





MOBILIZING SCIENCE FOR A GLOBAL GREEN RENAISSANCE

The Frontiers Planet Prize is a unique, global science competition that recognizes exceptional scientists who deliver breakthrough, scalable solutions for living healthy lives, on a healthy planet.









The Frontiers Planet Prize identifies



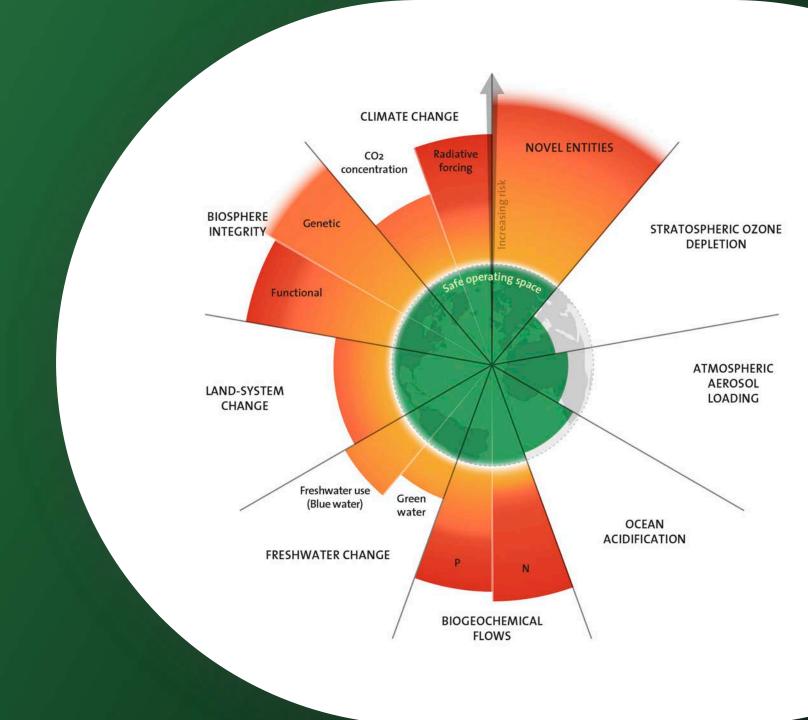


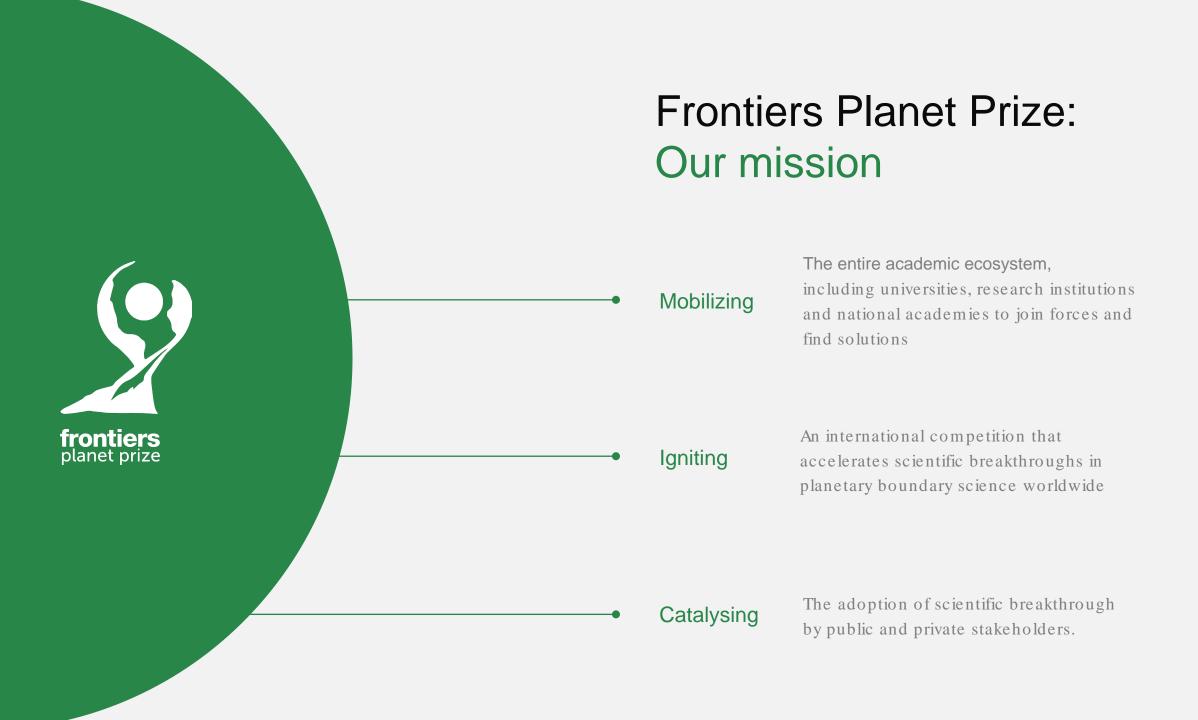
Planetary boundaries

Transgressed boundaries:

