MULTI-ANNUAL
ACTION PLAN
2021-2026

SCIENCE
EUROPE
Shaping the future of research

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INTRO
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TION

This Multi-annual Action Plan proposes a series of framework actions (Section 3) to guide the implementation of the Science Europe Strategy Plan 2021–2026 in line with the stated capacity, vision, mission, and values. The Multi-annual Action Plan also describes mechanisms through which the objectives will be achieved and proposes the creation of several Working Groups to engage the membership (Section 2). The framework actions have been suggested between 2019 and 2020 by Member Organisations, the Governing Board, and the Science Europe Office.

Overall, Science Europe actions aim equally to promote:
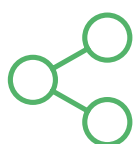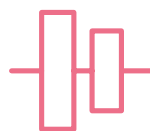
SHARING · ALIGNMENT · COLLABORATION

ADVOCACY · OUTREACH

The actions will be implemented through successive Annual Workplans, with the necessary flexibility to explore new avenues as opportunities arise. This is therefore conceived as a living document that can be adapted as often as necessary. The actions in each Annual Workplan will be prioritised by the Science Europe Office in consultation with the Working Groups and the Governing Board, and subsequently proposed to the General Assembly for approval.

MECHA NISMS & TOOLS

Mechanisms and Tools to Meet Strategic Priorities and Implement Actions

As indicated in the introduction, Science Europe actions aim to:

Share
best practices between Member Organisations;

Facilitate alignment
of policies between Member Organisations where relevant;

Promote collaboration
between Member Organisations;

Conduct advocacy
of common interests to EU institutions and relevant stakeholders;

Develop and support outreach
for Science Europe and Member Organisation activities and the promotion of science.

The Annual Workplans will define concrete actions that Science Europe will take within the three central priorities outlined in the Strategy Plan.

A variety of mechanisms and (e-)tools will facilitate Member Organisation participatory activities, encourage networking, promote mutual learning and generate common messages. All these will enhance the knowledge base and performance of the Science Europe community.

2.1.
Mechanisms

Several mechanisms are used by Science Europe to foster sharing, collaboration and alignment between Member Organisations.

These include:

- Governance
- Working Groups and Task Forces
- Partnerships
- Commissioned Expertise

The Science Europe Office will support and undertake many actions in collaboration with Science Europe Working Groups and Task Forces. Advocacy of R&I to EU institutions and other stakeholders will be performed by the Science Europe Office independently, but remains grounded in the interests of the Member Organisations and is overseen by the Governing Board. Other actions will be implemented via ad hoc mechanisms such as the High Level Workshops or other discussion fora, and by establishing strategic partnerships with key organisations.

In this way, Science Europe will have the means and organisation necessary to develop long-term actions, whilst remaining flexible to accommodate unforeseen or novel priorities that may arise.

Science Europe's mechanisms enable it to develop long-term actions, whilst remaining flexible to accommodate unforeseen or novel priorities that may arise.

Governance

- Governing Board and General Assembly.
- Discussion forum for Heads of Science Europe Member Organisations (General Assembly, High Level Workshop, possibly other mechanisms).

Working Groups and Task Forces

- Working Groups provide an advisory role to the Governing Board. The Governing Board determines, for instance, the groups' mission, composition, powers, and working methods (Art. 32 of the Articles of Association). Working Groups are composed of experts representing Science Europe Member Organisations. They develop and implement a multi-annual programme of strategic activities guided by specific milestones and deliverables. Working Groups should be in place for 2–3 years, with the possibility of renewal following a decision of the Governing Board. See section 2.3 for more information about Working Groups.
- Task Forces are also established by the Governing Board (Art. 33). They can be created:
  - By Working Groups, to conduct specific activities or projects (such as the Task Force on Research Assessment, 2018–2020).
  - To implement a specific action led by a sub-set of Science Europe Member Organisations facilitated by the Science Europe Office (such as the Multilateral Lead Agency activity/Weave).
  - To implement a specific action led by a single Member Organisation in collaboration with the Science Europe Office (such as NWO and Science Europe led development of Data Management Policies).

Partnerships

- Strategic partnerships are formed with selected external organisations from among the various relevant stakeholder groups (such as the Joint Science Europe–EUA statement on Research Assessment, and the joint OECD–Science Europe activity on Research Infrastructures).

