



# ANNUAL REPORT 2022



# JOIN THE MOVEMENT

We invite you to join us in building an abundant future for all. Read on to learn the numerous ways you can participate in XPRIZE.








### CONTRIBUTE

The work we do wouldn't be possible without the contributions of people like you.

We offer a number of ways in which you can partner, sponsor, or donate to our foundation. To learn more, simply email us at [getinvolved@xprize.org](mailto:getinvolved@xprize.org)

### JOIN IN THE CONVERSATION

Follow us on social media to be part of the movement and contribute to the conversation. Watch compelling stories about groundbreaking innovations and the people building them, and tune-into the world's foremost experts and thought leaders who are propelling us toward a better tomorrow.

-  [discord.com/xprize](https://discord.com/xprize)
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XPRIZE is the ultimate celebration of human potential and achievement, while breaking boundaries and limiting beliefs

**SERGEY YOUNG** | XPRIZE Innovation Board

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## OUR MISSION IS MORE CRITICAL NOW THAN EVER.

**ANOUSHEH ANSARI**  
CEO

# SCALING FOR AN ABUNDANT + EQUITABLE FUTURE

When we look through history for pivotal moments of change, we find that they follow two common events: great tragedy or disaster, and major technological advancement. Whether it is change that unites and builds collaboration, or change that uproots industries and fuels growth, we need to make the most of our opportunities. Today, both types of change are happening all around us, at scales greater than we have ever seen. Whether it be the pandemic, social unrest, crumbling institutional trust, or paradigm shifting technologies, global shifts are accelerating change faster than ever before.

It is easy to feel discouraged and overwhelmed by the unpredictability of

this change, of our future. It is easy to give in to fear, to fall into reactive states where we focus on small problems in front of us and abandon long-term goals. It is easy to save equity and abundance for later, to unintentionally create bigger problems for our future. But XPRIZE has never pursued that which is easy.

After 29 years of consistent demonstrated impact, we occupy a unique and necessary space.

Our mission is more critical now than ever: to focus the attention of millions of creative minds around the world on solving complex global challenges with scalable solutions.

That is why I am thrilled to share some of the highlights of our work in this past year and invite you to join us as we take the next historic step for our foundation and enter a new phase of XPRIZE.

In the past year, we have been busy creating impact at scale in carbon removal, food security, and biodiversity conservation, and preparing to launch a new prize to address destructive wildfire detection and suppression. We also celebrated the achievements of our Rapid Reskilling XPRIZE teams and awarded the winners in our ANA Avatar XPRIZE competition. Our global community continues to grow with new partners, sponsors, donors, teams, experts, volunteers, and supporters who share our passion and commitment to making a difference.

This community will be essential for the next phase of our work. It is time to scale our efforts and invite the world to co-architect a future we all want to

live in. A scientifically-validated future we will be proud to pass on to our children and grandchildren. A future we can build through collective creative energy, accelerated breakthroughs, and incremental solutions. This is the next step in our mission.

This phase will build on decades of success in creating more than 31 times the return in long-term value of philanthropic prize-purse investments. The effect our prizes have in inspiring and motivating action and shaping the future beyond our competitions may be even more significant.

As the CEO of XPRIZE, I am honored and humbled to lead such an amazing organization driven by the vision of a hopeful future for humanity. A future where we harness the power of innovation and collaboration to solve the world's greatest challenges. A future where we create equitable and abundant opportunities for everyone. A future where we explore the unknown and discover new possibilities.

None of this would be possible without your generous support and involvement. You inspire us to push the boundaries of what is possible. You help us create a better world for ourselves and generations to come.

Thank you for being part of this incredible journey.

Together, we can achieve anything.





**“**  
**WE BELIEVE THE**  
**WORLD’S GRAND**  
**CHALLENGES**  
**ARE ALSO THE**  
**WORLD’S BIGGEST**  
**BUSINESS**  
**OPPORTUNITIES.**

**PETER H. DIAMANDIS, M.D.**  
FOUNDER + EXECUTIVE CHAIRMAN OF THE BOARD

# **HARNESSING TECHNOLOGY, EMPOWERING IMPACT**

We live in the most extraordinary period in human history. A time when passionate innovators can leverage exponential technologies to solve humanity’s grandest challenges.

Today’s entrepreneurs live on the very edge of what is possible, equipped with more transformative knowledge, manufacturing, computing, capital, and technology than the leaders and industrial titans of decades past.

XPRIZE was born from the belief that small teams have the potential to solve monumental problems. We champion the

notion that “The day before something is truly a breakthrough, it’s a crazy idea.” Often, it’s the small, audacious teams willing to risk it all that manage to deliver incredible breakthroughs.

Our mission is to focus on and encourage these efforts to revolutionize humanity. We believe the world’s grand challenges are also the world’s biggest business opportunities—whether it’s addressing climate change, reinventing education and healthcare, or ensuring food, water, and shelter to every man, woman, and child on the planet. These goals are not just achievable, they’re probable, and they’re profitable.

Our journey began 29 years ago. From 1994–2004 our \$10M Ansari XPRIZE spurred the rise of a \$500B private spaceflight industry. By 2022, we evolved into a global incentive prize platform, initiating nearly \$300M in prizes that spurred over \$2 billion in R&D across diverse fields.

Now, it is time to evolve once more. By 2045, our aim is for everyone to have clean water, nutritious food, affordable housing, quality education, top-tier healthcare, and affordable, clean energy.

In this decade, the XPRIZE team is dedicated to funding and executing this transformative vision.

We’re launching this metamorphosis by targeting five grand challenge areas. We’re gathering a ‘Brain Trust’—a global assembly of the world’s best scientists, innovators, entrepreneurs, and policy specialists—to shape our future direction and lay the groundwork for its realization. These visionaries will ideate and propose prize competitions as stepping stones toward our united vision.

This is our plan for the future, an abundant future we can all believe in.

