

# creating **climate** stories for kids

MAKING CHILDREN'S CONTENT ABOUT CLIMATE CHANGE CAN  
SEEM DAUNTING, BUT IT'S DOABLE—AND IMPERATIVE.

WRITTEN BY KATIE GRANT







Characters from the Netflix series *Spirit Rangers*.

**W**hat do *Octonauts: Above and Beyond*, *Spirit Rangers*, *The Wild Robot* and even *Moana* have in common? They are all examples of “cli-fi”—climate fiction films made for children. Cli-fi is a subgenre of science fiction meant to help viewers understand climate change—to educate through entertainment. Some use scare tactics showing dystopian futures or disasters, while others use comedy and superhero tales to spur kids to take action in whatever small ways they can to help the planet.

By contrast, we have climate silence—when people avoid mentioning the climate change elephant in the room even though they are worried about it. Until recently, this silence has been common in children’s media. But experts are recognizing the critical importance—and the attainable possibility—of breaking the silence and creating effective, entertaining climate content for children.

A 2022 United States Government Accountability Office Report to Congressional Committees found that between 2017 and 2019, close to 1 in 5 U.S. students attended schools affected by federally declared disasters. The institute’s 2022 study revealed that close to 70% of parents and caregivers believe children’s media should include age-appropriate information about climate, including climate solutions. This information illuminates a clear avenue for children’s media to help turn kids into positive agents of change.

“If we know that kids have eco-anxiety and we know that storytelling affects attitudes and habits of mind, then what we need to do is get this into the water of the kids’ media ecosystem,” offers Amy Friedman, head of kids and family programming at Warner Bros.

There are strong examples of how movie and TV producers can navigate that ecosystem without sinking into the gloom and doom of climate content.

Jeff Hermann is the producer of the animated feature *The Wild Robot*, based on the book by Peter Brown. Climate change is subtly addressed in the film as it is in the book. For example, the Golden Gate Bridge is shown underwater. Hermann says it works because there’s no finger-pointing—the film is simply showing the state of the world where the story takes place.

“The theme of the movie is ‘Kindness is a survival skill,’” Hermann says. “But what we’re pointing to is that if there’s a way for technology and nature to coexist, hopefully the rest of us can as well. That’s the message we want to get across more than anything.”

Hermann’s advice for filmmakers wanting to address climate change in children’s media—and to find funding and backers—is to commit to telling a particular story or

including a particular topic or issue within their project. With that story goal in mind, producers can aim for the most suitable collaborators and studios, as well as financiers—including nonprofits and grantors who may not be in the media industry space—who want to support that message.

A good deal of content for kids is animated, but that format isn’t the only way to put stories of climate change within the grasp of children’s understanding. Documentaries and instructional live-action content can help creators of film, TV and emerging media to deliver messages in a way that may inspire young viewers to take action, including a plan for growing up to study science, make policies, and engineer solutions.

Gary Knell is the senior advisor for media and social impact at the Boston Consulting Group (BCG) and executive chair of Common Sense Networks; he also serves as the cochair of the Planet Media Climate Task Force for This Is Planet Ed, an initiative of the Aspen Institute. The task force aims to unlock the power of education as a force for climate action and solutions.

It’s not news that television is a teacher to children. “It was the concept that television was the most important teacher ever that spurred Joan Ganz Cooney to create *Sesame Street* 55 years ago,” says Knell, a *Sesame Street* alum. The show has been covering climate for years with content like *Being Green*, the 2009 direct-to-video special in which Mr. Earth hosts an Earth-a-Thon and Abby Cadabby’s spell to help Elmo become more environmentally conscious turns him green.

The overall story arc of the show’s seventh season had the residents of *Sesame Street* deal with snow and freezing temperatures that foreshadowed periods of severe weather the planet is experiencing decades later. A character’s climate anxiety was addressed in five episodes that dealt with hurricanes in season 32.

Knell acknowledges that it’s a challenging time for producers who are focused on content for children, especially for those intent on telling stories about climate change.

“To me, it’s always a creative question: Can you come up with something that’s going to grab kids and be exciting and not be a lecture? Not be, as kids would say, ‘boring?’”

The challenge requires getting the correct information across, but also transforming that information into stories that kids can relate to. “Nobody needs producers to be scientists. Producers are storytellers,” Friedman says. Ideally, those stories inspire children, show how small changes really do matter, and show how they can build those small changes into their everyday lives.

Here’s how producers can help their creative teams do just that.





## MAKING KID-FRIENDLY CLIMATE CHANGE CONTENT

After speaking with a range of climate-content experts, *Produced By* identified valuable strategies for effective, engaging storytelling that helps kids understand and feel empowered to take a stand against climate change.