Commissioned expertise

- Actions implemented using ad hoc external consultants and expertise when required.

2.2.
Tools to facilitate highly participatory activities

A collection of (e-)tools will be implemented to facilitate participatory activities, encouraging networking and promoting mutual learning:

- The deployment of 'e-Science Europe'. Online collaboration and networking tools to promote efficient and effective activities and exchanges (such as the development and deployment of the Delphi method of systematic surveying for relevant policy topic developments).
- A network to facilitate staff exchange and promote mutual learning between Science Europe Member Organisations.
- An IT platform for Science Europe Member Organisations to meet and discuss, exchange good practices, and co-ordinate co-operation with external partners and stakeholders (such as networking events with Chinese organisations).

2.3.
Science Europe Working Groups

Major Science Europe activities will be conducted through topic-specific Working Groups. These Working Groups will play an advisory role to the Governing Board and will act as discussion fora, coordinated and supported by the Science Europe Office. The broad functions of Working Groups will be:

- Sharing trends and good practices related to Working Group topics.
- Identifying priority areas for work and advocacy by Science Europe.
- Strategically analysing current trends of relevance to each group.
- Contributing to Science Europe policy positions considering Member Organisations characteristics and the European Research Area (ERA) framework.
- Developing collaborations amongst Member Organisations, in a flexible manner, on specific areas of interest.
- Expert members of each Working Group will be considered as the main contact points for each topic. A Working Group chair will be appointed to moderate meetings and actions. In addition, periodical meetings between chairs of Working Groups will be organised to discuss cross-cutting issues and possible synergies.

The Science Europe Office will support the activities of Working Groups and represent members and activities at the highest level, at EU institutions and other relevant organisations and venues. This will be done through:

- Identifying and analysing trends and priority areas for Science Europe work.
- Coordinating and supporting Member Organisation sharing of best practices; developing common messages.
- Acting as the spokesperson to EU Institutions (European Commission, European Parliament, European Council); planning advocacy strategies.
- Drafting reports and policy positions as needed, in consultation with other relevant Working Groups.
- Liaising with other relevant ERA and global stakeholder organisations, such as the Global Research Council.
- Drafting meeting agendas, background documents, and minutes of meetings.