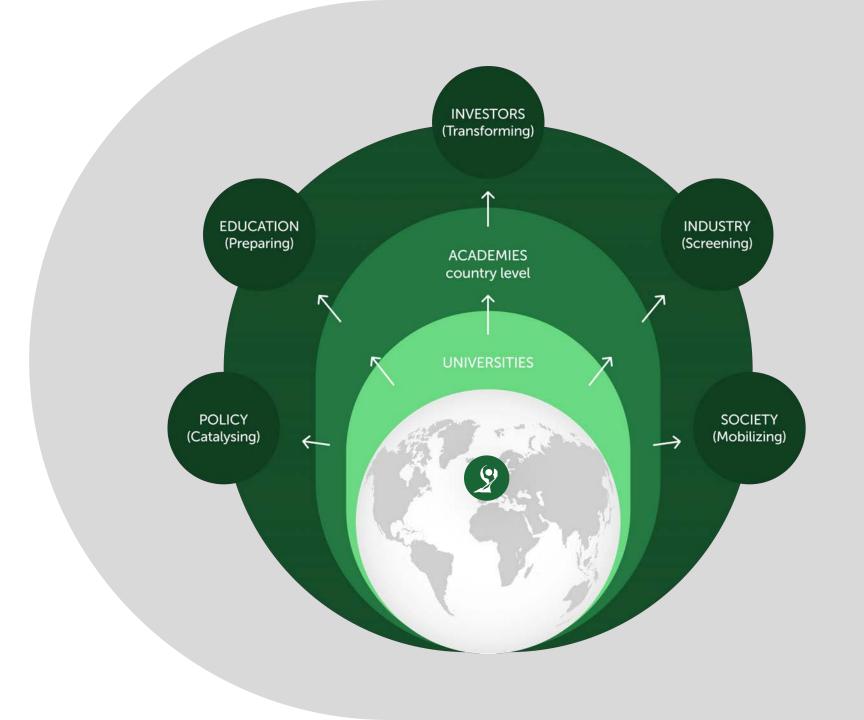
- 1. Biogeochemical flows
- 2. Biosphere integrity
- 3. Climate Change
- 4. Freshwater use
- 5. Novel entities
- 6. Land-system change

Sources: Updated Planetary Boundaries. The 2023 update to the Planetary boundaries. Licensed under CC BY-NC-ND 3.0. Credit: "Azote for Stockholm Resilience Centre, based on analysis in Richardson et al 2023"





And what are we going to achieve?



