# FLIPPING THE SCIENCE MODEL:

A Roadmap to Science Missions for Sustainability





Foreword

FROM THE PRESIDENT OF THE UN GENERAL ASSEMBLY, AMBASSADOR CSABA KŐRÖSI

'Solutions through solidarity, sustainability and science' - this is our motto for the 77<sup>th</sup> United Nations General Assembly. Sustainability is no longer an aspiration; it has become an imperative. To seek integrated and sustainable solutions, policy and political decisions at the United Nations must be supported by science-based evidence.

The 2030 Agenda on Sustainable Development and its Sustainable Development Goals (SDGs) provide the enabling framework for relevant and timely scientific evidence to bear on the needs of policy-makers. We can clearly demonstrate in 2023 that multiple negotiations facilitated by the UN have benefited from the invaluable contribution of science, including the recent High Seas Treaty, the UN 2023 Water Conference, or the current discussions on the UN Treaty on Plastic Pollution. The High-Level Political Forum is itself underpinned by the Global Sustainable Development Report, developed by an independent group of scientists.

Science is not truth per se; science is a systematic approach to knowledge generation and continuous evaluation. Hence, science can also assist with the art of finding compromises that may be necessary for deliberations by Member States on issues of global concern. The International Science Council brings together the active scientific community, and I salute its efforts in mobilizing scientists to support sound decisions towards our common and shared sustainable future. I welcome the report of the Commission on Science Missions for Sustainability and look forward to seeing a number of such missions deliver sustainable solutions on the ground. Let us do this together, Member States, scientists, and community: let us together contribute actively to implementing sustainable solutions.



### **Preface**

FROM CO-CHAIRS, HELEN CLARK AND IRINA BOKOVA

Progress on the SDGs and the 2030 Agenda is unacceptably slow. There are many political, policy and framing reasons why this is the case, but it is also clear that science could play a much stronger role. The International Science Council (ISC) has previously explored why science was not making a greater and more effective contribution through a wide consultative process in its report <u>Unleashing</u> Science. The Council highlighted the need for new ways of doing science, making the knowledge actionable, less siloed and truly engaged with stakeholders. The subsequent recognition within the science community itself, regarding the need for structural changes to make science more actionable, prompted the ISC to establish the Commission - an effort we have been honoured to co-chair. The Commission has examined the proposal presented in Unleashing Science and concurs with the necessity and urgency to develop a new funding approach. This approach should encompass both transnational and national efforts to support actionable and engaged research that surpasses the limitations of the predominantly national-based funding models currently in place. Further, unless funders accept the need to

transform their funding instruments to promote transdisciplinary stakeholder-engaged research, science will continue to be under-exploited in addressing the challenges of the 2030 Agenda.

The Commission, supported by its Technical Advisory Group (TAG), has sought practical solutions to this issue. It identifies both a long-term need for a global transdisciplinary research process that properly brings communities, policy-makers and science together and across the global divides. But it also recognizes the need for immediate action by suggesting pilot activities to demonstrate to the policy community the value and needs for what might be seen as a 'big science approach' taken locally for effect. Just as the global community has used big science approaches to build infrastructure like CERN and the Square Kilometer Array, a similar mindset should be applied, particularly in the Global South, to address sustainable development challenges. This report suggests a roadmap to do so. There is an urgency to act. The ISC has committed its own resources to get to this stage. It now needs the global community to join with it so a science-based approach to the existential risks we all face can be systematically delivered.

### **Commissioners**



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The Commissioners would like to extend their appreciation to the Members of the Technical Advisory Group (TAG) for their invaluable contributions and dedication.

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- Pamela A. Matson Co-Director of the Stanford University Change Leadership for Sustainability Program (Co-Chair)
- Alan Bernstein President emeritus of the Canadian Institute for Advanced Research
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- William Clark Harvey Brooks Research Professor of International Science, Public Policy and Human Development at Harvard University
- Zakri Abdul Hamid Chair of Atri Advisory, Ambassador and Science Advisor, Campaign for Nature (CFN)

### Key Messages

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We need to fund and undertake science for the SDGs differently if we are to put humanity and the planet back on a path towards long-term global sustainability.

This requires an additional mechanism beyond the traditional science model, which is predominantly characterized by intense competition, an absence of trustful relationships with stakeholders, and siloed science funding. We propose a model that encourages science to cater directly to societal needs. This can be achieved by co-creating actionable knowledge and finding solutions tailored to the intricate sustainability issues identified by both local and global stakeholders. The Commission advocates for the co-design of research and action to be the standard practice in sustainability science. This approach requires an inclusive collaboration among a wide array of stakeholders, making it the new norm.