If there’s a single person who deserves top honors for the ongoing success, evolution, and relentless optimism of XPRIZE, it is our CEO, Anousheh Ansari. I am struck every day by my incredible luck in working with Anousheh. All of XPRIZE benefits from her expertise, dedication, and the exceptional clarity of her vision. She has faced each global crisis as an opportunity to make an impact, move forward, and progress as a foundation and planet. Without her leadership, moving into a new era of XPRIZE would not be possible.

I am proud of what we have achieved this year, and beyond excited for what is yet to come.



# THE XPRIZE MISSION

The challenges facing humanity become more complex and consequential every day. We need radical breakthroughs to solve them.

XPRIZE is the established global leader in designing, launching, and executing large scale competitions to solve humanity's greatest challenges. We crowdsource solutions through incentivized competitions open to anyone, anywhere who is willing to defy the status quo. We don't just celebrate great ideas; we reward innovators who build rigorously-tested, innovative, and scalable solutions.

Our mission is to inspire and empower humanity to achieve breakthroughs that accelerate an equitable, abundant future for all.

RADICAL IDEAS

BREAKTHROUGH INVENTIONS

GLOBAL EXPERTISE

BOLD INNOVATORS

# FROM CHALLENGE TO CHANGE

In 2022 XPRIZE spearheaded six dynamic prize challenges, rallying global teams to address monumental challenges in education, food, climate, and biodiversity. Read on to find out what we administered these competitions to do.



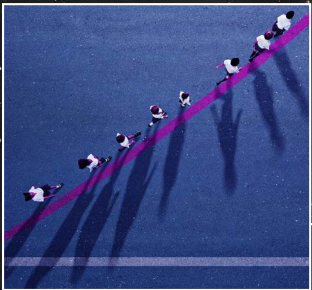
 **XPRIZE AVATAR** | 

Pioneer robotic avatar systems to instantaneously project human presence to distant places



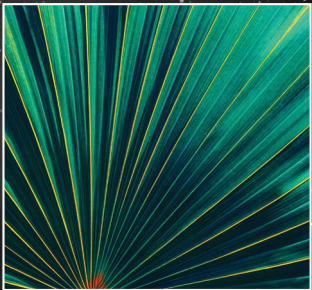
 **XPRIZE RAPID RESKILLING** | 

Revolutionize educational tools for enhanced, rapid learning outcomes.



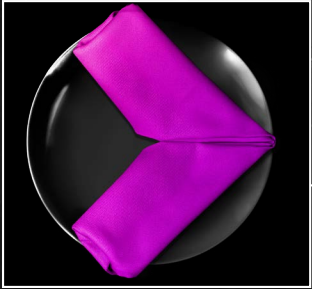
**DIGITAL LEARNING CHALLENGE**

Empower under-resourced workers to reskill for the digital age



 **XPRIZE RAINFOREST** | 



Develop technologies to monitor and assess complex rainforest ecosystems



 **XPRIZE FEED THE NEXT BILLION** | 

Innovate sustainable alternative proteins that outperform conventional chicken or fish in taste and texture



 **XPRIZE CARBON REMOVAL** | 

Pioneer efforts to restore Earth's carbon equilibrium to fight climate change



# A YEAR OF OUTSTANDING SUCCESS

We are proud to highlight the achievements of competing teams from across our six prizes. This year has seen some outstanding successes that include:

\$15M

awarded across 15 XPRIZE Carbon Removal \$1M Milestone Award winning teams

\$8M

awarded between three victorious teams in the ANA Avatar XPRIZE

\$1.75M

awarded between finalist teams across three competitions

\$250K

awarded between 15 semifinalist teams for XPRIZE Rainforest.

\$25M

TOTAL PRIZES AWARDED

# IMPACT IN ACTION

This year was a testament to the power of innovation and collaboration to change the world. XPRIZE was at the center of this transformation, championing challenges that spanned various sectors—including climate change, education, robotics, and beyond—by harnessing the genius of global problem solvers. The achievements of XPRIZE and competing teams epitomized our

collective potential and charted the course for a more sustainable and inclusive future.