The nomination community



A unique mechanism
Highlighting the best
mission-driven science
nominated by worldleading institutions







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TURKISH ACADEMY OF SCIENCES



frontiers research foundation









































Undisputed excellence

The Jury of 100 led by Chair: Prof Johan Rockstrom





Johan Rockström



Prof Katharine Abernethy



Prof Priyanga Amarasekare



Prof Angela Arthington



Prof Xuemei Bai



Prof Govindasamy Bala



Dr Elena Bennett







Prof Matthew Collins









Prof Wim de Vries



Prof Mercedes

Bustamante



Prof Daniel Esty



Prof James Evans

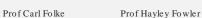


Dr Mariele Evers



Dr Richard Florizone







Prof Pierre Friedlingstein



Prof Andrew Haines



Dr Shakuntala Haraksingh Thilsted



Prof Bronwyn Hayward



Prof Terry Hughes



Prof Hans J. Schellnhuber



Prof Kevin Jones



Prof Sirkku Juhola



Prof Louis Kotzé



Prof Praveen Kumar



Ms Rachel Kyte



Prof Rattan Lal



Dr Miriam L Diamond



Prof Eric Lambin



Prof Tim Lenton



Our advisory board



Peter Gluckman





Sybil Seitzinger



Jakob Lundberg



Lise Korsten



Lee Howell



Ian Miller











The prize mechanics

Mechanics An 'Olympic' race for solutions

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Foundation

NNBs

National Nominating Body

NRBs National Representative Body Jury of 100

Award Ceremony

Invites NNBs and NRBs

Mechanics An 'Olympic' race for solutions

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Foundation

Invites NNBs and NRBs

NNBs National Nominating Body NRBs National Representative Body Jury of 100

Award Ceremony

- NNBs reach out to the lead scientist of the most promising research articles and receive their application
 - NNBs then shortlist applications to 3 nominations and share with NRB

Mechanics An 'Olympic' race for solutions

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NRBs National Representative Body

- The National Academies within each country collects the nominations made by the NNBs.
- The NRB in each country selects 3 of the nominees to submit to the Jury of 100.

Jury of 100

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Award Ceremony

- Jury of 100 evaluates the nominations.
- 1st round of voting: Decide on one National Champion for each participating country
- 2nd round of voting: Decide on the three International Champions

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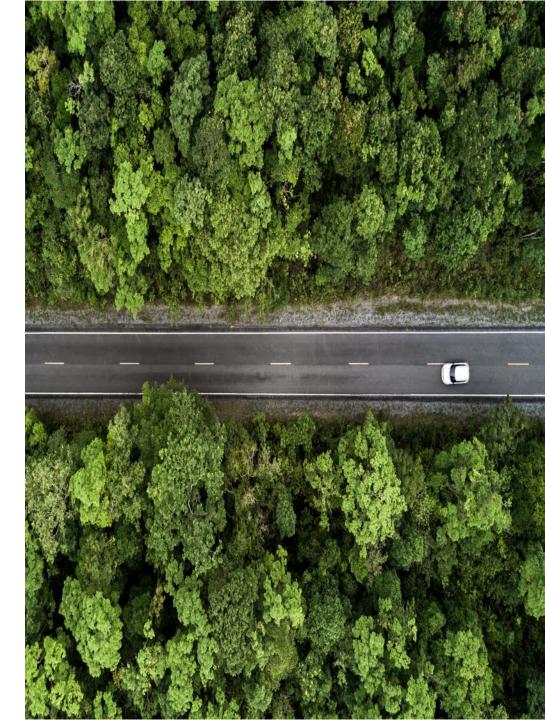
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Award Ceremony

 The 3 International Champions are awarded the Frontiers Planet Prize of US Dollars 1M each at the Awards Ceremony, taking place in June.

The criteria

- The Frontiers Planet Prize will be awarded to the best research published in established peer-reviewed scientific journals, with robust peer review and transparent publication procedures.
- Acceptance date of the article: 1st November 2023 to 31 October 2025 scientific excellence is the default principle to participate in the Frontiers Planet Prize
- 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.



