frontiers
Planet Prize

Frontiers
Planet Prize

Mobilizing science for a global green renaissance

3 prizes of 1 million US dollars awarded annually to accelerate and scale up breakthrough research for healthy lives on a healthy planet.

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Mission

The Earth's system is rapidly approaching its planetary boundaries. There is a broad consensus amongst scientists that human activity is the primary driver of these breaches, and the time needed to protect and restore planetary health is slipping away.

Pulling back from these boundaries, averting tipping points and critical thresholds, will require new urgency from societal institutions and leaders across the world. To secure a healthy planet we will need a deep understanding on the mechanics of our earth system, as well as scientific solutions – and action – at pace and at scale. The Frontiers Research Foundation, a not-for-profit foundation based in Switzerland, launched a new international science competition in 2022. It has the simple but significant ambition to directly address the planetary crisis, by mobilizing the scientific community engaged in breakthrough research to advance planetary boundary science, and with the greatest potential to stabilize the planet's ecosystem. Each edition awards 3 scientists with 1 million US dollars to accelerate and scale up their research.

The prize aims to emulate the passion and pride of the Olympic Games by unleashing the competitive spirit of researchers – who are supported by their universities and nations – to get the world to sit up, listen, and act on the profound planetary threats we face. This, in turn, helps accelerate the process of reaching a scientific consensus, something crucial to achieve quickly and resolutely as time marches on. History has shown that once consensus is achieved – such as policy mechanisms to tackle ozone depletion, governments, industries, and societies implement decisive action.

Since it's launch on Earth Day, 2022, the prize has engaged a wide network of global institutions, academies of science, and thousands of scientists who participate through their nominated research articles. An international expert Jury works independently to identify thought leaders and select both National and International Champions whose work advances our understanding of our earth system, and demonstrates exceptional potential to create real-world impact. Award recipients receive significant support to accelerate, scale, and amplify their research. Each new edition of the prize continues this mission. National Champions are announced annually. For the most up-to-date information on participants, champions, and impact, please visit our website.

Reach to date

69 countries	62 National Champions	10 International Champions	9.6M US dollars awarded
730+ participating research institutions	10,000+ participating scientists	Winning research cited in more than 350 policy documents	Winning articles cited 34x more compared to others in their field

Partners

PIK

International Science Council

The African Academy of Sciences

Villars Institute

WORLD ECONOMIC FORUM

FALLING WALLS CONNECT

National Sustainability Society

Download the progress reports

First edition

Second edition

There is no planet B

Earth system scientists have identified nine planetary boundaries, beyond which irreversible changes to the planet may occur. A core principle of the Frontiers Planet Prize is its commitment to addressing the breach of these boundaries through breakthrough scientific research.

These planetary boundaries have been described in detail by Johan Rockström and Owen Gaffney in their book and documentary "Breaking Boundaries". The Planetary Boundary framework paints a clear picture of the challenges humanity faces, and the Frontiers Planet Prize believes it should spur a call to action.

Read more

FEATURE

A safe operating space for humanity

Identifying and quantifying planetary boundaries that must not be transgressed could help prevent human activities from causing unacceptable environmental change, argue Johan Rockström and colleagues.

SUMMARY

- New approach proposed for defining preconditions for human development
- Crossing certain biophysical thresholds could have disastrous consequences for humanity
- Three of nine interlinked planetary boundaries have already been overstepped

Mobilize

the international scientific community through an annual competition, to drive breakthroughs in planetary boundary science worldwide.

Catalyze

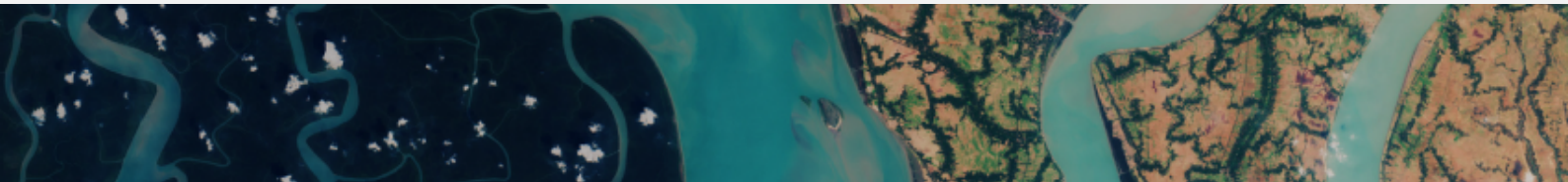
funders, foundations, and philanthropists to join forces with each other and step up their efforts in supporting planetary boundary science.