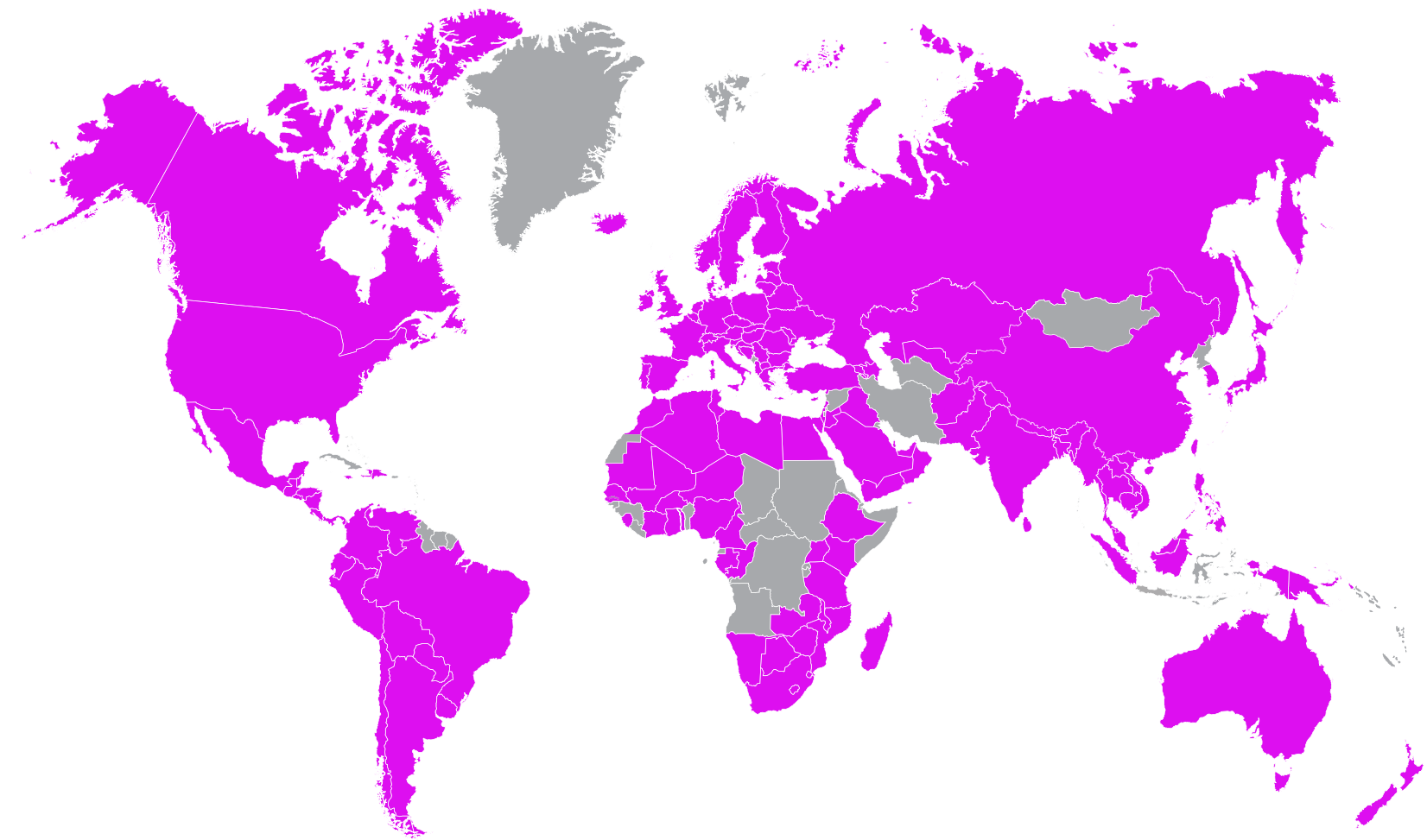
In 2022 the XPRIZE community delivered remarkable stories, breakthroughs, and tangible impacts. We are proud to highlight the achievements of competing teams from across our six prizes.





# XPRIZE AROUND THE GLOBE

The work of our competing teams and impact of our prize competitions can be seen and felt all around the world. In 2022, XPRIZE initiatives touched more than 148 countries.





# PRIZE SPOTLIGHT: XPRIZE ANA AVATAR

The ANA Avatar XPRIZE challenged teams around the world to integrate a range of diverse, cutting-edge technologies to create an avatar system that could transport a person’s senses, actions, and presence to a remote location in real time. Teams worked to overcome the barriers of time and distance to create new modes of human interaction for industries like healthcare, space travel, disaster relief, and remote work.

Over four years of competition, more than 400 participants from 99 teams and 20 countries competed for the \$10M prize purse.

The All Nippon Airways-sponsored project culminated in a live testing event in Long Beach, California. Each team had to demonstrate their system to a live audience, and viewers streaming

around the world, on a space-themed course. Avatar robots had to communicate back and forth with human operators, identify a full canister by weight among empty canisters, use a hand drill, flip switches, identify rock textures, and navigate the course.

In the end, Team NimbRo from Bonn, Germany won the \$5M grand prize. Pollen Robotics from Bordeaux, France, won second place with a \$2M prize, and Team Northeastern from Boston, Massachusetts, won third with a \$1M prize.

The 38 semifinalist and finalist teams invested \$19M to build their solutions over the course of competition, but the prize impact goes far beyond these dollar investments.



# BEYOND THE COMPETITION

Across our finalist and semifinalist teams, innovators invested more than 2 million hours of work toward meeting the challenge of the ANA Avatar XPRIZE. This work had a value of \$114M which netted the prize competition an 11.4X return on investment from our \$10M prize purse.

Technology created from the ANA Avatar XPRIZE is having a meaningful impact in the real world. The tech is being used in several ways; to create teleoperated robots on the moon by NASA and Honeywell, to reduce the transmission of healthcare-acquired infections in hospital geriatric acute wards, to support emergency disaster response, and to immerse remote workers in distant physical meeting spaces.

This technology will continue to evolve for decades to come and we’ll be keeping a close eye on its progress.

**\$10M**  
PRIZE PURSE



**2M**  
INNOVATOR  
HOURS

**\$114M → 11.4X**  
PRIZE PURSE ROI





# OUR GLOBAL REACH

XPRIZE’s media reach and impact continued to grow in 2022. We reached and engaged global audiences and influential media outlets with stories of innovation, determination, and perseverance that raised curiosity in, and knowledge of, our work.



**62B**

PRESS IMPRESSIONS

**\$117M**

IN MEDIA AD EQUIVALENCY

**11M**

SOCIAL MEDIA VIDEO VIEWS

**11.9K**

MEDIA MENTIONS

**2M**

SOCIAL MEDIA ENGAGEMENTS

**84M**

SOCIAL MEDIA IMPRESSIONS

# A LEGACY OF IMPACT + GROWTH

Over our history, we’ve distributed over \$142M in prizes spanning seven areas that embody our core mission. The initiatives born from these contests have ignited groundbreaking technologies, spurred enterprise formation, and initiated societal movements that amplify their benefit to human life each passing year.

This trajectory of triumph traces back to our inaugural prize. Historically, XPRIZE challenges have realized an impressive 31x multiplier on philanthropic dollars through investment in, and by, competing teams.

As we take stock of what we’ve accomplished so far, we seek to learn from our successes as we move ahead to scale our efforts in 2023.