Mission-led science is that new mechanism. The Commission recognizes that while the new mechanism suggested is urgently needed, sustainability science must be strongly anchored in advancing novel theories, methods, and fundamental new concepts such as Earth justice, safe and just earth system boundaries and new legal frameworks and governance concepts like planetary stewardship. This will require continued investments in basic, social, and natural sciences, both as disciplinary and interdisciplinary approaches and with a focus on ensuring practical outcomes.

> The Commission calls for a new model for scaling up investment in science to strongly and sustainably support transdisciplinary and engaged mission science for sustainability, with the potential to drive inclusive, intergenerational wellbeing of both people and our planetary life support systems. In the past, the global community has supported big science approaches in basic science and infrastructure, such as CERN. Now it is the time to invest at scale in human infrastructure for sustainability science. A global collective investment of a billion dollars per annum, which is not even 1% of global annual R&D investment, would significantly accelerate the progress towards the implementation of the 2030 Agenda

The Commission calls upon international financial institutions and national and philanthropic science funders to redesign how they interact with the science sector, as well as civil society, to mobilize mission science around creative solutions for sustainability challenges of common and global concern.

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The Commission invites UN organizations, as well as national and philanthropic funders, to support and mainstream mission and transdisciplinary science as an ambitious but pragmatic framework for action to accelerate collective efforts in implementing the 2030 Agenda.

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The Commission calls for the development of processes within Member States and the multilateral system to accelerate the uptake of actionable knowledge to inform policy and its integration into decision-making, to advance progress on sustainability challenges.

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To support the required shift, the Commission recommends new forms of doing science to provide context-specific solutions to sustainability challenges, at the local and global scales. This could be achieved through a network of Regional Sustainability Hubs that will be able to identify and tackle these challenges with urgency and at scale. Individually and collectively, these Hubs would be designed to systematically approach mission science for sustainability, from problem definition to implementation. With enough funding and time to develop and test interventions wherever they are needed, the Regional Hubs would ensure that science is fit-for-purpose, inclusive and resultsdriven to address the complex real-world situations it seeks to transform.



The Commission recommends the urgent support of pilot projects to demonstrate the validity and effectiveness of this new paradigm for global science.



These recommendations should be seen as an evolution of basic and applied research using traditional modalities, responding to the critical need for a new, currently unrecognized and largely unfunded modality of producing actionable knowledge.

### **Introduction**

Both natural and social sciences have made significant contributions to our understanding of the challenges and issues affecting our societies and planet. Notwithstanding that, it is now clear that new approaches are urgently needed if science is to be effectively used to make rapid progress. Following the release of Unleashing Science, coordinated by the ISC, the Council established the Commission in 2021 to explore how these recommendations might be condensed to practice. Here, we summarize the conclusions reached after extensive consultation with experts, detailed in the accompanying TAG report "A model for implementing mission science for sustainability." As part of the proposed shift in how we tackle the 2030 Agenda and its SDGs with greater expediency, the ISC Global Commission on Science Missions for Sustainability is calling for science in support of progress towards the SDGs to be undertaken and supported differently. We firmly believe that by better integrating science with other perspectives, we can achieve what the 2030 Agenda set out to do: creating the conditions for

a fairer and more sustainable world, while living within planetary boundaries.

To do so, we must supplement and rebalance our current scientific model. This requires incentivizing collaboration and outcomes between scientists, and of scientists, with other stakeholders, especially civil society, on large-scale sustainability challenges. Furthermore, the current model should shift from intense competition and fragmented science, both in terms of disciplines and funding, to building collaborative science communities. This report describes and advocates for mission science for sustainability as an urgently needed new form of science for the SDGs. We outline how this shift can be implemented and funded building upon the work of the Technical Advisory Group of the Global Commission. It also serves as a call, inviting all stakeholders, both familiar and unconventional, to unite with the science community in this endeavour of collectively catalyzing science's power to drive transformative action towards a more sustainable world for all.

### The Need For An Additional Science Model: Doing Science Differently

### SCIENCE AND THE QUEST FOR SUSTAINABILITY

Science is striving to keep pace with the sustainability challenge, yet it has largely relied on a traditional model. As we have expressed, more must be done, and additional modalities are needed for science to lead effectively to action. Enormous potential lies at the interfaces between sectors and between science and its users.