The criteria

The Frontiers Planet Prize wants to honor:



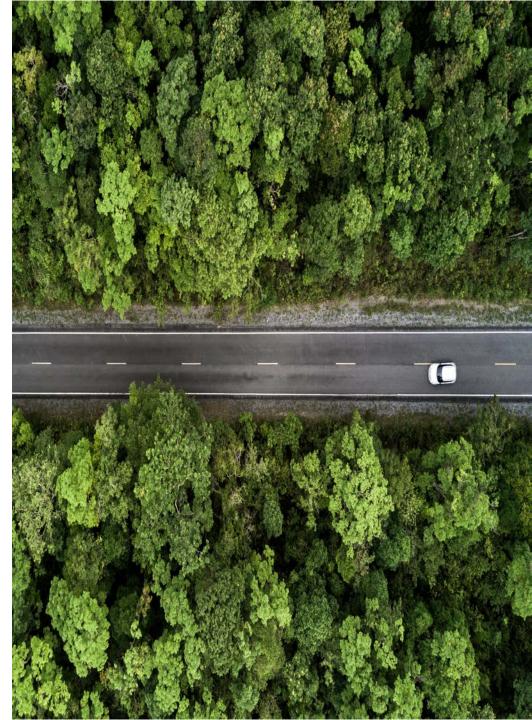
The research outlines actionable solutions or pathways that can be implemented in policies, adapted commercially, or otherwise contribute to keep global development within planetary boundaries.



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.







Transformational science: Breakthrough research from our National Champions



Turkey Mustafa Sahmaran

Developed a novel chemical process that enhances cement carbonation and offsets its production emissions



Japan Jian Feng Ma

Engineered rice capable of growing in polluted environments



USA Edward Kolodziej

Identified toxic compound in tyres that leaches in rivers and impacts aquatic ecosystems



South Africa Petra Holden

Determined which invasive species should be removed to reboot biodiversity and restore freshwater systems



ChinaBaojing Gu

Reduced ammonia emissions from fertilizer production, which reduces air pollution in cities





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DenmarkMinik Rosing

Revealed the potential of spreading powdered volcanic rock on agricultural lands to enrich soil nutrients



Netherlands Paul Behrens

Showed how adoption sustainable dietary practices such as reducing meat consumption, mitigates climate change



Argentina Pedro Jaureguiberry

Conducted an assessment thzat showed 60% of biodiversity loss is driven by land use change.

Outputs of the third edition



2025 National Champions





Dr Rafael Pedro Fernandez Instituto Interdisciplinario de Ciencias Básicas (ICB-CONICET)



Dr Arunima Malik The University of Sydney



Prof Dr Günter Blöschl Vienna University of Technology



Dr Suzanne Tank University of Alberta



Prof Xing Yuan Institute of Atmospheric Physics, Chinese **Academy of Sciences**



Prof Dr Robert Arlinghaus Leibniz Institute of Freshwater Ecology and Inland Fisheries



Dr Uria Alcolombri The Hebrew University of Jerusalem



Dr Giovanni Forzieri University of Florence



Dr Paola Laurino Okinawa Institute of Science and Technology



Dr Kok Sin Woon Xiamen University Malaysia



Dr Fabiola S. Sosa-Rodriguez Metropolitan **Autonomous University**



Prof Sjak Smulders Tilburg University



Dr Sebastian Steibl University of Auckland



Adam Mickiewicz University



Dr Nicoletta Makowska-Zawierucha Prof Carlos Manuel Duarte Quesada King Abdullah University of Science and Technology