Amplify

the transformative impact of collaboration among scientists and institutions in planetary boundary science.

Accelerate

the process of reaching scientific consensus and therefore public and private stakeholder adoption of transformative solutions.



Process

The Frontiers Planet Prize aims to tackle the planetary crisis at a global level by launching a passionate competition between scientists, universities, and nations to fund and develop science that advances planetary boundary science and provides potential actionable solutions to keep us safe within these boundaries.

All invited universities and research institutions register with us as a National Nominating Body (NNB), which opens Prize eligibility to their institution. The NNB committee then reaches out to the lead scientists of the most promising research articles and invite them to apply via the application form supplied by the the Frontiers Research Foundation.

The National Nominating Body will select its top three candidates from these applications and forward them to the national academy serving as its National Representative Body (NRB).

The international Jury of 100, chaired by Professor Johan Rockström, will evaluate these National Nominees based on the importance and relevance of their proposed breakthrough solution or insight.

The jury will vote for one National Champion from each participating country, and then from among these selected National Champions, will vote to select the three International Champions, each of whom is awarded the 1 million USD prize money. Note that while all countries that participate are eligible to have a National Champion, the decision belongs to the Jury.

The National Champions will be announced on Earth Day (22nd April). The International Champions will be announced at the Award Ceremony, each of whom will then be awarded with the prize money.. For an overview of the prize and details on the current cycle, please visit our website.

1 NNB

3 candidates per institution

Individual universities or research institutions register as National Nominating Bodies (NNB), which authorizes them to nominate three candidates for consideration.

2 NRB

3 nominees per country

This pool of candidates is evaluated by a National Representative Body (NRB), typically a national level learned academy, which nominates three National Nominees.

3 Jury

1 National Champion per country

The Jury of 100, led by Prof Johan Rockström, evaluates the National Nominees based on the importance and relevance of a recently published article and selects the National Champions.

4 Prize

3 International champions

The Jury of 100 undergoes a second round of voting and selects selects three International Champions from the National Champions each of whom wins one of the three 1 million USD prizes.

Timeline

*Please note that this date may vary depending on the timeline of each National Representative Body"

February - October

The NNBs and NRBs register with the Frontiers Planet Prize

March - October

Each NNB reaches out to the lead scientists of the promising research articles, and invites them to apply

October - November

Each NNB submits 3 Nominations to their NRB

Deadline: 1 November*

November - December

Each NRB submits 3 National Nominations to the Jury of 100

Deadline: 1 December

December - February

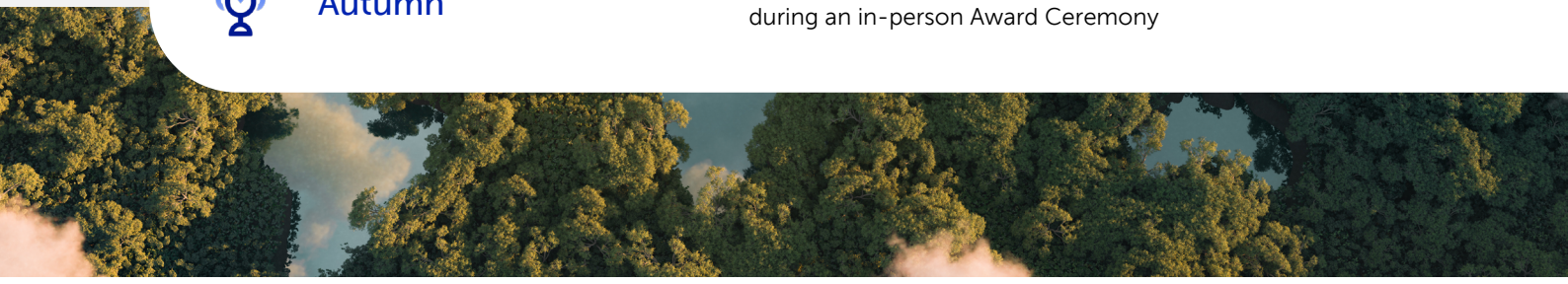
The Jury of 100 reviews the applications and votes to select the National and International Champions