**Make it sticky.** To make sure your message really resonates with kids and has an impact, use vivid imagery and age-appropriate entertaining narratives. If it doesn't feel fun, it doesn't stick.

**Make it visual.** Help kids understand that the main culprits of climate change are invisible. According to UN.org, these are heat- and pollution-trapping greenhouse gas emissions caused by burning fossil fuels. That's a mouthful, but you can help children visualize these gases and how they're emitted by including graphics, animations and pointers to games or interactive apps. Once that understanding is laid down, you can show young viewers possible solutions so they can do their part. Vividly visual stories are the most accessible to kids. The film *Wall-E* shows climate change and its effects on Earth with minimal dialogue, yet powerful imagery makes the message clear.

The term "carbon footprint" goes hand in hand with this. Your stories can help children understand that we all have a carbon footprint, and explain where that comes from. A storyline about buying a plastic water bottle can explain how the amount of water it takes to make the bottle is greater than the amount of water it can hold. Follow this by showing characters choosing Earth-friendly alternatives, such as always carrying a reusable water bottle.

**Empower agency.** Kids need to see themselves in the stories they consume. If kids care about your characters—be they animals or spirits or kids like them—then they will care about the issues those characters face. Put them in situations that tug on a child's heartstrings. Have your characters show compassion toward

each other and the Earth.

Counter feelings of anxiety and helplessness by having the young characters in your project demonstrate agency. Teach kids to challenge the status quo by depicting characters who question injustices and the issues around them.

Show youth working to create change in their communities through creative thinking, problem-solving and action. Inspire them with examples of children engaging in social enterprises such as community gardens or a school recycling program. Relatable kids like the characters in *The Boy Who Harnessed the Wind* or *Whale Rider* instill a fascination with nature.

Showcase real-life examples of young climate activists like Greta Thunberg or the kids in *Landfill Harmonic*, which spotlights a youth orchestra that made their instruments out of recycled materials.

Kids will model the bravery shown by your characters. Have characters stand up for themselves so young viewers can learn how it's done and that it's possible for them to stand up for causes they care about.

**Address the big picture.** Show the interconnectedness of the different natural worlds to open a child's mind to the ripple effect of one climate-related event across a wide range of creatures or geography. For example, in *Finding Dory*, the strong current that sweeps Dory away—as well as all the animals she meets on her quest to get back home—are part of her ecosystem. Help kids connect the dots to the bigger picture.

**Weave it into all things, great or small.** Imbue climate change into your storylines, character traits and imagery. Give characters eco-friendly jobs like solar panel installer or environmental scientist, and have characters routinely perform tasks like recycling and saving water. Find topics kids are already passionate about—playing outdoors, animals, swimming at the beach—and weave messages about fighting climate change into those scenarios.

Use storylines to explain reasons why the Earth's weather is changing, and show how it is affecting everyday life. For example, a soccer game gets canceled because it's too hot out.

Facts matter when integrating methods and meaningful information into your project's world. Ensure yours are scientifically accurate by consulting resources like Climate Spring's Storytelling Guide, Planet Media's 4 Essential Climate Principles and Educational Guide, and [climateonscreen.org](http://climateonscreen.org). For example, an entertaining way to foster an interest in science is to have characters demonstrate experiments that show how and why the Earth is heating up.

**Make it simple.** Use graspable words to explain issues to children at their level. Use those words to teach the difference between terms like global warming, climate change and weather.

**Rip from the headlines.** Stuck for a story idea? Every day offers news reports about climate change that can be incorporated into your stories. Make sure to use the fact-checking resources listed in this article to ensure the integrity of the information presented in the news story.

**Shed a positive light.** Always end on a hopeful note with a resolution to the problem of your story. Make the characters safe and show the solutions they came up with and how they were effective, thus "saving the day." Spotlight proactive characters. Rather than shying away from showing the truth about climate change, you're emphasizing that something can be done to address it. Don't be preachy. Use dialogue between characters to encourage talking about climate change and all of the questions, emotions, and ideas around it, instead of simply lecturing about the dangers we are facing. To inspire empathy in young viewers, have characters talk about their feelings and have questions answered in the simplest terms.

### EXAMPLES TO INSPIRE

Following are some climate-centric projects that are either nascent or already successfully exemplifying how climate content can inform and entertain.

