

THE GROUP OF CHIEF SCIENTIFIC ADVISORS

The seven Advisors provide independent scientific advice directly to the Commission on topics of high political and strategic importance. They first met in January 2016.

The Advisors are:

- Chair: Rolf-Dieter Heuer, Former Director-General of the European Organization for Nuclear Research (CERN)
- Deputy Chair: Pearl Dykstra, Professor of Sociology, Erasmus University Rotterdam
- Janusz Bujnicki, Professor, Head of the Laboratory of Bioinformatics and Protein Engineering, International Institute of Molecular and Cell Biology, Warsaw
- Elvira Fortunato, Professor, Materials Science Department of the Faculty of Science and Technology, NOVA University, Lisbon
- Nicole Grobert, Professor of Nanomaterials at the Department of Materials at the University of Oxford
- Carina Keskitalo, Professor, Department of Geography and Economic History Umeå University
- Sir Paul Nurse, Director of the Francis Crick Institute, London. More effective national research systems

How do they work?

- The Advisors receive a request for scientific advice from the College of European Commissioners, or may also deliver advice to the College on issues the Advisors consider important.
- The Scientific Advice for Policy by European Academies (SAPEA) consortium informs the Advisors through evidence review reports. SAPEA is a Horizon 2020-funded project, representing over 100 academies, young academies and learned societies in 40 European countries. The Advisors may also consult other experts.
- A team in the Directorate-General for Research and Innovation (DG RTD), including staff seconded from the Joint Research Centre (JRC), supports the Advisors and manages the SAPEA contract. Together, the Advisors, SAPEA and the support team are known as the Scientific Advice Mechanism.
- The Advisors work with other science advice structures, within the European Commission and beyond, to share expertise and best practice, and avoid duplication.

What impact has the Advisors' work had?

September 2019 – Scientific Opinion 'Scientific Advice to European Policy in a Complex World' makes recommendations to ensure the quality and relevance of scientific advice to policy.

April 2019 – Scientific Opinion 'Environmental and health risks of microplastic pollution' will contribute to the achievement of President-elect von der Leyen's objective to "open a new front in our fight against plastic waste by tackling microplastics", and continues to be discussed in the context of G7 environment ministerial meetings.

Research and Innovation June 2018 – Scientific Opinion 'EU authorisation processes of Plant Protection Products' informs the ongoing review of the General Food Law and Plant Protection Products legislation and was presented to the European Parliament's special 'PEST' committee. It will inform President-elect von der Leyen's "...cross cutting strategy to protect citizens' health from {...} pesticides...".

May 2018 - Scientific Opinion 'Novel carbon capture and utilisation (CCU) technologies' underpins the Innovation Fund in supporting CCU projects for climate mitigation, and supports the objective that Europe becomes the world's first climate neutral continent.

November 2017 – Scientific Opinion 'Food from the oceans' has resulted in 'Food security' now being one of the main objectives of the European Commission's proposed post-2020 European Maritime and Fisheries Fund.

April 2017 - Explanatory Note 'New techniques in agricultural biotechnology' and November 2018's Statement "A scientific perspective on the regulatory status of products derived from gene editing and the implications for the GMO Directive" contribute to debate on the regulatory status of products derived from gene editing.

March 2017 - Scientific Opinion 'Cybersecurity in the European digital single market' informs September 2018's proposal for a Regulation establishing the European cybersecurity industrial technology and research competence centre and network of national coordination centres.

November 2016 - Scientific Opinion 'Closing the gap between light-duty vehicle real-world CO2 emissions and laboratory testing' informs the European Union's 2019 Regulation on emissions performance standards for cars and light commercial vehicles.

Other publications include an Explanatory note on 'Regulatory assessment of glyphosate used in plant protection products' (May 2016), linked to the June 2018 scientific opinion on plant protection products.

The Advisors work closely with other science advice structures in the Commission and beyond including:

- the European Science Advisors Forum (bringing together science advisors and science advisory structures from European Member States for the exchange of information and best practice).
- the EU Agencies Network on Scientific Advice (EU-ANSA). EU-ANSA is a network of EU technical and regulatory agencies providing scientific advice to EU policy makers.
- the International Network for Government Science Advice (INGSA). INGSA provides an international forum for stakeholders to share experience, build capacity, and develop the use of scientific evidence in informing policy at all levels of government.

Whats next?

In 2020 and later, scientific opinions:

• "Towards an EU sustainable food system". This opinion will contribute to the evidence base for the 'Farm to Fork' strategy on sustainable food and explicitly advise on how to achieve a just transition to such a system.

- "Adaptation to Climate Change Related Health Effects in Europe" This opinion will contribute to the EU
 adaptation strategy by providing evidence on what can make the health sector more resilient with respect to
 impacts from global warming.
- "Biodegradability of plastics in the open environment". This opinion will support the preparation of a framework (i.e. set of general rules for biodegradability of plastics) under the EU Plastics Strategy in a Circular Economy.