**26**

LAUNCHED PRIZES

**35,000+**

INNOVATORS

**148**

COUNTRIES

**389+**

PARTNERS + PRIZE SPONSORS

**\$284M**

CUMULATIVE PRIZE PURSE

**\$2B**

INVESTED IN + BY COMPETING TEAMS





**IT IS TIME TO SCALE OUR  
EFFORTS AND INVITE THE  
WORLD TO CO-ARCHITECT  
A FUTURE WE ALL WANT  
TO LIVE IN.**

— Anousheh Ansari



# SUPPORTING OUR MISSION

Our mission at XPRIZE would not be possible without the help of our robust community of committed investors who drive impact at every level. While many people contribute to XPRIZE, our Benefactors are the lifeblood of the organization. They keep the foundation strong and growing by powering our work today and far into the future.

Beyond sponsoring our competitions, our strategic and visionary foundation-wide donors support our scientific research, public education and awareness work, and efforts to expand our

Brain Trust. They are essential in assisting our alumni on their entrepreneurial journey to make a real impact in the world.

We are grateful for those investments that have made our work to find solutions to some of humanity's greatest challenges possible. As we look to the future, we seek the generosity of more like-minded, optimistic people who want to take action and support XPRIZE as we create a world of equitable abundance for all.





# THE FUTURE OF XPRIZE

After over two decades of fostering innovation, XPRIZE is evolving. We have proven that our prize competition model accelerates breakthroughs to humanity's grand challenges. Now, we must scale our efforts.

XPRIZE is working with thought leaders and supporters to create a vision for 2045—a world where every individual's basic needs are satisfied. This includes universal access to clean water, nutritious food, affordable housing, effective learning, personalized medical care, and plentiful, inexpensive, non-polluting energy.

We have assembled a diverse Brain Trust of the world's brightest minds including futurists,

subject-matter experts, innovators, leaders, and solvers from each grand challenge area to help make this vision a reality. The Brain Trust will devise scientifically-validated roadmaps, and ten vetted prize concepts, to steer us toward our goals for 2045.

XPRIZE will share these prize concepts with the world for review and voting. The global community vote for which prizes we should move forward with and help shape our vision for 2045.

To scale, we will need substantial, sustainable funding. We will move beyond the inefficiencies of fundraising one project at a time and are seeking \$300M to build an opportunity fund with the

financial runway and resources to continuously support impactful prizes within each grand challenge area. This will allow us to run bold experiments and accelerate our efforts to solve an even larger number of challenges.

We cannot do this work without an involved and supportive global community. That is why each year we will implement our Global Visioneering process to collect ideas, build and update our roadmaps, and refine our path to an equitable and abundant future.

Together, we'll scale the impact of global innovators.



At Visioneering you have the smartest, most passionate people representing their slice of the world and you put them all in the same room. You can actually ask the questions and have a healthy debate while knowing we're all just there to make the world better.

**LAUREN LYONS** | Space Industry Executive | Brain Trust Member







## BUILDING THE ROADMAP

Global Visioneering is an annual, four-month-long prize ideation and discovery process led by the XPRIZE Brain Trust.

Brain Trust members develop prize sketches that address and overcome existing barriers and chart a path to deliver breakthroughs.

At the Science Conclave and Visioneering Summit yearly capstone events, Brain Trust members and guests review and score the most promising prize ideas that emerge from each grand challenge area.

At our 2022 Visioneering process, our Brain Trust worked in five grand challenge areas and identified the below exciting ideas for future competitions in line with our mission.

### BIODIVERSITY + CONSERVATION

#### ACCELERATED MANGROVE RESTORATION - BIODIVERSITY & CONSERVATION

**PROPOSED PRIZE PURSE:** \$10 MILLION

**PHASE:** IN DEVELOPMENT

**BARRIER:** While mangrove forests are among the most productive ecosystems for carbon sequestration, storm damage prevention, and habitat protection, they are declining rapidly and regrowth success rates are less than 20%.

**BREAKTHROUGH:** Deploy a strategy to regeneratively restore as many hectares of mangrove ecosystem as possible.

### CLIMATE + ENERGY

#### SPACE-BASED SOLAR POWER

**PROPOSED PRIZE PURSE:** \$25 MILLION

**PHASE:** IN DEVELOPMENT

**BARRIER:** Much of the earth receives little sunlight, especially in long winter and rainy seasons. This inhibits climate-friendly power generation and creates energy poverty and intermittent power.

**BREAKTHROUGH:** Create a robotically-assembled space solar array of at least 50kW that can beam power to earth to be converted to electricity with a minimum efficiency of 70%, regardless of weather.

### HEALTH

#### AUTONOMOUS SURGERY FOR HUMANITY

**PROPOSED PRIZE PURSE:** \$100 MILLION

**PHASE:** IN DEVELOPMENT

**BARRIER:** Global access to surgery is in a crisis that will continue and be exacerbated in regions affected by poverty, natural disasters, and conflict.

**BREAKTHROUGH:** Enable surgical and anesthetic care through progressively autonomous surgical suites that exceed WHO-defined standards of care.

### LEARNING + SOCIETY

#### DEGREE ME

**PROPOSED PRIZE PURSE:** \$20 MILLION

**PHASE:** IN DEVELOPMENT

**BARRIER:** Around 65% (\$500B) of American post high school “education” is spent on job training and apprenticeships rather than finding an alternative path to a degree. Those with high school diplomas but no degree are left out of 60% of the job market.

**BREAKTHROUGH:** Design and deploy an assessment-only degree platform.

### SPACE + EXPLORATION

#### ULTRAFAST TRAVEL

**PROPOSED PRIZE PURSE:** \$100 MILLION

**PHASE:** IN DEVELOPMENT

**BARRIER:** Entrenched assumptions that hypersonic vehicles cannot serve as commercial transportation are preventing us from reducing travel times by a factor of five or more.

**BREAKTHROUGH:** Catalyze commercially viable and available ultra-fast air travel to radically reduce both journey times and environmental impact.