#### A Big-Ideas Pitch Fest

New stories on the cli-fi horizon are coming out of the Planet Media Call for Pitches, a pitch contest held last spring that brought more than 200 short-form content submissions aimed at helping children understand climate science and solutions. Friedman, executive producer and advisor to Planet Media, is supervising production of the seven winners of the 2024 pitch fest. The winners had to meet the criteria of addressing Planet Media's 4 Essential Principles in their children's story pitches: Earth is our home; it's getting hotter because of us; it's changing now, and it's impacting us; but together, we can make the changes we need for a brighter future.

"We looked for a diverse array of big ideas that could hold and be entertaining for kids across all these four ideas so when you put them together, they can help us look at reality while feeling optimistic and empowered," Friedman says. She sees the contest as "giving the pen and the power" to these storytellers.

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**-Jeff Hermann**

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An image from *Yo Zeno*, an anime-style series that teaches climate lessons to kids. Art by Nak Yong Choi.



Characters from the climate-themed animated series *Solar Punks*, created by Lindsey Owen with art by Mike Geiger.

Planet Media and the Aspen Institute are helping winners of the pitch contest represent the science accurately, providing them with the data they need to make their stories sound while supporting their creative freedom.

The winning projects range from feature films to TV series to songs. Among them are an anime comedy called *Yo Zeno*, about an eco-prince from a different planet who is making his way from eco-anxiety to becoming a steward of the Earth; *Solar Punks*, about time-traveling heroes who help kids find solutions to ecological problems; and *Cold Sweat*, a multimedia project about a YouTuber who initially doesn't care about the environment but changes her tune after a trip to the Great Barrier Reef with her scientist father.

### **Spirit Rangers: Making Connections**

Karissa Valencia, creator and showrunner of Netflix's Emmy-nominated animated series *Spirit Rangers*, is a member of the Santa Ynez Band of Chumash Indians. Valencia grew up with the ideology that plants and animals are not only very much alive, but that we are always connected to them. She believes this connection is necessary for kids to care for our environment, and recommends using humor and a sense of wonder to build that connectedness.

"I really want to capture that sense of amazement you feel when you enter a national park, see the Milky Way for the first time, or stand beside a waterfall," Valencia says. "I think by capturing the power of awe, curiosity and love for the environment will naturally follow."

She adds, "While I love incorporating all the wonderful environmental and Indigenous messaging, my job is entertainment first and always. Humor is our favorite tool. We rely on comedy and humor when writing many of our episodes." She notes that music is also a helpful and creative tool to drive

certain themes home.

In the *Spirit Rangers* finale "Blizzards and Blankets," a polar bear spirit gets lost when her home melts and she's stranded in California. In earlier *Spirit Rangers* episodes, the three heroes would transform into their animal forms and save the day. But this episode was much bigger. Instead of having the kids save the day on their own, Valencia and her team included parents on the journey.

"It was a way for us to show that battling climate change is not a problem that should only fall on the children's shoulders, but that they should rely on adults, too," Valencia says. "This is an everyone problem, not just a mess for our youth to clean up. This way they can feel inspired to take action because they know they are not alone in this."

Valencia believes that *Spirit Rangers* is growing a new generation of park ranger hopefuls who now think twice about squishing a spider they might see or kicking a rock on a trail "because they know it has a spirit," she says.

### **Heroism and Cuteness**

*Octonauts: Above and Beyond*, one of the first television shows directed at very young children to explicitly address climate change, shows animals facing challenges related to the environment and how the Octonauts rescue those creatures. The show teaches 3- and 4-year-olds that saving the planet is a heroic act to aspire to, while extreme cuteness lessens the frightening blow of our changing world.

Anu Ramamurthy, creator of KatKid Adventure, agrees with this tactic. KatKid is a climate change awareness education agency on a mission to raise a generation of "eco-heroes" by making learning about climate change "infotaining and funderstandable." She believes that joy holds kids' attention much more effectively than bad news.

Grasping the meaning of words like

infotaining and funderstandable is also a great way to approach making climate change an easier topic—meeting kids where they are on the silly, goofy, curious front to help educate them. KatKid does this by using the principles of gamification to make climate literacy fun but also actionable.

Ramamurthy calls out *Finding Nemo* as an example of a kids movie that happens to address climate change as a part of its larger story. "While it's a story about friendship, it also helped to build empathy for nature—the first step to wanting to protect it. Movies that are able to pique interest and cultivate curiosity for the natural world are a win!"

Another example is the animated feature *Cloudy with a Chance of Meatballs*, which is not just a silly movie about meat falling from the sky. It's a metaphor for the weather anomalies caused by climate change, human greed and exploitation of resources.

