Press Release – 2026 National Champion "Country-Specific"

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Colombia's National Champion shortlisted for US$1 million Frontiers Planet Prize to tackle planetary crisis

- *The Frontiers Planet Prize names 25 National Champions in 2026 – scientists presenting scalable, evidence-based solutions to help humanity live within Earth's planetary boundaries.*
- *The National Champion's research also informs a new policy report developed with United Nations University Centre for Policy Research (UNU-CPR) and the Potsdam Institute for Climate Impact Research, identifying practical pathways to address the planetary polycrisis.*
- *Following an independent scientific assessment by 100 planetary health experts, chaired by Professor Johan Rockström, the developer of the Planetary Boundaries framework, the prize accelerates global scientific solutions urgently needed to safeguard planetary health.*

22 April 2026 – The Frontiers Planet Prize has today announced Dr Olga Mayorga, from Tibaitatá Research Center, Colombian Corporation of Agricultural Research (ARGOSAVIA), as Colombia's National Champion for 2026, one of 25 exceptional scientists whose research advances our understanding of our Earth system, while offering practical, scalable solutions to help keep humanity safely within the planetary boundaries.

As the world's largest global science competition dedicated to planetary health, the Prize awards three scientists $1 million each per year and fast-tracks transformative research with the power to shape real-world outcomes.

Building on the work of this year's National Champions, Frontiers Planet Prize has released the "From Science to Policy: Planetary Solutions in Action" report, developed with the Frontiers Policy Labs, United Nations University Centre for Policy Research (UNU-CPR), and the Potsdam Institute for Climate Impact Research, translating science into actionable policy pathways. Within the decarbonizing hard-to-abate sectors domain, research from Dr Mayorga and her team shows that integrating native shrubs into cattle systems can both increase productivity and reduce methane emissions, demonstrating how targeted agricultural changes can significantly lower emissions. The report outlines a pathway focused on scaling such nature-based solutions in livestock systems.

The research article that secured Dr Mayorga the National Champion award is The contribution of local shrubs to the carbon footprint reduction of traditional dairy systems in Cundinamarca, Colombia, published in *Agroforestry Systems*.

Reflecting on the award, Dr Mayorga said: *"My work focuses on rumen modulation – using functional feed additives and locally available forages – backed by Intergovernmental Panel on Climate Change (IPCC) Tier 2 and life-cycle assessment and carbon balance in farms to increase milk and meat output while lowering methane, nitrogen losses, and overall emissions. This matters because livestock can be*

part of climate solutions without compromising rural livelihoods or food security. What excites me most is translating science into practical rations that farmers can adopt quickly, delivering measurable, scalable reductions in footprints across Colombia."

The National Champions were selected by the Jury of 100, an independent group of leading sustainability and planetary health experts chaired by Professor Johan Rockström, architect of the planetary boundaries framework. The Champions now move forward to the final stage of the competition, where three of them will be selected as International Champions later this year and awarded 1 million USD each to scale up their research globally.

Led by Professor Johan Rockström, the planetary boundaries framework defines nine Earth system limits within which humanity can thrive. Crossing them increases the risk of abrupt or irreversible environmental change. As multiple boundaries are now under extreme pressure, accelerating science-based consensus and implementation is critical.

Professor Johan Rockström, said: "*The twenty-five national winners of the 2026 Frontiers Planet Prize exemplify the diversity of research that is so urgently needed. Spanning a range of topics, disciplines, and methodological approaches, they share a defining quality: excellence in advancing our understanding of the Earth system and unlocking new frontiers in the solution space.***"**

"From Science to Policy: Planetary Solutions in Action highlights the urgent need to translate scientific insight into actionable policy solutions at the scale today's challenges demand," **said Tshilidzi Marwala, Under-Secretary-General of the United Nations and Rector of United Nations University**. *"From pollution to climate change, pressures on people and planet are intensifying – requiring stronger links between science and decision-making. We are proud to partner with the Frontiers Policy Labs and the Potsdam Institute for Climate Impact Research to advance this effort."*

Professor Jean Claude Burgelman, Director of the Frontiers Planet Prize, said: *"We are no longer short of warnings, we are short of solutions and time. The science that exists to address the planetary crisis does not reach the right decisionmakers quickly and at scale. By identifying and supporting the most robust, relevant, and scalable research worldwide, the Frontiers Planet Prize helps turn truly transformative science into collective action for healthy lives on a healthy planet. In doing so, we hope to inspire the scientists around the world to step up the search for solutions. We really have no time to waste."*

As a National Champion, Dr Mayorga will have the opportunity to share her award-winning research through national and international conferences to facilitate the systemic change needed to safeguard our planet's health. This is made possible through the support of the Prize's strategic partners, including the Potsdam Institute of Climate Research Impact, the International Science Council, The African Academy of Sciences, and the Villars Institute.

The Frontiers Planet Prize Award Ceremony will take place on 18 January 2027, in Davos. Hosted by the Frontiers Science House, this landmark event will bring together thought leaders from policy, practice, and philanthropy. It will place transformative science at the center of the conversation,

spotlighting innovations and solutions in which advances in planetary boundary science help inform the decisions that define our future.