For example, in the context of the climate emergency and the imperative energy transition: are science-informed solutions sufficiently practical and acceptable by governments and civil society? Addressing this kind of challenges requires the integration of social sciences alongside technical and climate sciences. However, a critical question arises: are policy-makers, civil society, and the private sector sufficiently engaged with the science system to identify the most urgent research questions in the beginning? Engaging end-users is essential to ensure the research is designed to generate actionable knowledge and develop a plan for its uptake. Are the current policy frameworks enabling science to provide the needed solutions?

The evidence suggests that the existing funding mechanisms, while essential for basic science and linear applications, often fail to understand and transform complex systems underlying sustainability challenges. This is mainly due to incentives within current funding systems. Consequently, significant gaps persist in understanding and resolving the intersection of complex sustainability issues in all regions.

Unfortunately, there are many illustrative examples of sustainability challenges at multiple scales from global to local in both the Global North and South. Some of these issues exhibit a 'nexus' nature, cutting across food, energy, and water, while others focus on specific thematic areas such as 'water' or 'cities.' Even seemingly straightforward sectoral challenges still cry to be looked at through an interdisciplinary and transdisciplinary lens, which the research community has woefully overlooked due, largely, to limitations imposed by funding mechanisms. As a result, these issues have been studied in silos.

It is crucial for stakeholders to come together and unite around these challenges. Science has a vital brokering role in co-creating solutions to the current sustainability problems. The question is how?

The Commission has concluded that new approaches to practicing science are needed. We call this approach **mission science for sustainability**. Solutions-focused, time-bound, substantial at scale, and ambitious in the intended impact, this approach emphasizes the need for science to directly engage with society, policymakers, civil society, funders, the private sector and other relevant stakeholders – with the aim to co-design and co-implement interventions leading to urgent action locally and globally. This is the premise to design science missions for sustainability.

#### FOCUS ON THE 'HOW' RATHER THAN THE 'WHAT'

In recent decades, science has assisted greatly in identifying some of the most pressing sustainability challenges of our century. *Future Earth* runs a process to identify the scientific challenges for the next decade via surveys to the science community. *The Sustainable Development Solutions Network* has identified the needed 'great transformations.' The *Earth4All* initiative has focused on identifying the needed economic transformations to achieve sustainability.

<u>Unleashing Science</u> both confirmed these analyses and identified the operational and systemic issues that inhibit progress. The focus of discourse must now shift from 'what' to 'how,' identifying the mechanisms needed to achieve

the desired outcomes. Yet the conversation has been strangely silent on this matter and, without change and evolution, achievement of the 2030 Agenda is unlikely. The kind of knowledge needed requires new ways of doing - ways that are currently not possible even at small scale because of the prevailing funding mechanisms that prioritize national narrowly-focused scientific efforts for national benefits over international collaboration, plus do not include funding for engagement. As it is currently organized, the international science system produces fragmented and compartmentalized knowledge that is often disconnected from society's most immediate needs. Sustainability must be articulated not by any specific sector or endeavour on its own, but by being mainstreamed and integrated in all aspects of the human enterprise. We propose that science missions would help to solve the current mismatch in aspirations, expectations and needs of multiple stakeholders and the foci of the science community, through the engagement of transdisciplinary scientific communities together with end-users and their own tacit and local knowledge (including indigenous), values and perspectives. Only then will the coproduced knowledge from science be properly and effectively incorporated into effective societal, business and policy choices.

Let us, for example, consider the challenge of shifting the global food system. The question of how to feed humanity on current croplands without increasing greenhouse gas emission or destroying biodiversity and nature has constituted the dominant model of partnerships between science and research funders thus far in the food sector. While the research to do so has either been technological and/or agriculturally focused, food systems operate at various scales from local to global and are largely influenced by factors such as business models, cultural factors, the political economy and geostrategic factors. Studying biotechnological solutions without consideration of these and other factors cannot succeed, yet funding mechanisms to undertake this research at any scale largely do not exist. As a result, the science community retreats to the types of siloed research that are currently incentivized.

It is also critical that we take a transnational approach to the way science is organized and practiced. Currently, sustainability research has a bias towards the Global North and reinforces disciplinary and community barriers. Beyond a changed mindset from national and philanthropic funders, a more collective approach is needed via, for example, the Global Research Council working with the International Science Council.

Such a refreshed approach should include new or expanded roles for the international financial institutions (IFIs), including the International Monetary Fund, the World Bank, and the multilateral development banks. If these IFIs could be redesigned to better interact with both the public and private sectors to support scienceinformed developments, they could mobilize mission science around creative solutions for infrastructural, economic, environmental, or social challenges of regional or global concern.

