



10X PRIZE: Clean Cooling Student Competition

MARCH 19, 2024

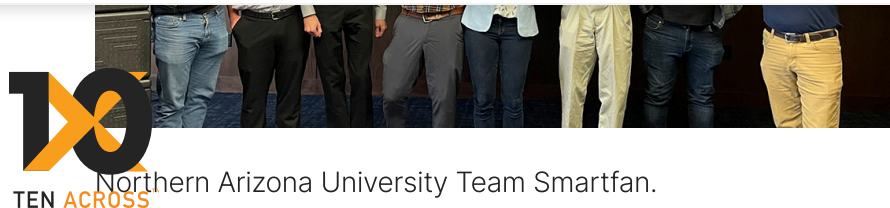
On March 19, 2024 five student finalist teams from colleges and universities across the U.S. Interstate I-10 southern corridor took part in a fast-paced virtual pitch competition for the **10X Grand Prize**, a \$100,000





Northern Arizona University's *Project SmartFan* desert home, as imagined by team SmartFan and AI.

The inaugural Grand Prize was awarded to the team from **Northern Arizona University**, who presented ***Project SmartFan***, which leverages fluctuating temperatures and the night-day temperature difference to bring in cool air when it's hot, or hot air when it's cool, redefining affordable cooling for underserved communities. Northern Arizona University will receive \$100,000 to advance the project, and their community partner, **Habitat for Humanity**, will receive an additional \$50,000 to support implementation of the solution in 40 starter homes in Flagstaff, Arizona.



Northern Arizona University Team Smartfan.

“We’re honored to have had the opportunity to offer this important competition to colleges and universities in the Ten Across heat-challenged region and are thrilled to have had such a diverse group of solutions. Our goal of empowering and inspiring students to collaboratively develop creative clean and sustainable cooling solutions was far exceeded and we’re looking forward to following each team’s progression.”

— WELLINGTON “DUKE” REITER, EXECUTIVE
DIRECTOR AND FOUNDER, TEN ACROSS INITIATIVE
AT ARIZONA STATE UNIVERSITY

The remaining four finalists, were **awarded \$10,000 each** to support further development of their project solutions:

- **Loyola University of New Orleans** proposed **Green Roofs are COOL**, which offers a variety of options for growing plants on rooftops of assorted shapes

Architecture and Environmental Design Program



presented **Shade Structures and Systems**, an open-access information platform and hands-on community training program that aims to provide

solutions that mitigate the risks of extreme heat in at-risk communities.

- **Texas A&M Corpus Christi** pitched their ***HydroCycle SolarHarvest: Eco-Friendly Circular Cooling and Water System for Underserved Communities***, designed to provide sustainable cooling and clean water access to communities that experience extreme heat, water scarcity and unreliable power supplies.
- ***Cool Colibri***, presented by the **University of California Los Angeles** team, is a revolutionary shade structure that features a novel material that utilizes passive daytime radiative cooling to create a microclimate that is cooler than ordinary shade without any power input.

People's Choice Award

In addition to the top finalist teams, a group of semi-finalists were entered to participate in the People's Choice Award competition where the public-at-large was invited to select their favorite clean cooling solution via an online voting process. Semi-finalist teams included solutions from the University of South Florida, Arizona State University, California State University Fresno and UC Berkeley. The **\$10,000 People's Choice award** was given to **Lovela**



“As rising global temperatures are already threatening livelihoods, the world needs sustainable and scalable

ways to adapt to extreme heat. The Clean Cooling Collaborative is proud to support Ten Across' competition, which connects students with tools and platforms to turn their bright ideas into a reality and advance local cooling solutions. Congratulations to all the winners and finalists for their inspiring project ideas that demonstrate the opportunities to sustainably cool communities and enhance resilience to extreme heat."

*AXUM TEFERRA, SENIOR ASSOCIATE DIRECTOR,
CLEAN COOLING COLLABORATIVE*

A Special Thanks to Our Competition Judges



competition, Ten Across selected judges from diverse backgrounds to evaluate team submission materials in addition to pitch competition presentations to choose the finalist teams, and ultimately select one grand prize winner.

The judges panel included:

- **Shannon Clancy**, Chief Executive Officer, St. Vincent de Paul Society-Phoenix, Arizona
- **Anne Congilanese**, Chief Resilience Officer, City of Jacksonville, Florida
- **Kristopher Eclarino**, Technical Project Manager, Climate Reserve, Los Angeles, California
- **David Hondula**, Director of Heat Response and Mitigation for the City of Phoenix, Arizona
- **Steven Lewis**, Principal, ZGF Architects, LLP

“The 10X Prize Clean Cooling Competition showcased talented teams from across the country who showed us what the future of innovative solutions to climate challenges look like. But even more, it demonstrated the power of what’s possible when caring, committed people come together to learn from and care for one another and their community.”

Ten Across is launching a new student competition designed to inspire the development of new and innovative solutions to address the impacts of extreme heat in poor and underserved communities in the Ten Across region. Five teams will be selected to present their solutions to a panel of expert judges. The winning team solution will receive a \$100K prize: \$25K to go to the student team's institution and an additional \$75K grant to prototype the solution. Fifty thousand dollars will be given to the grand prize winner's community partner to support implementation of the winning solution. The remaining four finalist teams will each receive \$10K. A \$10K People's Choice prize will also be awarded.

