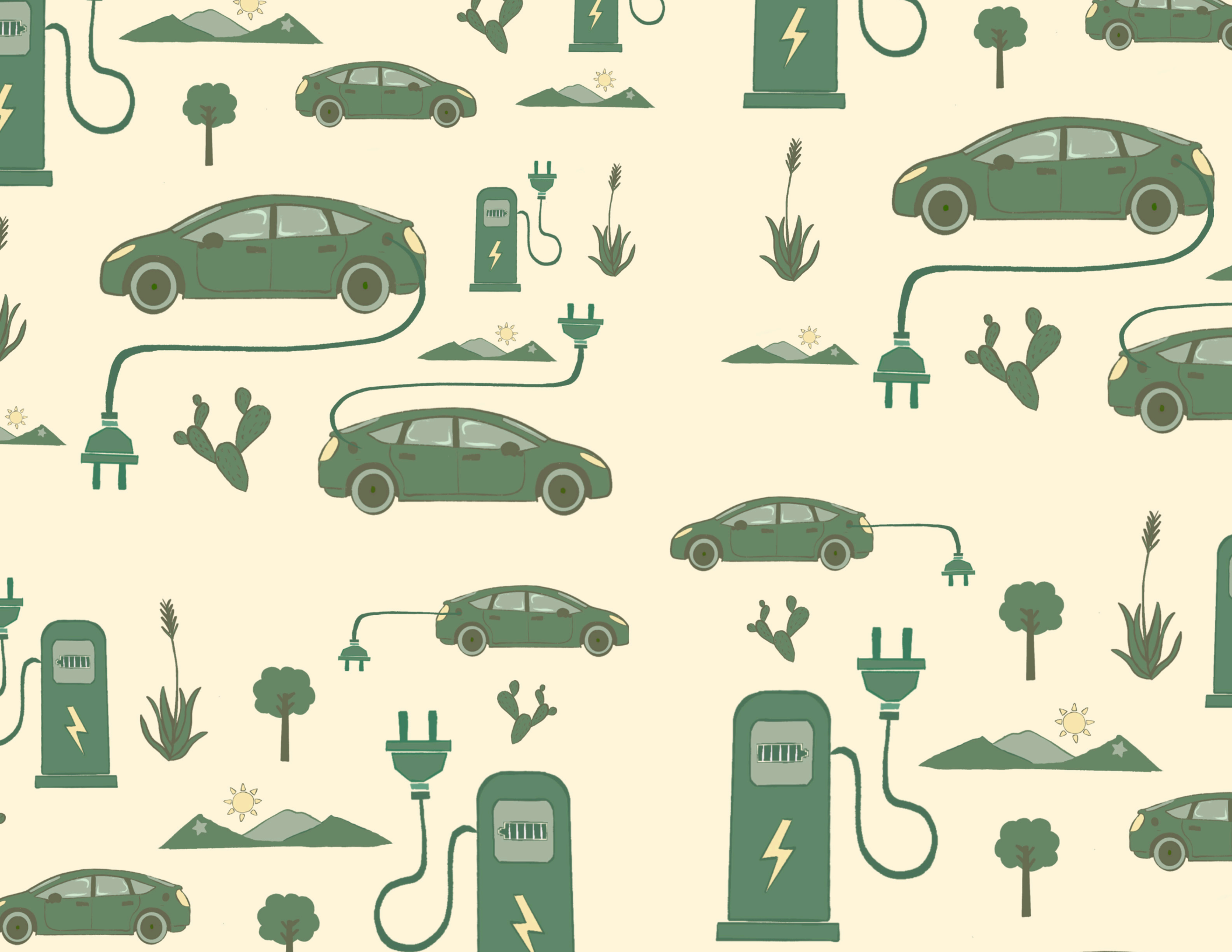
Everyone in town came together, and soon, more families considered making the switch to electric cars.

With the support of their community, Evie and her friends felt proud to have made a positive impact on the environment. Aba, breathing easier with the cleaner air, smiled at Evie, and the friends knew they had truly changed the world for the better.

And so, Evie and her friends continued their adventures, exploring more ways to make the world a cleaner and healthier place for everyone.







Join Evie and her friends who set out on a journey to discover a way to make her abuela (grandmother) and the planet healthier. Taking lead from great female scientists and engineers – both past and present, Evie and her friends learn all about electric vehicles and set out to inspire their community to embrace this new, clean technology.