The proposed approach is an essential addition to the conventional paradigm to science. Such an approach provides a new way to co- design research questions, to co- produce actionable knowledge and to co-implement solutions. This additional, much needed approach could be delivered via a network of Regional Sustainability Hubs, outlined further below.

Because of the interconnected nature of sustainability challenges, a multistakeholder approach is needed to facilitate systematic change and streamline efforts towards sustainability. Transdisciplinary, mission focused science can and should play a central role in this.

### Towards a New Approach to Sustainability Research

The Technical Advisory Group (TAG) has suggested an understandably ambitious approach to advance the cause of mission science. Their keenness to break the mold is based on their experience with previous initiatives aimed at funding research on global sustainability.

The accompanying TAG report suggests that in its mature form the above-mentioned functions could be delivered effectively through the roll-out of a network of proposed Regional Sustainability Hubs (perhaps numbering around 20 in total). This would entail significant funding, of the order of one billion dollars per year, which is a small fraction of the global research budget (less than 0.0005 % of the 2018 global research budget). But before fullscale implementation can be considered, a proofof-concept pilot stage is needed and has been designed by the ISC.



The accompanying report "A Model for Implementing Mission Science for Sustainability" from the Technical Advisory Group, is available at: <u>https://council.science/ publications/a-model-for-implementingmission-science-for-sustainability</u>

### THE PILOT STAGE

As a proof of concept, a series of pilots is necessary to demonstrate the delivery of mission-led research through these Hubs and refine their approach further. These pilots would reflect the key characteristics of the Hubs model, namely the systematic engagement of decision-makers and stakeholders, the collaborative setting of the agenda, and the mobilization of appropriate and relevant scientific expertise along with non-science participants in transdisciplinary co-produced research and interventions.

The pilot call – to be launched in the next twelve months – will see bids for collaborative consortia of scientific experts, policy-makers, nongovernmental organizations, communities and businesses in identifying options and solutions at the local, sub-regional and regional levels.

The pilots would need to have the following characteristics:

- Systems focused
- Transdisciplinary
- Cross disciplinary and SDG boundaries
- Stakeholder engaged from outset
- Engaged natural social science
- Locally focused with the potential to provide regional and global lessons
- Led from the affected region
- A well-defined process of engagement

Up to five collaborative consortia will be selected and funded at the pilot stage, receiving between \$250,000 to \$500,000 each, to undertake a full co-design process with relevant stakeholders over an 18-month period. During this co-design period, discussions with funders will take place, at the regional and global levels, to explore the mobilization of the required funds for supporting mission implementation and impact evaluation including independent evaluation by an appointed team.

#### THE END GOAL

If the pilots are successful and the funding community understands the need and responds, then progress could be made towards a global network of Regional Sustainability Hubs over time. These would each focus on key sustainability challenges, co-defined by the relevant stakeholders. The Hubs would be independent entities supported by existing facilities, new structures, virtual architectures or hybrid combinations, primarily situated in the Global South and in regions where sustainability goals require the most effort.

These Hubs would exclusively address issues cutting across multiple SDGs and sectors, with the aim of tackling multiple interconnected and evolving challenges rather than narrow sectoral concerns. Their agenda would be demand-driven by regional stakeholders, and each Hub would serve as the long-term custodian of practical sustainability-related knowledge within its respective region.

Together, they would form a global learning community called the Global Knowledge Sharing Platform. This global platform would most importantly focus on developing and sharing experience, knowledge, expertise and results across the Hubs as well as coordinating work at the global level.

Bringing together the best of global science, these hubs would have dedicated full-time multidisciplinary Sustainability Solutions Teams, with adequate financial support and institutional shielding to deliver not just knowledge outcomes, but also action outcomes. Every four years, each Hub would undergo a review to determine if it should continue operating, be terminated or be replaced by a more suitable alternative. The Regional Sustainability Hubs would drive a truly global scientific effort, ensuring that the Global North and South are equally involved in responding to environmental and social issues of a global nature while remaining sensitive to regional and local contexts.