Coordination is needed across all areas in Science Europe. The Science Europe Office will identify and encourage links between all Working Groups. It will facilitate the necessary communication and coordination between committees. Regular exchanges between Science Europe Working Groups and Task Forces will be scheduled where relevant. Working Groups are to be initially established for the first half of the duration of the Science Europe Strategy Plan (2021–2023), with a possibility of renewal. The following Working Groups are to be established alongside the initiation of the Science Europe Strategy Plan: Open Science; Research Culture; Horizon Europe; The Green and Digital Transition; The High Level Policy Network and; Communication.
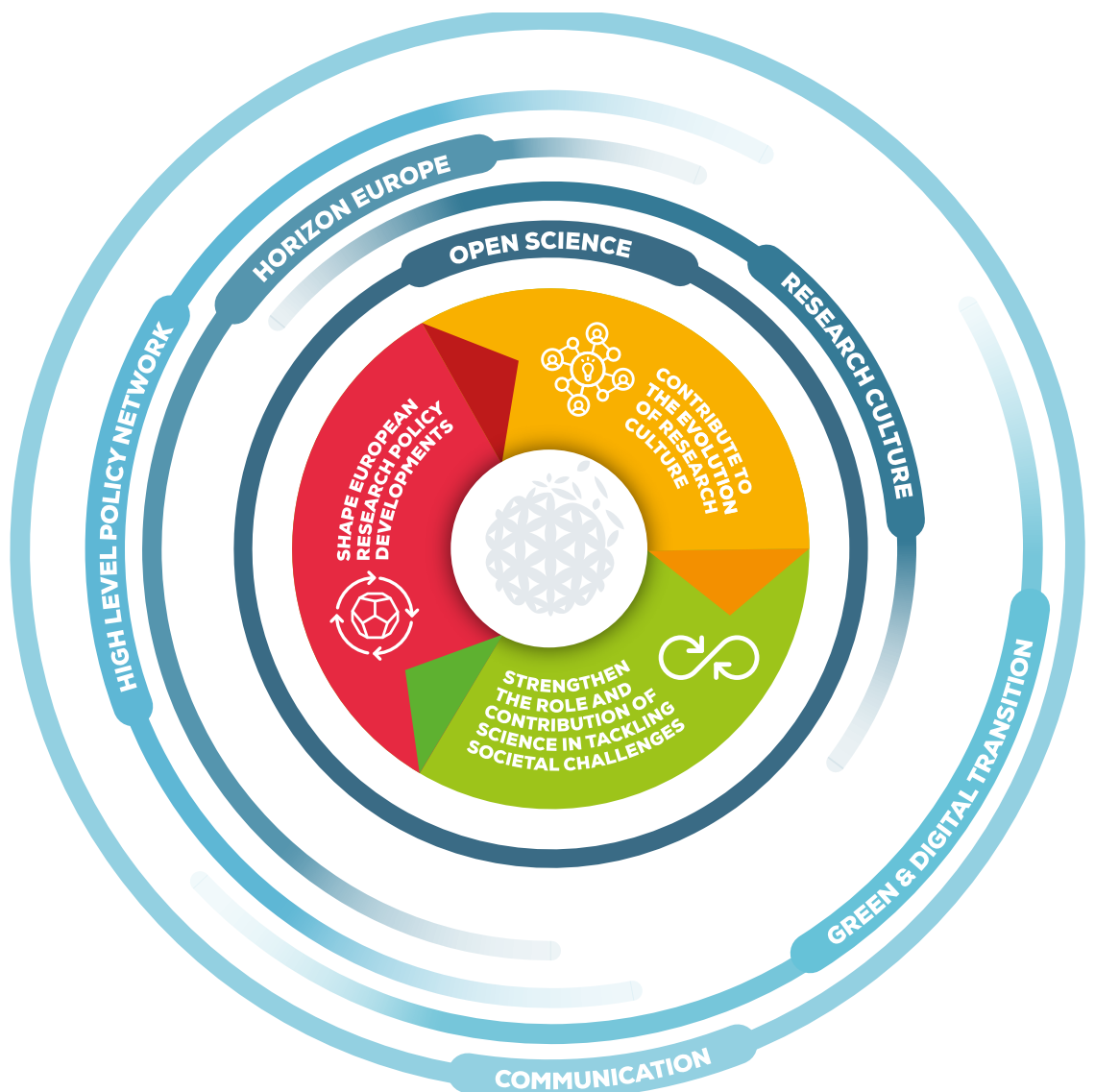
FRAME
WORK
ACTIONS

Framework Actions

The structure of the framework actions follows that of the three main priorities in the Science Europe Strategy. These are:

Shaping European Research Policy Developments

Contributing to the Evolution of Research Culture

Strengthening the Role and Contribution of Science in Tackling Societal Challenges

The introductory text in each sub-heading below elaborates on these priorities and contextualises their importance and relevance to Science Europe. Considering the holistic nature of Science Europe activities, items listed under one framework action will rarely address only one priority, but will cluster around different priorities, following the wider mission of Science Europe.

Science Europe will pursue (or reinforce, where possible) the following action lines, building on: i) the views, experience, and knowledge of its members: European national research performing organisations (RPOs) and research funding organisations (RFOs); ii) the expertise of the Science Europe Office; and iii) collaboration with key stakeholder organisations and dialogue with government entities.

3.1.
Priority Area 1:
Shape European Research Policy Developments

Promote investment in R&I at national and European levels and inform relevant EU legislative developments.

Why is this important?

For R&I systems to work effectively and efficiently in the European Research Area (ERA) they must be appropriately funded and supported to develop activity at both national and international levels. Funding is also key to ensuring the long-term sustainability of research systems and the cross-border collaborations that invigorate them. It is also important that policies and legislation under which research is conducted reinforce the capacity of research organisations to perform and fund high-quality R&I, and ultimately ensure the best possible conditions for researchers and research. In this context, the roles that Science Europe Member Organisations play in their national contexts are crucial to shaping the ERA.

Actions:

- Develop a Science Europe position on the ERA that builds upon members' policies and practices; promote collaborative activities that contribute to improving access to excellent R&I for researchers across Europe; and further facilitate the free circulation of knowledge, researchers, and technology (as referenced in the ERA strategic objectives and 14 ERA actions).
- Promote the need for fundamental research, both curiosity-driven and to underpin innovation.
- Develop policy briefs, collective positions, and campaigns that advocate and support sustainable R&I systems, encourage further investment in research across Europe, promote excellent research, and aim to increase European R&I performance.
- Guide and promote policy advances and advocate with the EU institutions to promote the best conditions for participation of Science Europe Member Organisations in the EU Framework Programmes. Give particular regard to European Partnerships, Missions, and Widening actions, by monitoring implementation of the first Horizon Europe Strategic Plan (2021–2024) and the execution of the Framework Programme as a whole.