22 April

The official announcement of the National Champions is made on Earth Day

Autumn

The official announcement of the International Champions is made during an in-person Award Ceremony



Scientific criteria

The Frontiers Planet Prize will be awarded to the best peer-reviewed research articles published in international scientific journals, with robust peer review and transparent publication procedures.

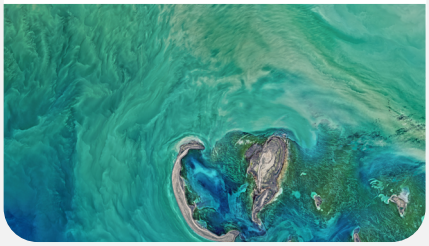
The acceptance for publication date of the article must fall within the 2 years prior to the NNB submission deadline of each edition's cycle (the acceptance window for eligible articles varies by prize cycle; to view the acceptance dates for the current edition, please visit our website). Scientific excellence is the default principle to participate in the Frontiers Planet Prize, with each nomination providing actionable solutions to bring us back into the safe operating space of the 9 planetary boundaries.

We welcome breakthrough science across all disciplines on condition it is focused on Planetary Boundaries and presents original research findings or insightful reviews and syntheses. Note that book chapters, books, and non-peer reviewed articles are not accepted.

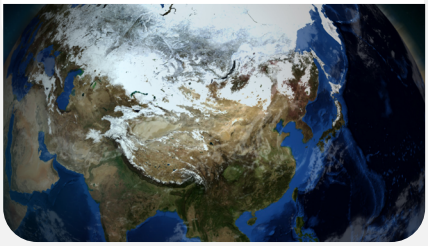
For contributions to be considered for the Frontiers Planet Prize, the following criteria must be met:

The research outlines actionable solutions or pathways that can be implemented in policies, adapted commercially, or otherwise contribute to keep global development within Planetary Boundaries.

The research advances the scientific understanding and quantification of Planetary Boundaries. It explores how Planetary Boundaries are affected or impact life support systems/the Earth system or investigates the implications of adopting Planetary Boundaries thinking across disciplines, sectors and activities/ applications.



The research must connect to several Planetary Boundaries at the Earth system scale. Research that explores interactions/relations between multiple Planetary Boundaries will be prioritized.



To address the planetary crisis and mobilize widespread global change, all perspectives that reflect the diverse contributions of nominees should be considered. During the nomination process, we strongly encourage each National Nominating Body to address any unintended bias in the proposed candidates.

Jury mandate

The Frontiers Planet Prize Jury of 100 will decide in full autonomy and under the strictest standards of impartiality, the selection of the National Champions, and the International Champions.

Each submission will be assessed based on the following:

- Applicability of the research results
- Scalability of the application
- Number of planetary boundaries involved
- Contribution to the general understanding of planetary boundaries
- Scientific novelty
- Research quality.

In the case of any conflicts of interest, jury members will be asked to declare their conflict and abstain during any proceedings related to a specific contribution. Note the Frontiers Planet Prize does not guarantee a National Champion for each participating country. This decision, along with the selection process, is managed independently by the Jury of 100.

Prof Johan Rockström
Director of the Potsdam Institute
Chairperson Jury of 100

Jury of 100

National Representative Bodies

Our community of NRBs represented by world leading national academies of science.

Our National Academies of Sciences supporting the prize

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Contact us

Please connect with us to discuss how we can work together in addressing one of the most urgent challenges of the 21st century.

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