The scale and long-term nature of the missions would require pooling and matchmaking of financial support by different funders. This would best be achieved through a central fund created by all participating funders and partners, or alternatively regional funds, or dedicated hub funders. This means a fundamental shift in how science is funded – committing resources to the process of co-defining issues and coimplementing solutions by scientists, policymakers, funders and other relevant stakeholders rather than focusing on narrow, predefined or singular outputs and outcomes alone by scientists alone. Ultimately, their goal is to deliver the 'how' not the 'what' of science for sustainability, by promoting a viable model for global cooperation which addresses complex local and regional challenges in service of a more sustainable planet and a dignified future for humanity.

### **Real-Life Interventions**

To illustrate the potential sustainability challenges the Hubs could address, we have chosen three real-life examples of complex issues requiring long-term and large-scale interventions.

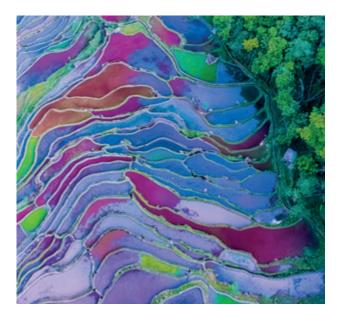
While they might not appear groundbreaking, what sets them apart as mission science activities is the need for the Hubs' systematic approach to engagement, from problem definition to implementation, and the need for enough funding and time to develop and test interventions wherever they are needed.



### TRADE-OFFS AND RISKS IN INFRASTRUCTURE DEVELOPMENT

Infrastructure development is accelerating in many parts of the world and is expected to change the face of land and water systems over the coming decades. Nations and regions are facing questions about trade-offs, unintended consequences and risks that may arise with such developments, with important implications for the short- and long-term wellbeing of economies, communities and ecosystems. While such developments carry opportunities to increase the wellbeing of billions, they also have the potential to generate unintended negative consequences for people and ecosystems over time and space.

In such instances, stakeholders must grasp the trade-offs between energy, water, food, biodiversity conservation and human health benefits in this complex system before investing. Interdisciplinary analyses can help examine feedback loops, tipping points, trade-offs, risks, governance issues and financial challenges associated with different development scenarios. This approach could identify potential cross-sectoral solutions that consider the need for long-term engagement, follow-up and course correction as impacts of decisions become apparent. In Nepal, for example, increased damming of rivers that drain from the Himalayas to India is intended to provide for the growing energy needs of multiple regions across national boundaries as well as a source of economic growth. Likewise, building of roads and railways to connect with China in the north and India in the south could provide not just economic benefits at national scales but also access to facilities for remote communities. A mission science-led approach could assist stakeholders in resolving the inherent dilemmas and offer lessons for many other comparable watersheds.



### INTERDEPENDENT NEEDS FOR FOOD, ENERGY AND WATER

The growing demand for these resources to satisfy human wellbeing needs will amplify existing global challenges, particularly in the Global South. Up to 70% more food production will be required globally by 2050. An urgent need exists for more integrated and inclusive development pathways that capture the synergies and trade-offs among food, energy, water and ecosystems and their consequences for the pursuit of lasting human wellbeing.

What is required is the creation of a comprehensive systems analysis framework applicable to different regions worldwide. This framework would facilitate the assessment of evidence-based policy and management options for the interconnected issues of water, energy and food across societies and generations. It would involve evaluating specific basins' developmental pathways and future scenarios, with solutions tailored to local and regional contexts. The Zambezi River basin is a good example as it presents a critical resource central to all these requirements in southern Africa. A mission-led approach would allow competing stakeholders to develop a coherent, evidence-based approach to sustainable food, energy and water and strengthen the role of science in partnership with other stakeholders in other complex nexus issues in the region.



### THE DUAL BURDEN OF MALNUTRITION

Many communities are facing the dual burden of malnutrition. As traditional sources of food are compromised and particularly as a rural–urban migration occurs, there is persistent evidence of both undernutrition (e.g. stunting, impaired brain function, infant co-morbidities) and malnutrition (e.g. obesity, diabetes, stroke, heart disease), fundamentally threatening long-term human wellbeing.

This problem is shared by both the Global North and South. The causes are complex and multiple, including pricing, food waste, poor use of production land and environmental degradation, resistance to technologies, inappropriate marketing, corruption, regulations and lack of nutritional understanding.

While in any one context the balance of factors will differ, understanding how to transition towards food and nutrition systems that eliminate malnutrition, while minimizing environmental impact is a pressing need. All stakeholders must work together to substantially change existing infrastructures, policies, regulations, norms and preferences. Here, the key is to understand how to mobilize communities, farmers/fishers/cultivators, small and big businesses and governments to stimulate changes within existing food and nutrition systems. Given the global nature of this challenge and its implications, initiatives need to span countries, regions and generational cohorts. A missionled approach in one affected region, for example Jamaica, would lead to generalizable lessons for many places in the Global South.