- Develop foresight mechanisms in collaboration with Science Europe Member Organisations to enable the drafting of timely positions on topics that will influence R&I policy and legislation, according to the values of Science Europe, in particular protecting the freedom of scientific inquiry. Identify key issues for Science Europe Member Organisations with regard to R&I policy developments. Continually monitor Science Europe Member Organisations' activities and capabilities to provide added value where appropriate.

Advance research collaboration.

Why is this important?

Collaboration is key to the effective functioning of research systems, especially as the complexity and globalised nature of the research ecosystem increases. A scientific landscape without borders will improve the generation of new scientific knowledge. This will contribute to advancements in many other R&I priorities, such as Open Science, infrastructure provision, and access to research activities, tools, and outputs. Cross-border and cross-sector collaboration within and beyond Europe must be facilitated, promoted, and supported, where it can improve researchers' careers and the quality of science carried out.

Actions:

- Consolidate and foster the engagement of Science Europe Member Organisations in joint initiatives, such as Weave, to promote, organise, and co-ordinate cross-border collaboration. Continue the collection, sharing, and development of good practices in the implementation and co-ordination of cross-border collaboration in research, to further support, encourage, and guide such activities.
- Develop indicators for monitoring cross-border research collaboration activity (see also the following point).
- Elaborate common guidelines for long-term research quality assurance and impact assessment, building on the sharing of methods and data that Science Europe Member Organisations use to conduct the assessments of their research programmes and strategies, and facilitate comparative studies. This will enable the identification of further opportunities for collaboration.
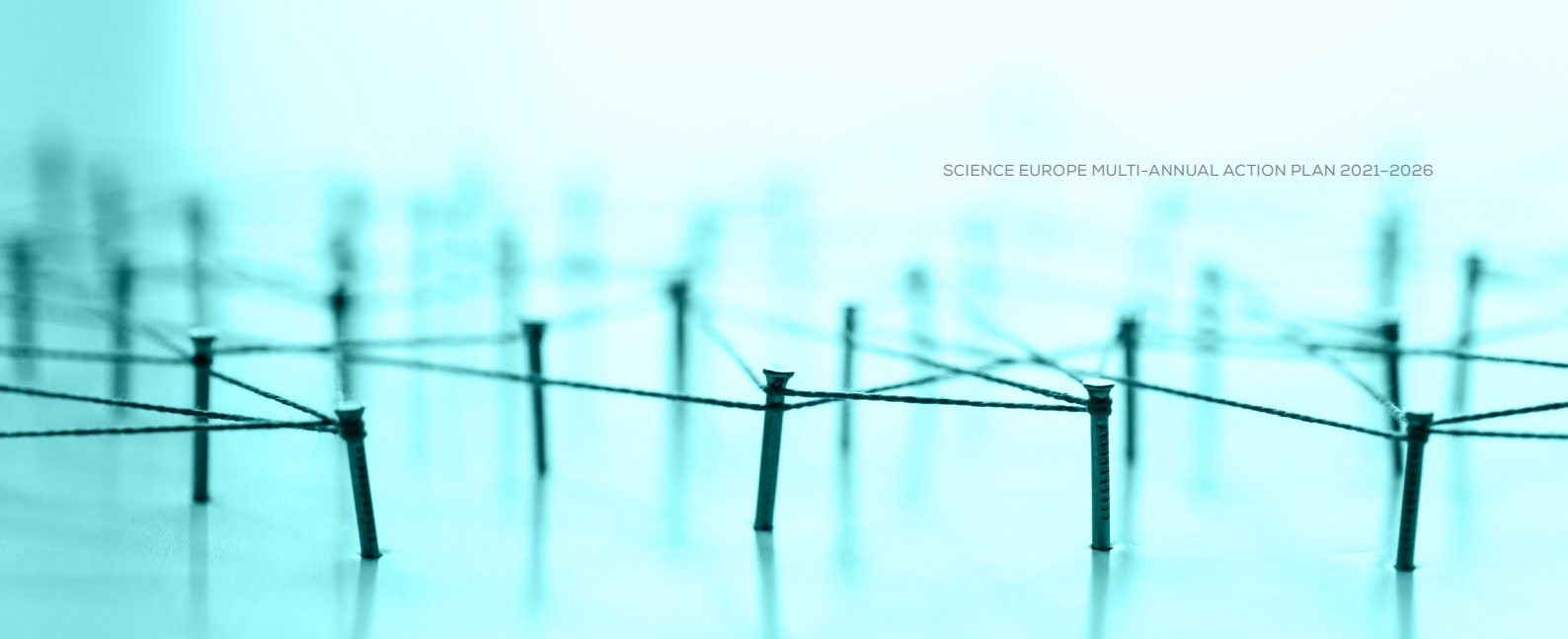
Strengthen the global dimension of research and research-based innovation.