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Notes to editors

For more information and interview requests, please contact: FPP@forster.co.uk

Champions toolkit (under embargo until 22 April) for biographies, images and research summaries: https://frontiersplanetprize.org/national-champions-media-kit-2026 (Password: FPPNC2026)

From Science to Policy: Planetary Solutions in Action (under embargo until 22 April) embargoed reports are available on request. The online report will be available from 22 April at this link: https://policylabs.frontiersin.org/fpp-policy-brief-2026

The full list of the 2026 National Champions, categorized by their solutions, is as follows:

The future of water security

- **Belgium:** Professor Dr Ann van Griensven, Vrije Universiteit Brussel (VUB), Combined impacts of climate and land-use change on future water resources in Africa
- **China:** Hong Wang, Southern University of Science and Technology (SUSTech), Anthropogenic climate change has influenced global river flow seasonality
- **Peru:** Dr Joan Sanchez-Matos, Pontifical Catholic University of Peru (PUCP), AWARE characterization factors in Peru encompassing El Niño and climate change events: does increased water availability guarantee less water scarcity?
- **Switzerland:** Dr Liangzhi Chen, Swiss Federal Research Institute for Forest, Snow and Landscape Research WSL, Global increase in the occurrence and impact of multiyear droughts
- **United States:** Professor Amir AghaKouchak, University of California, Irvine; Global assessment and hotspots of lake drought

Emissions: Insights and solutions

- **Canada:** Professor Ahmed Abdulla, Carleton University, Integrating climate and physical constraints into assessments of net capture from direct air capture facilities
- **Hungary:** Dr Csaba Tölgyesi, University of Szeged, Limited carbon sequestration potential from global ecosystem restoration
- **Norway:** Dr Gunnar Myhre, CICERO Center for International Climate Research, Observed trend in Earth energy imbalance may provide a constraint for low climate sensitivity models
- **Singapore:** Dr Xunchang Fei, Nanyang Technological University (NTU), Methane emissions from landfills differentially underestimated worldwide
- **Spain:** Professor Manuel Soler Arnedo, Charles III University of Madrid (UC3M), Climate-optimized flight planning can effectively reduce the environmental footprint of aviation in Europe at low operational costs
- **United Arab Emirates:** Dr Steve Griffiths, American University of Sharjah (AUS), Chemistry advances driving industrial carbon capture technologies

Building resilient ecosystems

- **Australia:** Dr Ana Sequeira, The Australian National University (ANU), Global tracking of marine megafauna space use reveals how to achieve conservation targets
- **Brazil:** Dr Letícia Garcia, Federal University of Mato Grosso do Sul, Mapping Resilient Landscapes to Climate Change in a Megadiverse Country
- **Colombia:** Dr Olga Mayorga, Tibaitatá Research Center, Colombian Corporation of Agricultural Research (ARGOSAVIA), The contribution of local shrubs to the carbon footprint reduction of traditional dairy systems in Cundinamarca, Colombia
- **Germany:** Dr Gustavo Brant Paterno, University of Göttingen, Diverse and larger tree islands promote native tree diversity in oil palm landscapes
- **New Zealand:** Daniel Hernández-Carrasco, University of Canterbury, Ecological and evolutionary consequences of changing seasonality
- **Poland:** Professor Michał Bogdziewicz, Adam Mickiewicz University, Growth decline in European beech associated with temperature-driven increase in reproductive allocation
- **Senegal:** Dr Adama Lo, Ecological Monitoring Centre (CSE), Remote Sensing-Based Assessment of Dry-Season Forage Quality for Improved Rangeland Management in Sahelian Ecosystems
- **United Kingdom:** Professor Helen Findlay, Plymouth Marine Laboratory, Ocean Acidification: Another Planetary Boundary Crossed

Innovation and systemic change

- **Argentina:** Dr Andrea E. Izquierdo, Multidisciplinary Institute of Plant Biology (IMBIV), CONICET-National University of Córdoba, Integrating local and Indigenous knowledge with sustainable development goals in lithium mining impact assessment for a fair energy transition
- **Austria:** Dr Nicolas Roux, University of Natural Resources and Life Sciences, Vienna (BOKU), Integrating sufficiency in the trade and biodiversity agenda of the European Union,
- **Finland:** Dr Daniel Fernández Galeote, Tampere University, Play, games, and gamification to support sustainability transitions: a scoping review and research agenda
- **Israel:** Dr Alon Shepon, Tel Aviv University, The environmental and social opportunities of reducing sugar intake
- **Japan:** Professor Takuzo Aida, The University of Tokyo, Mechanically strong yet metabolizable supramolecular plastics by desalting upon phase separation
- **The Netherlands:** Dr Rutger Hoekstra, Leiden University, Beyond GDP: a review and conceptual framework for measuring sustainable and inclusive wellbeing

About the Frontiers Research Foundation

The Frontiers Research Foundation is a not-for-profit organization based in Switzerland, which was founded by Kamila and Henry Markram, neuroscientists from the Swiss Federal Institute for Technology (EPFL). It raises funds to support programs that accelerate scientific solutions for healthy lives on a healthy planet.

About the Frontiers Planet Prize

The Frontiers Planet Prize is a global competition for scientists and research institutions to propose solutions to help the planet remain within the safe operating space of any one or more of the nine planetary boundaries. It was created by the Frontiers Research Foundation on Earth Day 2022 to mobilize the global scientific community, make it complete at the highest level of excellence, and contribute to the acceleration of concrete solutions to the challenges defined by the planetary boundaries. To-date, it has drawn together hundreds of scientists, 24 national academies of science, over 730 leading universities and research institutions to compete for three prizes of 1M USD each as adjudicated by a Jury of 100 leading sustainability scientists.

About United Nations University Centre for Policy Research (UNU-CPR)

United Nations University Centre for Policy Research (UNU-CPR) is a think tank that carries out policy-focused research on issues of strategic interest and importance to the United Nations and its Member States. The Centre prioritizes urgent policy needs requiring innovative, practical solutions oriented toward immediate implementation.

UNU-CPR offers deep knowledge of the multilateral system and an extensive network of partners within and outside of the United Nations. The United Nations University Charter, formally adopted by the General Assembly in 1973, endows the Centre with academic independence, which ensures that its research is impartial and grounded in an objective assessment of policy and practice.