### **VR Makes It Real**

In the digital world, Jeremy Bailenson, Stanford University's Thomas More Storke professor of communication, coauthored a VR project educating children about climate change. The study called upon a multidisciplinary team of experts in environmental science, immersive technology, and education. They took the time necessary to identify key emotional and cognitive experiences—like how humans are destroying the coral in their immersive underwater VR experience—that can make complex climate concepts work as memorable virtual worlds.

Bailenson partnered with schools, museums and other educational outreach organizations to bring the VR experience to students. Wearing VR glasses, students took on virtual identities such as a pink coral on a rocky underwater reef brimming with coral and sea urchins. By the end of the



## SELECT RESOURCES FOR CLIMATE ON SCREEN IN CHILDREN'S MEDIA

### CONNECTING WITH PRODUCERS

The Producers Guild of America is a member of the Inter-Guild and Union Sustainability Alliance along with the Directors Guild of America, Directors Guild of Canada, IATSE and several of its locals, the Teamsters' Motion Picture and Theatrical Trade Division, the Writers Guild of America West and Writers Guild of America East. For a list of sustainability resources offered by these guilds and unions, visit [producersguild.org/sustainability/#guilds-and-unions](http://producersguild.org/sustainability/#guilds-and-unions).

For writers seeking to collaborate with members of the Producers Guild, visit [producersguild.org/sustainability/#writers-seeking-producers](http://producersguild.org/sustainability/#writers-seeking-producers).

### OTHER RESOURCES

- Climate Onscreen – [climateonscreen.org](http://climateonscreen.org)
- Planet Media – [thisisplaneted.org/initiatives/planet-media](http://thisisplaneted.org/initiatives/planet-media)
- Climate Spring – [climate-spring.org](http://climate-spring.org)

simulation, the viewer's virtual coral skeleton disintegrates, and the students hear the narrator say, "If ocean acidification continues, ecosystems like your rocky reef, a world that was once full of biological diversity, will become a world of weeds."

While some schools visited Bailenson's lab, it also developed portable versions of the VR system, which can be set up in classrooms, community centers or mobile learning spaces. This flexibility allowed the researchers to connect with diverse student populations without geographical constraints.

Bailenson's follow-up studies and surveys revealed that students gained

a deeper understanding of climate change while also expressing a willingness to change their behaviors. Some participants engaged in energy-saving measures. The immersive, emotionally resonant nature of VR can easily foster a sense of agency and personal responsibility.

#### Science, Awe, Hope

Additional examples of media helping educate about climate change include the film *Electropolis 3D* and the game *Plan It Green: The Big Switch!* These National Geographic-designed projects bring students in grades 4–12 content about energy sources, energy efficiency and energy conservation.

Games4Sustainability is a platform dedicated to making sure sustainability messages are more compelling, accessible, and fun. Its blog has stories of professionals using gamification to this end. NASA's Climate Kids provides easy explanations to help convey the science of climate change in digestible ways. The program also shares games, videos, and activities to mine ideas from.

Shows like *Weathered: Extreme Weather Explained* on PBS are part of a vast resource of docuseries that teach science and a sense of awe while inspiring hope. Its website offers materials for classrooms and stories of real people making a difference. *Wild Kratts*, a PBS series that mixes live-



A scene from  
the animated  
feature *The  
Wild Robot*.

action and animation, is an example of how to show the truth about the planet while still entertaining kids.

Finally, the podcast *We the Children*, hosted by 12-year old Zachary Fox-DeVol, discusses climate change and solutions with experts and leaders. It also offers a toolkit for educators on its website.

### SOURCES FOR SUPPORT

Climate Spring, Planet Media, NRDC's ReWrite the Future, and Good Energy are a few of the sources available for support and funding to help create climate change stories. Climate Spring has a free storytelling guide on its website. As noted, Planet Media has a pitch fest and offers seed grants to the

winning story ideas in many mediums.

Good Energy is a nonprofit that aims to increase the number of climate storylines on film and television. It helps producers by offering story consultations and access to scientists, writers, and showrunners. It also offers a Comprehensive Climate Lens Analysis that helps address the psychological aspects of climate as well as climate solutions, the impact of climate on other areas of society, and intersections with other key issues.

A study by a University of Minnesota initiative called Taking Charge of Your Wellbeing found that when participants viewed scenes from nature, the parts of the brain

associated with empathy and love lit up. On the contrary, viewing urban scenes activated the parts of the brain associated with fear and anxiety.

It appears that nature inspires feelings that connect us and our environment. Movies, TV, video games, and interactive experiences can encourage children to get out into nature, appreciate it, and be motivated to protect it.

Knell of the Planet Media Climate Task Force encourages producers to keep at it. "If you can lean into these core environmental issues that are affecting the next generation that's inheriting the world from us, I can't think of a more important use of your creative juices." ■