Why is this important?

Research is increasingly global and the scientific process is a common global language. Research findings from one system may be instrumental in analyses that lead to discoveries in another. This also holds true for the infrastructures, tools, and methods that facilitate research. The transcendence of boundaries has long been central to science and must be supported. Therefore, it is vital that research be positioned in a global context to realise its potential for knowledge generation with all the educational, societal, and economic developments that may result. Science Europe represents the voices of national research organisations in Europe collectively, promoting and facilitating collaboration. It is important that the collaborative nature embedded into Science Europe's mission and vision extends globally, promoting and supporting scientific excellence wherever that originates.

Actions:

- Compare approaches and discuss the potential for co-ordination between Member Organisations regarding cooperation with non-European partners. Share good practices in this regard and develop common guidelines.
- Explore Science Europe Member Organisation strategies for the funding and use of national and international research infrastructures. Foster common guidelines for access to and use of global research infrastructure.
- Develop recommendations and promote good practices for research infrastructure and research-supporting infrastructure provisions, emphasising the links between national, EU, and international initiatives for large-scale projects.

3.2.
Priority Area 2:
Contribute to the Evolution of Research Culture

Inspire a re-appraisal of institutional approaches and values in research culture.

Why is this important?

Research culture encompasses the behaviour, values, expectations, attitudes and norms of our research communities. Research activity is underpinned by a set of presumed, often unwritten, values, which are an important component of research cultures in general. These values influence ethics and integrity when research is carried out. They shape the ways that research is conceived, conducted, and communicated, and determine the ways in which research activities, outputs, and outcomes are assessed. As science continues to become more collaborative and international, and the role of citizens in science increases, it is essential to align values between institutions and countries. As a precursor to such alignment, there needs to be a discussion and (re-)appraisal of the common values to be promoted in the ERA and globally.

Actions:

- Develop an understanding of the commonalities and differences in Science Europe Member Organisation perspectives regarding research culture and analyse the research values that underpin European R&I systems.
- Create a permanent forum for discussion between Science Europe Member Organisations to share practices and generate collaborative actions, further promoting agreed-upon values across the research ecosystem. Based on this, discuss and specify common components of key concepts in research, such as 'Excellence' and 'Quality'.
- Develop selected partnerships with other European and global R&I stakeholders to foster dialogue on research culture.

Develop recognition frameworks that support quality-driven and healthy research cultures.

Why is this important?

The recognition systems of research affect the way research is funded, performed, and disseminated. Many assessment systems still rely on output-based indicators, despite the well-known limitations of this approach. A focus on output can be to the detriment of the scientific process itself and affects the entire research ecosystem. It is important that recognition systems reflect core values that underpin all research activities, promoting activities, actions, and behaviours in line with these values. Value-centred recognition systems may more effectively contribute to ensuring the quality of science, whilst defining, establishing, and maintaining positive research cultures.

Actions:

- Collect and promote, both within Science Europe and globally, good practices from the R&I sector and beyond related to the recognition of research activities. Develop concrete guidelines for the evaluation of researchers, research projects, and research institutes based on the good practices identified.
- Promote supportive measures introduced by Science Europe Member Organisations for the career development of researchers and research-related staff and showcase existing good practices. Develop partnerships with organisations representing early-career researchers, to define novel career paths for scientists within and outside the research ecosystem.

Promote coherence between policy areas to improve the research ecosystem and conditions for researchers.

Why is this important?