# OUR GRAND CHALLENGE AREAS

We group the barriers we see in the world, and the breakthroughs we hope to build to get past them, into seven grand challenge areas. Grouping similar challenges together allows us to share resources, knowledge, and cognitive power among competing teams, benefactors, and the XPRIZE community at large.

**BIODIVERSITY + CONSERVATION**

**CLIMATE + ENERGY**

**DEEP TECH + QUANTUM**

**FOOD + WASTE + WATER**

**HEALTH**

**LEARNING + SOCIETY**

**SPACE + EXPLORATION**



# BIODIVERSITY + CONSERVATION

Biodiversity + Conservation focuses on revolutionizing technology and frameworks to protect all life on Earth, including humans. This grand challenge area will improve the measurement, monitoring, and management of biodiversity and deepen our understanding of the planet’s complex ecosystems. This work will drive investment and exploration in these ecosystems and create new, just, and sustainable bio-economies.

PROTECT + PRESERVE LIFE IN ALL ITS FORMS

MEASURE + CONSERVE NATURAL RESOURCES

RAPIDLY SURVEY BIODIVERSITY

SUSTAINABLE BIO-ECONOMIES



As a team based in a tropical country, we are motivated to apply science and technology to protect biodiversity. Being an XPRIZE finalist is a very efficient way to attract attention to this noble cause and encourage efforts to mitigate environmental degradation and its impacts on forest-dwelling communities.

**JULIANA DE PAULA SOUZA** COMPETITOR  
Brazil Team | XPRIZE Rainforest

## AWARDED + ACTIVE PRIZES

## WHAT’S NEXT?

### XPRIZE RAINFOREST

**PRIZE PURSE:** \$10 MILLION

**PHASE:** IN PROGRESS

**BARRIER:** Rainforests cover less than 10% of the earth’s land surface, but house over 50% of the planet’s biodiversity. We lack knowledge and access to the value of the standing trees and biodiverse ecosystems.

**BREAKTHROUGH:** Develop technologies that support biodiversity and conservation efforts in rainforest communities.

### XPRIZE WILDFIRE

**PRIZE PURSE:** \$10 MILLION

**PHASE:** IN PROGRESS

**BARRIER:** Wildfires are becoming more frequent and intense. Destructive wildfires wreak havoc on ecosystems, economies, and communities, and contribute to global greenhouse gas emissions and worsening health impacts.

**BREAKTHROUGH:** Innovate autonomous systems that detect, assess, and suppress destructive wildfires.

### XPRIZE CORAL RESTORATION

**PRIZE PURSE:** \$9 MILLION

**PHASE:** FUNDING

**BARRIER:** Corals are dying off at catastrophic rates, with entire ecosystems threatened by extinction. We could be the last generations to benefit from these invaluable, life-sustaining reefs that first formed 240 million years ago.

**BREAKTHROUGH:** Create technologies and processes to restore coral reefs, with at least three different coral types, at scale.



# CLIMATE + ENERGY

Climate + Energy focuses on creating a future where clean, reliable, and sustainable energy is accessible and affordable for all. This grand challenge area will drive solutions for today's urgent climate and energy threats. This work includes mitigating greenhouse gasses and redesigning energy systems to create sustainable, scalable, and equitable power. This will help restore balance to Earth's climate system and make circular economies a reality.

## CLEAN ENERGY SYSTEMS

## RELIABLE ENERGY FOR ALL

## CLIMATE INTERVENTIONS & ADAPTATIONS

## SUSTAINABLE SOLUTIONS



Being an XPRIZE winner has opened many doors. It helped us connect with the carbon removal ecosystem at large, inspired engineers and scientists to join us, and enabled funding for the 10 tons of CO<sub>2</sub>/year test facility that we're building in Knoxville, Tennessee.

**ANCA TIMOFTE** STUDENT AWARD WINNER  
CEO and Co-Founder, Holocene Climate | XPRIZE Carbon Removal

### AWARDED + ACTIVE PRIZES

#### NRG | COSIA CARBON XPRIZE

**PRIZE PURSE:** \$20 MILLION

**PHASE:** AWARDED 2021

**BARRIER:** Most of the world's energy came from fossil fuels such as coal, oil, and natural gas that accounted for a majority of global carbon dioxide (CO<sub>2</sub>) emissions, a leading contributor to climate change.

**BREAKTHROUGH:** Developed scalable technologies to convert CO<sub>2</sub> emissions into commercially viable products.

#### XPRIZE CARBON REMOVAL

**PRIZE PURSE:** \$100 MILLION

**PHASE:** IN PROGRESS

**BARRIER:** CO<sub>2</sub> is raising the temperature of our planet. If humanity makes no changes, the global average temperature could increase 6°C by the year 2100.

**BREAKTHROUGH:** The largest XPRIZE incentive prize ever. Rebalance the earth's carbon cycle, removing carbon from air, earth, and water to fight humanity's greatest threat: climate change.

### WHAT'S NEXT?

#### XPRIZE ENERGIZING

**THE FUTURE**

**PRIZE PURSE:** \$25 MILLION

**PHASE:** FUNDING

**BARRIER:** As much as 3/4 of global greenhouse gas emissions come from energy generation and consumption. 770 million people still do not have access to electricity and over 2.6 billion do not have access to clean fuels for cooking.

**BREAKTHROUGH:** Develop systems for storing, transferring, and creating clean, renewable energy for real-world use.



## DEEP TECH + QUANTUM

Deep Tech + Quantum focuses on advancing deep technologies for the betterment of life on Earth. This grand challenge area will drive innovation in quantum computing, artificial intelligence, robotics, nanotechnology, Web 3.0 and other breakthrough technologies. This work will promote high-speed, instantaneous computing and communication for all with quantum-supported data privacy and security to omit bad cyber actors.

## DATA PRIVACY & SECURITY

## ADAPTABLE LEARNING AI SYSTEMS

## HUMAN + ROBOT INTERFACES



We would not have any operations in the US if it hadn't been for XPRIZE. We are now speaking to more major global robotics players in the industry, and that is a huge deal.