This competition is made possible through the generous sponsorship of the Clean Cooling Collaborative, a philanthropic initiative of the ClimateWorks Foundation, working to create a future with efficient, climate-friendly cooling for all.

The Context: Adapting to a Hotter Future

The most recent UN IPCC AR6 Synthesis Report highlights a troubling heat trajectory—the planet is getting hotter and disadvantaged communities are being hardest hit. Recent analysis from First Street Foundation predicts an “extreme heat belt” may form in the U.S. by 2053 with 107 million Americans seeing

underserved communities being impacted the most.



This scenario is playing out most profoundly along the United States' southernmost region—the Ten Across U.S. I-10 corridor. A region that provides a through-line

to some of the fastest-growing, most diverse, and now hottest cities, suburbs, and rural communities in the U.S. This is an area where affordable, clean, and equitable cooling solutions are urgently needed now and for the future.

The Challenge: A Need for Innovative and Scalable Solutions

As record breaking heatwaves become the new normal, energy intensive air conditioning has become a go-to solution not only in this country, but in others who are following our model. However, this option is out of reach for many who lack the financial resources to pay for these mechanical systems to keep their homes cool or who don't have the luxury of a stable dwelling arrangement.

Ironically, current cooling technologies are major contributors to climate change making it imperative that alternative, affordable, and scalable solutions be developed to meet the needs of a hotter planet. Whether mechanical, passive, or policy driven, new options need to be responsive to local conditions and communities where creative thinking and adaptive problem solving will be required.

To meet this challenge, Ten Across is hosting a competition to addresses the issue of needed clean

decarbonization challenges before us.



Student teams of 3-5 students with at least one faculty lead from colleges and universities residing within the 8-state U.S. I-10 transect region are invited to participate in the competition. Student teams must bring together different study areas, skillsets, and perspectives to insure a comprehensive approach to the challenge. Teams will also be required to identify a community partner organization to work/consult with the team to inform solution responses and to be prepared to work with the winning team to implement the solution in a designated community location.

Awards and Recognition

This is an ideas competition but one with an intent to implement the winning solution. All entries will be available on the competition website with five finalists selected from the submissions.

All finalist teams will be invited to present their presentation to a jury of topic experts.

The winning team solution will receive a \$100K prize: \$25K to go to the student team's institution and an additional \$75K grant to prototype the solution. Fifty thousand dollars will be given to the grand prize winner's community partner to support implementation of the winning solution. The remaining four finalist teams will each receive \$10K. A \$10K People's Choice

Note dates are subject to change.



Competition Announced – April 2023

- Competition Launches – September 5, 2023

- **Intent to Apply** Deadline – December 15, 2023
- Final Application Deadline – January 31, 2024
- People's Choice \$10K Award Online Voting – February 5 – March 19, 2024
- Finalists Announced – February 14, 2024
- Pitch Presentations – March 19, 2024
- 10X Prize Winning Team Announced – March 19, 2024
- Prototype and Testing Executed – March – December 2024

Resources

[Download 10X PRIZE Overview Packet](#)

[Media Release: March 20, 2024 – ASU's Ten Across Initiative Announces 10X Prize Clean Cooling Solution Grand Prize, Finalists, and People's Choice Awards](#)

[Media Release: Arizona State University's Ten Across initiative invites college students from across the southern U.S. to compete for the 10X PRIZE Clean Cooling Student Competition \\$100K award.](#)

To receive updates and deadline reminders please



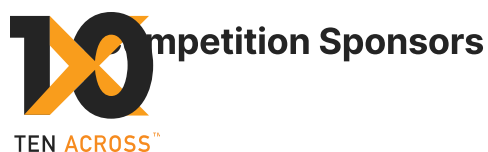
First Name *

Last Name *

Organization Institution *

Questions?

For questions regarding the competition please contact [Rae Ulrich](#).



The competition is offered in partnership with the Ten Across Initiative and the ClimateWorks Foundation Clean Cooling Collaborative.

The Clean Cooling Collaborative is a philanthropic initiative of ClimateWorks Foundation that is working to create a future with efficient, climate-friendly cooling for all.

Both organizations share an ongoing commitment to supporting and raising interest among young entrepreneurs to envision and create scalable solutions to address the world's most pressing climate challenge.



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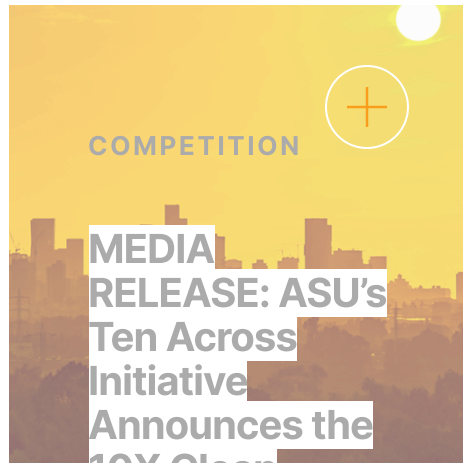
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