Prof Zahra Kalantari KTH Royal Institute of Technology



Prof Shabbir Gheewala King Mongkut's University of Technology Thonburi



Dr Marina Romanello University College London



Dr Zia Mehrabi University of Colorado Boulder









10'000+







\$6.6 Million to support their research



620 Participating universities







100

recognized top scientists on Jury



560+

Media pickups covering the prize



countries with 50+ media pickup



Policy documents citing Champion work







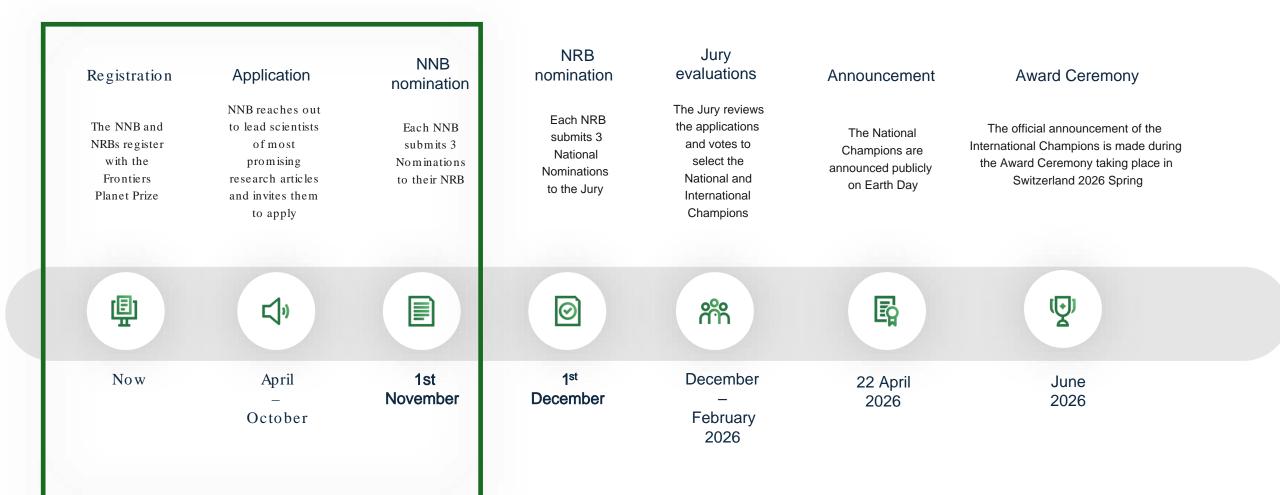






Timeline and Next Steps

Timeline



What are the next steps? If you represent an institution...

- Register on our platform to formalize your participation as a National Nominating Body.
- Nominate the **lead scientists** of the most promising research articles of your institution that have been accepted for publication between 1 st November 2023 and 31st October 2025

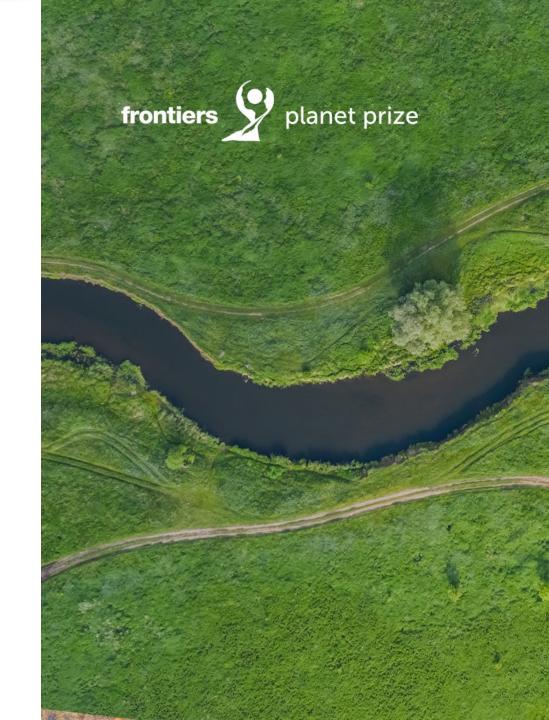
Who is the lead scientist?

The lead scientist best represents the research of the published article

In the event that the individual is awarded the International Champion, they will manage the prize money to drive the project forward.