**ZAKI HUSSEIN** | CEO / Founder, Touchlab | XPRIZE Avatar

## AWARDED + ACTIVE PRIZES

### IBM WATSON AI XPRIZE

**PRIZE PURSE:** \$5 MILLION

**PHASE:** AWARDED 2021

**BARRIER:** When this prize launched in 2016 there was little public-facing discourse around how AI works, how it was used, and how it could be used for significant human benefit.

**BREAKTHROUGH:** Accelerated adoption of AI technologies and sparked innovative solutions to major societal challenges.

### XPRIZE AVATAR

**PRIZE PURSE:** \$10 MILLION

**PHASE:** AWARDED 2022

**BARRIER:** Time, distance, culture, and access limit our ability to deploy human skills where they are needed quickly and effectively. Deploying human knowledge and expertise is nearly impossible in hard to reach places like remote areas, space, and disaster scenes.

**BREAKTHROUGH:** Create an avatar system that can transport human presence to remote locations in real time and water to fight humanity's greatest threat: climate change.

## WHAT'S NEXT?

### XPRIZE QUANTUM

**PRIZE PURSE:** \$20 MILLION

**PHASE:** FUNDING

**BARRIER:** Despite growing investment and innovation activity, the world is still awaiting a transformative, real-world application of quantum.

**BREAKTHROUGH:** Democratize quantum computing technology to unlock its radical potential to secure a future of opportunity that is accessible to all.



# FOOD + WATER + WASTE

Food + Water + Waste focuses on building toward a future of safe access to clean water, sanitation, and nutritious food for all. This grand challenge area will accelerate technologies, processes, and policies to create resilient, regenerative, and inclusive food systems. Advancements will focus on increasing nutritional quality, reducing waste, and building novel water systems to provide equitable access to clean drinking water around the world.

## SUSTAINABLE NUTRITIOUS FOOD SYSTEMS

## RESILIENT FOOD & WATER MANAGEMENT

## TRANSPARENT & FAIR SUPPLY CHAIN

## SMART ECOSYSTEM LIFECYCLE MANAGEMENT



XPRIZE motivated us to fully focus on our plant-based salmon filet development, and we would not have reached this stage without XPRIZE.

**ROBIN SIMSA** | CEO, Revo Foods | XPRIZE Feed the Next Billion

### AWARDED + ACTIVE PRIZES

#### WATER ABUNDANCE XPRIZE

**PRIZE PURSE:** \$1 MILLION

**PHASE:** AWARDED 2018

**BARRIER:** Over 780 million people in 43 countries faced water scarcity due to lack of availability, uneven distribution and access, and contamination.

**BREAKTHROUGH:** Alleviated global water shortages with energy-efficient technologies to harvest fresh water from the air.

#### XPRIZE FEED THE NEXT BILLION

**PRIZE PURSE:** \$15 MILLION

**PHASE:** IN PROGRESS

**BARRIER:** By 2050, Earth's population will be 9.7 billion. Demand for meat products is increasing while impact from meat production will include accelerating deforestation, biodiversity loss, and climate change, and straining global water supply.

**BREAKTHROUGH:** Produce accessible and sustainable meat alternatives that outperform chicken or fish in taste, texture, and nutrition.

### WHAT'S NEXT?

#### XPRIZE DESALINATION

**PRIZE PURSE:** \$120 MILLION

**PHASE:** FUNDING

**BARRIER:** One in four people around the world lack access to safe drinking water, and by 2030, we'll only have enough water to meet less than half of growing demand. Traditional desalination methods are expensive and have harmful impacts on the environment and marine ecosystems, making them an unsustainable solution to increasing water insecurity.

**BREAKTHROUGH:** Incentivize the development of sustainable and scalable desalination solutions that increase access to usable water around the world — helping communities thrive instead of survive.



# HEALTH

Health focuses on creating a future where everyone has access to high-quality, personalized, precision healthcare to increase human health spans and improve quality of life. This grand challenge area will accelerate the development of convergent technologies that improve prevention, diagnostics, and therapy. These innovations will pave the way to vastly improved healthcare and biomedicine for all.

PRIORITIZE PROACTIVE CARE

PREDICT, DETECT, PREVENT DISEASE

CROWD-SOURCED INSIGHTS

EXTENDED LIFESPAN



The Qualcomm Tricorder XPRIZE allowed us to define and embody our deepest values, which are compassion, respect, persistence, resourcefulness and daring. You have to live and breathe those values to win an XPRIZE. By participating and eventually winning the Bold Epic Innovator Award, Cloud DX was set on a path to success that continues to this day.

**ROBERT KAUL** | CEO, Cloud DX | Qualcomm Tricorder XPRIZE

## AWARDED + ACTIVE PRIZES

### XPRIZE RAPID COVID TESTING

**PRIZE PURSE:** \$6 MILLION

**PHASE:** AWARDED 2021

**BARRIER:** The world needed COVID-19 testing options that were fast, affordable, and easy to implement in order to properly reopen schools, businesses, and other vital institutions around the globe.

**BREAKTHROUGH:** Developed faster, cheaper, and easier to use COVID-19 testing methods at scale.

### PANDEMIC RESPONSE CHALLENGE

**PRIZE PURSE:** \$500,000

**PHASE:** AWARDED 2021

**BARRIER:** Regional governments, communities, and organizations lacked data-driven systems to build and implement plans to minimize harm when reopening their economies after COVID-19.

**BREAKTHROUGH:** Developed prediction models to estimate numbers of daily COVID-19 cases with the greatest accuracy.

## WHAT'S NEXT?

### XPRIZE HEALTHSPAN

**PRIZE PURSE:** \$120 MILLION

**PHASE:** FUNDING

**BARRIER:** Traditional medicine focuses on treating symptoms of injury, illness, or disease. This reactive system extends life, but doesn't proactively extend health, leaving millions of Americans grappling with poor quality of life and related economic challenges in their later years.