Research culture influences and is influenced by many individual issues within the R&I sector. Many independent initiatives, including both top-down (such as Plan S) and community-driven (such as DORA) approaches drive the evolution of research cultures internationally. It is vital that all relevant topics are considered in actions aimed at promoting culture change at system and institutional levels, and that such actions are implemented with a coherent overarching perspective of the entire research ecosystem. Such an approach can ensure that actions taken in relation to one issue do not have unintended consequences for another priority area.

Actions:

- Collect and promote good practices associated with Equality, Diversity, and Inclusion (EDI) policies, particularly with regards to research assessment and peer review processes. Promote a continued integration of EDI into the design and content of scientific research, and into the development of funding programmes and national funding priorities.
- Promote developments and advances in the Open Science policies of Science Europe Member Organisations, in the context of research culture perspectives and mutual learning and collaboration, to make Open Science a reality.
- Develop guidance for the effective incorporation of Open Science, Team Science, and interdisciplinary/transdisciplinary perspectives as part of research assessment processes and criteria. Promote the adaptation of recognition mechanisms accordingly.

3.3.
Priority Area 3:
Strengthen the Role and Contribution of Science in Tackling Societal Challenges

Strengthen the voice of science in and for society.

Why is this important?

Science is an integral part of society. It contributes to the generation of knowledge, to enhancing education, to the development of technology, and to addressing societal challenges. It is important that the research process and its characteristics, possibilities, and limitations are effectively communicated. This means communication not only with the scientific community but also with relevant stakeholders, from governments to policy makers and from industry to the public. Public understanding of and trust in science and the scientific process supports a science-led and evidence-based response to societal challenges. Such trust requires a strong and united voice from science in all relevant debates.

Actions:

- Promote collaboration between communication departments in Science Europe Member Organisations to support public interest in research, research processes, and research methodologies.These will be vital with the ever more pressing need for public engagement in global challenges, such as the COVID-19 pandemic and climate change.
- Share and coordinate activities related to the role of scientific research in society by setting up a network of Science Europe Member Organisation communication experts. Develop a communication plan to support the work of Science Europe and its Member Organisations in strengthening the voice of science in policy-related and public discourse.
- Set up an observatory for Science Europe Member Organisations to collect and promote good practices in science communication, and to periodically assess public interest, trust, and expectations towards science, researchers, and research institutions.
- Promote the Citizen Science initiatives of Science Europe Member Organisations, providing a platform for collaboration and exchange of good practices. Link this to Science Europe's work on Open Science.
- Investigate where common interactions between research and policy occur. Identify major barriers that currently exist. Highlight good examples and best practices to promote mutual learning between Science Europe Member Organisations.

Support transdisciplinary research and Open Science as key enablers for sustainable development.

Why is this important?

The challenges faced by society are increasingly complex and interconnected. As our collective knowledge expands, scientific activities increase in both complexity and collaboration. Managing and facilitating transdisciplinary research and Open Science requires a rethinking of existing policies and practices related to the administration and management of research funding and performing. Supporting and promoting Open Science and transdisciplinary research will be key to the role that science plays towards sustainable development.

Actions:

- Develop good practices to evaluate and support the funding and performing of interdisciplinary and transdisciplinary research, including but not limited to programmes that aim to tackle societal challenges.
- Collect and promote case studies related to the development of Open Science policies and the implementation of Open Science practices by RFOs and RPOs and monitor their impact upon both fundamental and targeted research activities.

Promote the role of science in shaping input for sustainable development beyond 2030.

Why is this important?

RFOs and RPOs harbour significant expertise and experience related to the role of science, both curiosity-driven and targeted, in sustainable development. This collective knowledge can and should contribute to the definition of the role of science in sustainable development, and the dynamics and responsibilities that research organisations have for the definition of research targets.

Actions:

- Define a common understanding of the roles of Science Europe Member Organisations in addressing societal challenges, both from curiosity-driven and applied research perspectives. Foster dialogue between researchers, research organisations, and stakeholder groups to identify and promote a shared responsibility in balancing curiosity-driven and challenge-oriented approaches.
- Promote a reflection on the incentives for research and researchers to contribute to societal challenges, in collaboration with the activities on recognition systems of research.
- Investigate funding instruments and programmes used by Science Europe Member Organisations to promote research for societal challenges, and to share experiences related to the support of targeted research.
- Investigate and develop an understanding of the role of scientists and research organisations in the definition of missions and their integration with democratic processes.

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