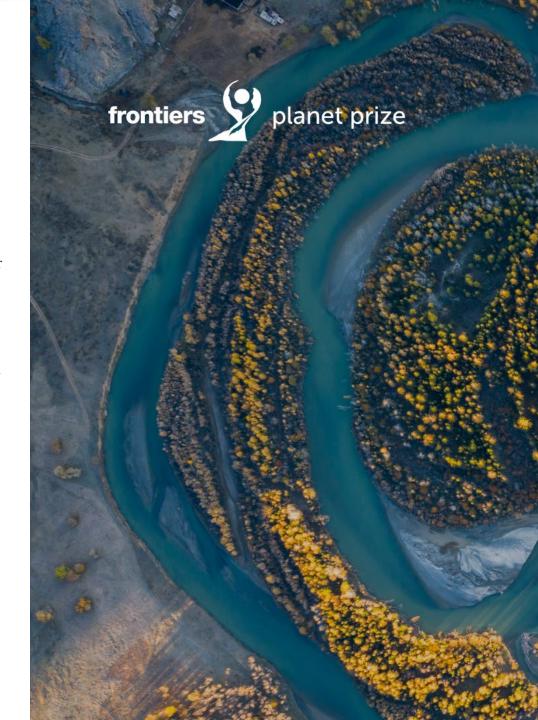
The lead scientist is selected directly by the NNB. Being a lead scientist is not based on the hierarchical position of the author

- Invite them to apply by filling out the application form attached in the resource hub, also attaching a PDF of the published article by a deadline set by you.
- Review the applications, select the top three and share with your NRB.



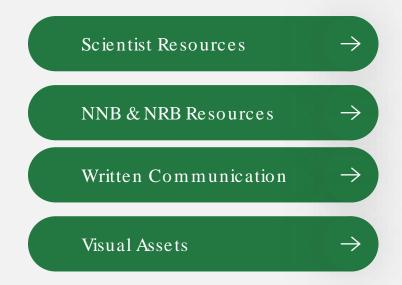
What are the next steps? If you are a scientist

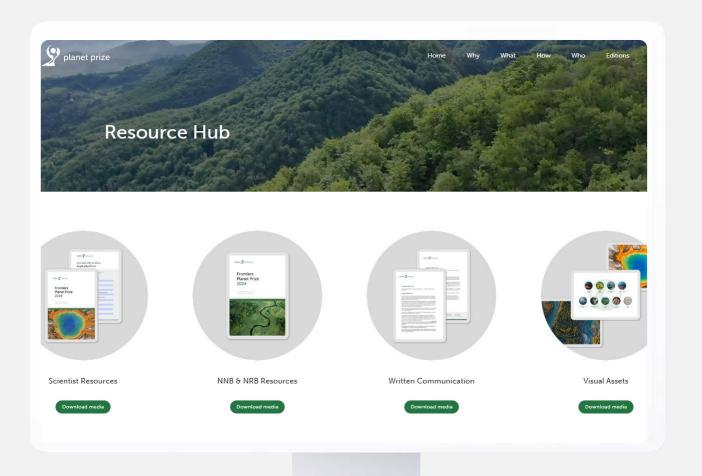
- Check if your institution is registered as a National Nominating Body by visiting the Frontiers Planet Prize website -> nomination partners
- Should your institution be registered, and you do not know the point of contact for managing awards and prizes, get in touch with <u>info@frontiersplanetprize.org</u> and we will direct to you the point of contact.
 - Should your institution not be registered, reach out to info@frontiersplanetprize.org and we will issue an invitation to have your institution to participate.
- Once registered, your institution will receive the application form, all information and process for them to be a national nominating body
- Follow their process to get your application submitted. Note that your institution will be responsible for nominating the top 3 applications they receive, to put forward to their National Representative Body.





The Resource Hub





Why your participation matters:

- The prize collapses the timeline to achieve scientific consensus, allowing the fast take up of transdisciplinary research
- The prize money is used specifically to scale up and amplify the impact of breakthrough research
- The prize is a movement: it mobilizes the academic community and gives science a voice to drive positive change.

The Green Renaissance will not happen without your participation.



The foundation facilitates the prize, the world of science owns it



Prof Dr Jean-Claude Burgelman Director <u>jean-claude.burgelman@frontiersplanetprize.org</u>



Dr Gilbert De Gregorio Associate Director gilbert.degregorio@frontiersplanetprize.org



linkedin.com/company/frontiers-planet-prize



Frontiersplanetprize.org