**BREAKTHROUGH:** A proactive, accessible therapeutic treatment that reduces the risk of chronic age-related diseases, increases human healthspan and extends quality of life well into our later years.



## LEARNING + SOCIETY

Learning + Society focuses on building equitable, individualized learning systems to foster an inclusive, sustainable society. This grand challenge area will accelerate decentralized, immersive learning experiences, educational systems that support the global growth of tech innovation, and a new era of quality, on-demand, accessible, and lifelong learning for all.

GLOBAL ACCESS TO QUALITY EDUCATION

TECHNOLOGY ENABLED SYSTEMS INTEGRATION

INTEROPERABLE DATA SYSTEMS

EQUITY-CENTERED DESIGN



The XPRIZE Rapid Reskilling Competition has been a catalyst for growth and expansion that has not only validated our approach but accelerated our mission to empower under-resourced communities through accessible, transformative education.

**MUSTAFA SAHID**

Dir. of Operation, Shifa 360 | XPRIZE Digital Learning Challenge

## AWARDED + ACTIVE PRIZES

### GLOBAL LEARNING XPRIZE

**PRIZE PURSE:** \$15 MILLION

**PHASE:** AWARDED 2019

**BARRIER:** One out of five children around the world were not enrolled in school. Less than half of children who did attend were able to read by age 12. More than quarter billion children globally could not read, write, or do basic math.

**BREAKTHROUGH:** Developed open-source, scalable software to enable children to learn basic reading, writing, and arithmetic within 15 months.

### XPRIZE RAPID RESKILLING

**PRIZE PURSE:** \$5 MILLION

**PHASE:** CONCLUDED 2022

**BARRIER:** Under-resourced communities in the U.S. face systemic barriers to career learning, mobility, and progress. Ineffective workforce development systems exacerbate widening skills gaps, deteriorating job quality, and a lack of collaboration between players in the labor market.

**BREAKTHROUGH:** Create novel digital training solutions, so workers can quickly attain new, relevant skills during digital transitions.

### ADULT LITERACY XPRIZE

**PRIZE PURSE:** \$7 MILLION

**PHASE:** AWARDED 2019

**BARRIER:** More than 36 million U.S. adults lack basic English literacy. This gap increases healthcare costs, decreases labor productivity, and keeps families in the cycle of poverty.

**BREAKTHROUGH:** Develop mobile apps that increase adult literacy skills in just 12 months.

### DIGITAL LEARNING CHALLENGE

**PRIZE PURSE:** \$1 MILLION

**PHASE:** AWARDED 2022

**BARRIER:** As the adoption of edtech expands, the needs of students, from early years to higher education, are evolving every day. Our understanding of learning and how learning takes place is not evolving with it.

**BREAKTHROUGH:** Conducting large-scale experiments to radically improve digital education processes and outcomes for all learners.



# SPACE + EXPLORATION

Space + Exploration focuses on on- and off-planet exploration to advance knowledge and sustain human life in the universe. This grand challenge area encompasses all necessary technologies and resources to create self-sustaining communities in orbit or on other planets and moons, including transportation, habitation, and energy.

PROTECT & REPAIR THE BIOSPHERE

ESTABLISH MULTI PLANETARY SOCIETIES

HARVEST THE RESOURCES OF SPACE

PLANETARY DEFENSE SYSTEMS



The XPRIZE was extremely instrumental not only in iSpace’s development— it gave us a platform to gain worldwide attention, trust and credibility from our investors, and technological experience to further pursue commercial lunar exploration activities.

**AARON SORENSON** | iSpace

## AWARDED + ACTIVE PRIZES

### ANSARI XPRIZE

**PRIZE PURSE:** \$10 MILLION

**PHASE:** AWARDED 2004

**BARRIER:** Space flight, exploration, and tourism were too dangerous and expensive for the general public. Space was the purview of government alone.

**BREAKTHROUGH:** Engineered a reliable, reusable, crewed spaceship that launched the \$2 billion private space industry.

### GOOGLE LUNAR XPRIZE

**PRIZE PURSE:** \$30 MILLION

**PHASE:** COMPLETED 2018

**BARRIER:** Space exploration is in the exclusive domain of governments. Commercial exploration of the moon is unviable and unfit for the creativity and resources of private markets.

**BREAKTHROUGH:** Build affordable access to the moon and develop long-term business models around lunar exploration.

## WHAT’S NEXT?

### XPRIZE SPACE DEBRIS

**PRIZE PURSE:** \$50 MILLION

**PHASE:** DESIGN

**BARRIER:** Space debris from inoperable spacecraft and satellites, as well as their discarded components and fragments, surrounds our planet. This debris is a regular problem for present space operations and could impede future space ventures.

**BREAKTHROUGH:** Clear Earth’s orbit of space debris to allow humanity to explore our solar system and beyond.



# FINANCIAL SUMMARY

Our financial performance in Fiscal Year (FY) 2022 reflects the hard decisions we made in 2021 to reorganize the foundation. From 2022 through 2023 we will be rebuilding and optimizing, paving the way for future growth and development.

We are committed to implementing strategic initiatives to drive sustainable growth and showcase our value as the gold standard for competitions that solve the world’s grandest challenges.

We appreciate the ongoing support of our benefactors and sponsors and are confident in our strategy to scale and capitalize on the opportunities ahead for continued growth and success.