This report is a culmination of extensive collaborative efforts, building off the work of many including the Global Sustainable Development Report's (GSDR) prototype editions in 2014, 2015 and 2016; the first GSDR edition in 2019; and the UN's own analyses of progress (UN, 2020; 2023).

In response to the insufficient progress made on the SDGs in 2019, the ISC joined forces with several partners and formed a group to explore the science landscape related to the Goals. The findings and major conclusions of this exploration led to the ISC establishing in 2021 a Commission tasked with operationalizing the core conclusions. Supported by a Technical Advisory Group, the Commission reviewed and concurred with the recommendations put forth in the <u>Unleashing Science</u> report. It then focused on determining effective strategies for implementing these recommendations through pilot and definitive phases. As a result, the Commission has endorsed a number of recommendations, which are presented in this report.

#### A SHORT HISTORY OF HOW THIS REPORT CAME TO BE:

Recognizing the urgent need to harness the full potential of science for advancing sustainable development, the ISC launched the Global Forum of Funders (GFF) initiative – in collaboration with leading organizations, including the International Institute for Applied Systems Analysis (IIASA), the Swedish Development Cooperation Agency (Sida), the US National Science Foundation, the National Research Foundation of South Africa, the International Development Research Centre in Canada, the UK Research and Innovation, Future Earth, the Belmont Forum, and the Volkswagen Stiftung.

The GFF serves as an open platform that unites leaders representing national research funding agencies, international development aid agencies, private foundations, and scientific institutions. Together, they are committed to scaling up collective action within funding and science systems worldwide to maximize the impact of science on the implementation of the SDGs.

Within the framework of the GFF, science funders entrusted the ISC with shaping a priority action agenda for science that would support and enable societies to accelerate societal transformations towards sustainability. Through a global call and extensive literature review, the ISC developed the Unleashing Science: Delivering Missions for Sustainability report in 2021. The report called for a

concerted effort to produce actionable knowledge through a set of science missions for sustainability and associated support structures that harness the benefits of purpose-driven science, alongside the collaboration of policy-makers, civil society, and the private sector. Presented during the second session of the GFF in April 2021, the report garnered significant attention. Consequently, the ISC was assigned the task of initiating a consultative process to identify institutional arrangements and funding mechanisms for implementing mission science for sustainability. This led to the establishment of the Global Commission on Science Missions for Sustainability and the presentation of this report, which received invaluable support from the Technical Advisory Group (TAG).



### Concluding reflections

FROM THE PRESIDENT, PETER GLUCKMAN, AND THE CEO, SALVATORE ARICÒ

The International Science Council federates the community of scientific researchers and scientific organizations worldwide. Mobilizing the active scientific community around sustainability actions informed by science is a priority of the ISC.

We anticipate the call for a series of pilots to test and demonstrate the delivery of science missions for sustainability. This can only be done if science agrees to reach out to and engage with stakeholders other than scientists themselves. Actionable scientific knowledge can be generated only through frank dialogues between scientists and funders based on trust; the same applies to the interaction of scientists with policy-makers on the one hand and with local and indigenous communities on the other, as both sides are exposed to the need to find solutions to complex sustainability challenges at multiple scales.

We thank the Commission on Science Missions for Sustainability and its Technical Advisory Group for supporting this ambitious initiative. The challenge from now on is actions and 'walking the talk' on the notions of co-design, co-production and co-delivery.

The ISC will commit significant resources to issue bids for collaborative consortia of scientific experts, policy-makers, non-governmental organizations, communities and businesses working on the cutting edge in identifying options and solutions for complex sustainability challenges at the local, sub-regional and regional levels. The bids would demonstrate a commitment and plan to co-design research questions around specific challenges for sustainability aimed at generating actionable knowledge around which to build commitments for accelerating collective impact.

We are confident that this initiative will demonstrate the commitment of all partner organizations to the success of the endeavor: to deliver science to rescue the SDGs, to help us achieve them, and to support us all to thrive in balance between development and sustainability.

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**About:** The International Science Council (ISC) is a non-governmental organization working at the global level to catalyze and convene scientific expertise, advice and influence on issues of major concern to both science and society. The ISC has a growing global membership that brings together over 230 organizations, including international scientific unions and associations from natural and social sciences, and the humanities, and national and regional scientific organizations such as academies, research councils and young science organizations.

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