

If we wish to achieve a sustainable future, research needs a strategic tool for the co-production of knowledge and action.



# SUSTAINABILITY-ORIENTED

## Research and The Need For Knowledge Co-Production

**S**cience is one of the four levers (alongside governance, economy and finance, and individual and collective action) identified by the UN's Sustainable Development Report that, together, could bring about achieving its Sustainable Development Goals (SDGs). Sustainability-oriented research networks aim to advance high-quality science relevant for understanding and sustaining the social and natural systems of Earth and

identifying solutions to sustainability challenges confronting society. Scientists are increasingly calling for a transformation of the science systems, with a move towards greater co-production (collaborative processes) of knowledge and action, in order to achieve a sustainable future. Also emphasised is the need for global research networks capable of providing better co-ordination, international and interdisciplinary collaboration, efficient use of resources and greater capacity to overcome

complex challenges.

A team of international researchers has developed a strategic tool, Network Compass, which aims to foster self-reflection and learning within and between networks. It identifies four interrelated fields of action through which research networks can strive to foster co-production. The [project](#) was partly funded by the National Research Foundation. The four fields of action are:

- **Connecting actors and scales to enable co-production** – This highlights the function

Network Compass identifies four interrelated fields of action through which research networks can strive to foster co-production.

of convening actors across disciplines, societal sectors, places and scales and the building of a community that engages in co-production and action. Networks differ in who should be involved in co-production with priorities such as co-production between disciplines, e.g., social and natural science; geographic regions, e.g., north and south; and societal actors, e.g. decision-makers and civil society, as well as connections between scales, e.g. global and regional agendas.

- **Supporting the network community in co-production** – This focuses on strengthening the agency of its members for co-production through support services such as encouraging the practice of co-production; sharing guidelines and best practices; and organising webinars, online courses, and workshops; funding for working groups and transdisciplinary research; and the creation of “home” or place of belonging for researchers.

- **Fostering co-production to leverage the network community's transformative power** – This relates to co-ordinating the efforts of network members and acting as a collective agent. As a combination of expertise and connections, networks are able to speak with one voice and exert more influence than an individual while as a collective agent they can co-ordinate co-production with additional societal actors.

- **Innovating the network to strengthen co-production** – This relates to the need to foster innovations within the network to build capacity for co-production.

Network Compass also facilitates the identification of activities within

the fields of action of research networks and the challenges they face. The Network Compass provides a critical starting point for building the processes necessary to reflect on how global research networks can contribute to co-production. 