INCOME	FY 2021	FY 2022
Revenue	\$16,595,353	\$15,205,255
Other Income	\$2,419,252	\$808,882
TOTAL INCOME	\$19,014,606	\$16,014,137
EXPENSE		
Personnel Expense	\$14,665,528	\$14,877,616
Team Activities	\$236,999	\$219,871
Testing Activities	\$1,242,924	\$1,385,263
Event Expense	\$1,019,050	\$1,827,711
Marketing Activities	\$2,822,939	\$722,058
Education/Awareness & Impact	\$260,673	\$545,255
Travel & Entertainment	\$393,703	\$1,409,445
General Administrative	\$2,801,712	\$2,575,592
TOTAL EXPENSE	\$23,443,525	\$23,562,811
Net Assets	(\$4,428,920)	(\$7,548,674)

# LEADERSHIP

The XPRIZE Leadership team executes the Foundation’s mission of hope and abundance for humanity’s future by harnessing the power of innovators, technology, and resources.

- Anousheh Ansari**  
CEO
- Michael Birnbach**  
VP, Finance
- Jennifer Haslip**  
Chief Marketing Officer
- Marcus Extavour**  
EVP, Climate + Energy
- Peter Houlihan**  
EVP, Biodiversity + Conservation
- Alexander Nicholas, Ph.D.**  
EVP, Education + Society
- Jim Mainard**  
CTO, EVP, Quantum + Deep Tech
- Andrew Tauhert**  
Chief Advancement Officer
- Ose Ugochukwu**  
General Counsel
- Kathy Mandato**  
Chief People Officer

# BOARD OF DIRECTORS

The Board of Directors is the fiduciary board of XPRIZE, providing key leadership and financial oversight.

- Anousheh Ansari**  
CEO
- Amir Ansari**  
Founder & General Manager, Vaticx, LLC
- Helene Desmaris**  
Founder & Executive Chairman, IVADO Labs
- Peter H. Diamandis, M.D.**  
Founder & Executive Chairman, XPRIZE
- Gil Elbaz**  
Vice Chairman, Foursquare
- Eric Esrailian, M.D., M.P.H.**  
Chief, UCLA Vatche & Tamar Manoukian Div. of Digestive Diseases
- John Frank**  
Vice Chairman, Oaktree Capital Mgmt LP
- Laetitia Garriott de Cayeux**  
CEO, Global Space Ventures
- Salim Ismail**  
Founder & Chairman, EXO Works, Open EXO
- Anu Jain**  
Founder, Women’s Safety XPRIZE
- Gregg Maryniak**  
Secretary, Director & Co-Founder, XPRIZE
- Lauren Selig**  
Founder & CEO & Prod. Shake and Bake Productions
- Jeff Shames**  
Exec. in Residence, MIT Sloan School of Management
- Mark Siegel**  
Founder & President, Remy Investors
- Kelly Vlahakis-Hanks**  
Presiden & CEO, Ecos
- Don Walker**  
Retired CEO, Magna Intl.
- Robert K. Weiss**  
Vice Chairman



BOARD OF TRUSTEES

VISION CIRCLE

INNOVATION BOARD

SPIRIT OF XPRIZE

The **Board of Trustees** is the most valued advisory organization of the XPRIZE Foundation, comprising thought leaders, artists, and top executives.

- Eric Anderson

James Cameron

Ken Dychtwald, Ph.D.

Richard Garriott de Cayeux

James Gianopulos

Jack Hidary

Eric Hirshberg

Arianna Huffington

Naveen Jain

Dean Kamen

Ray Kurzweil
- Erik Lindbergh

Dr. James Manyika

Rob McEwen

Diane Murphy

Larry Page

Lee Stein

Ratan Tata

Ali Velshi

Will Wright

The **Vision Circle** is a membership of visionary philanthropists who underwrite the operations of XPRIZE at the highest level and provide thought leadership on the foundation’s direction. Vision Circle members contribute a minimum of \$500,000 per year.  
\*Members are listed in the order they joined.

- Larry Page

Sergey Brin

Gil + Elyssa Elbaz

Dr. Ray Sidney

Anne Wojcicki

The W.J. Silverstein Family Trust

Eric Schmidt

Wendy Schmidt

The Ansari Family

Dr. Richard Merkin, M.D.

Dustin Moskowitz

Rob McEwen
- Ratan Tata

Ricardo B. Salinas

George M. Marcus

Paresh Ghelani

Jeffrey Shames

Naveen + Anu Jain

John Templeton Foundation

Sidd Pagidpati

Nabyl Charania + Rodrigo Tona

Glenn Sanford

Carl Barney

The **Innovation Board** is made up of philanthropists who are entrepreneurs and CEOs who work with the XPRIZE leadership team to help define the grand challenges and areas of focus for XPRIZE. Innovation Board members contribute a minimum of \$150,000 per year, which underwrites the work of the foundation.

- Sanju Bansal

Fabricio Bloisi

David Blundin

Chuck Brady

Derek Collison

Sam Englehardt

Megan McGill

John Frank

Garrett Gerson

Kam Ghaffarian

Alex Giannou

Dr. Joan Greco

Seth Green

Susan & Duane Hoff
- Ann & Paul Konecny

Marc Lore

Dr. Yixiang Liu

Stacey Shulman

Mark Siegel

Christian Stolz

Ana Lucia Villela

Don Walker

Beau Wrigley, Jr.

Charlie Young

Sergey Young

**Spirit of XPRIZE** members are regional XPRIZE ambassadors who effect change and build communities that drive research, innovation, and bold ideas to meet the global challenges we face today. Spirit of XPRIZE members contribute \$50,000 per year.

- Jack Bader

Teymour Boutros-Ghali

John Gleber

Jon Huberman

Ben Kante

Jim Kwik

Ashley Merrill

Marc Merrill

Diane Murphy

Tony Pritzker

Joni Rogers-Kante
- Chip Rosenbloom

Lauren Selig

Dr. Jay Short

Nina & Scott Stanford

Kelly Vlahakis-Hanks

Scott Watt

Jeff Wilke

Liesl Wilke



“

**THE BEST WAY TO PREDICT  
THE FUTURE IS TO CREATE IT  
YOURSELF.**

— Peter H. Diamandis, M.D.