



EP Intergroup Climate Change,  
Biodiversity & Sustainable Development

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# Plastics pollution: Are biodegradable plastics a solution?

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SAPEA

Science Advice for Policy by European Academies

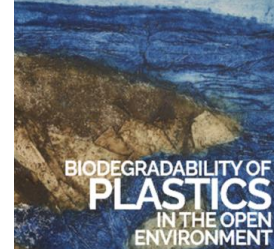
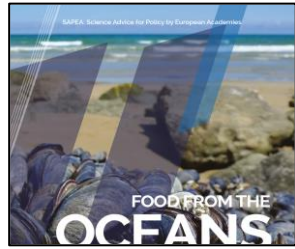


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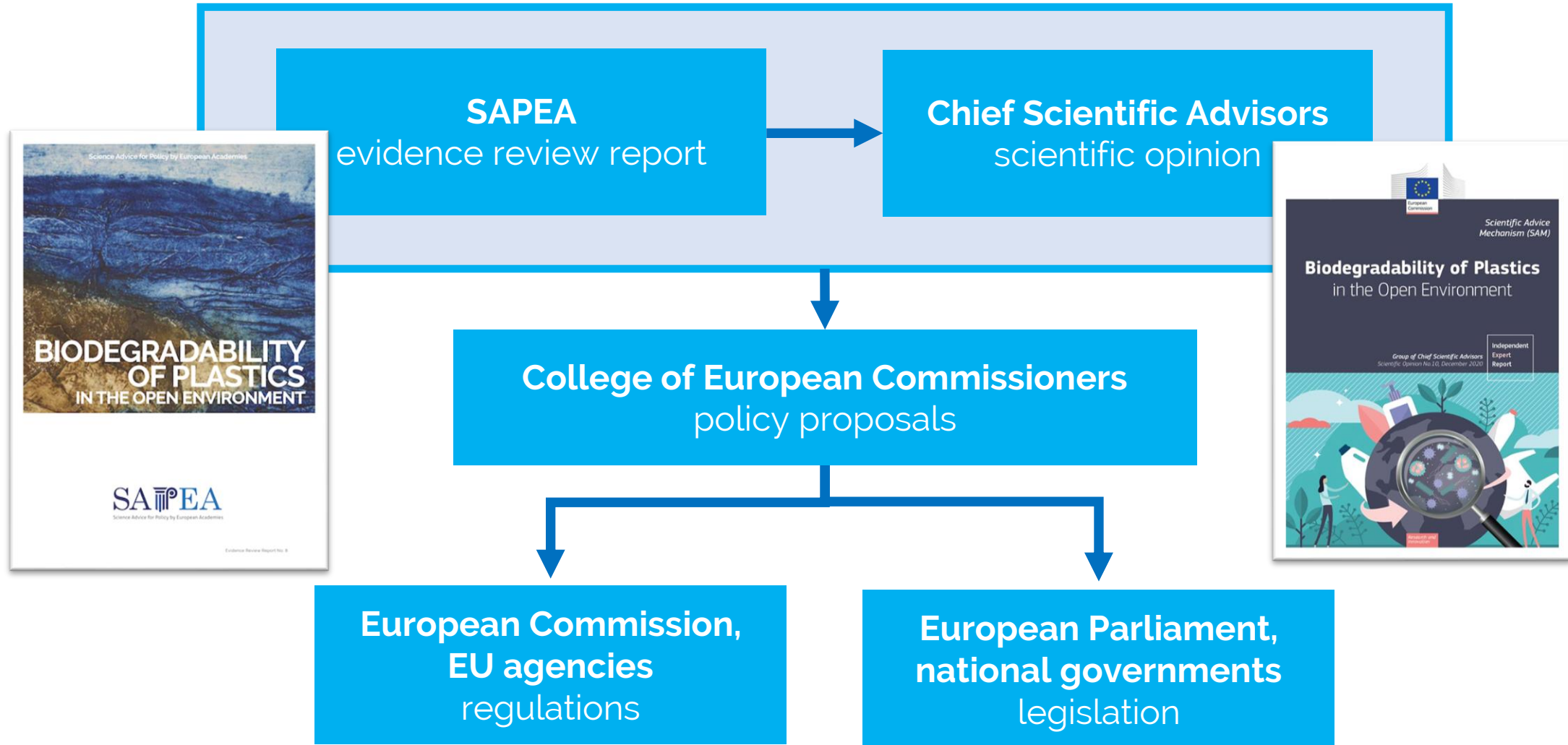




SAPEA produces Evidence Review Reports for the *European Commission's Scientific Advice Mechanism*



# Scientific Advice Mechanism



Production of plastics worldwide from 1950 to 2018 (in million metric tonnes)

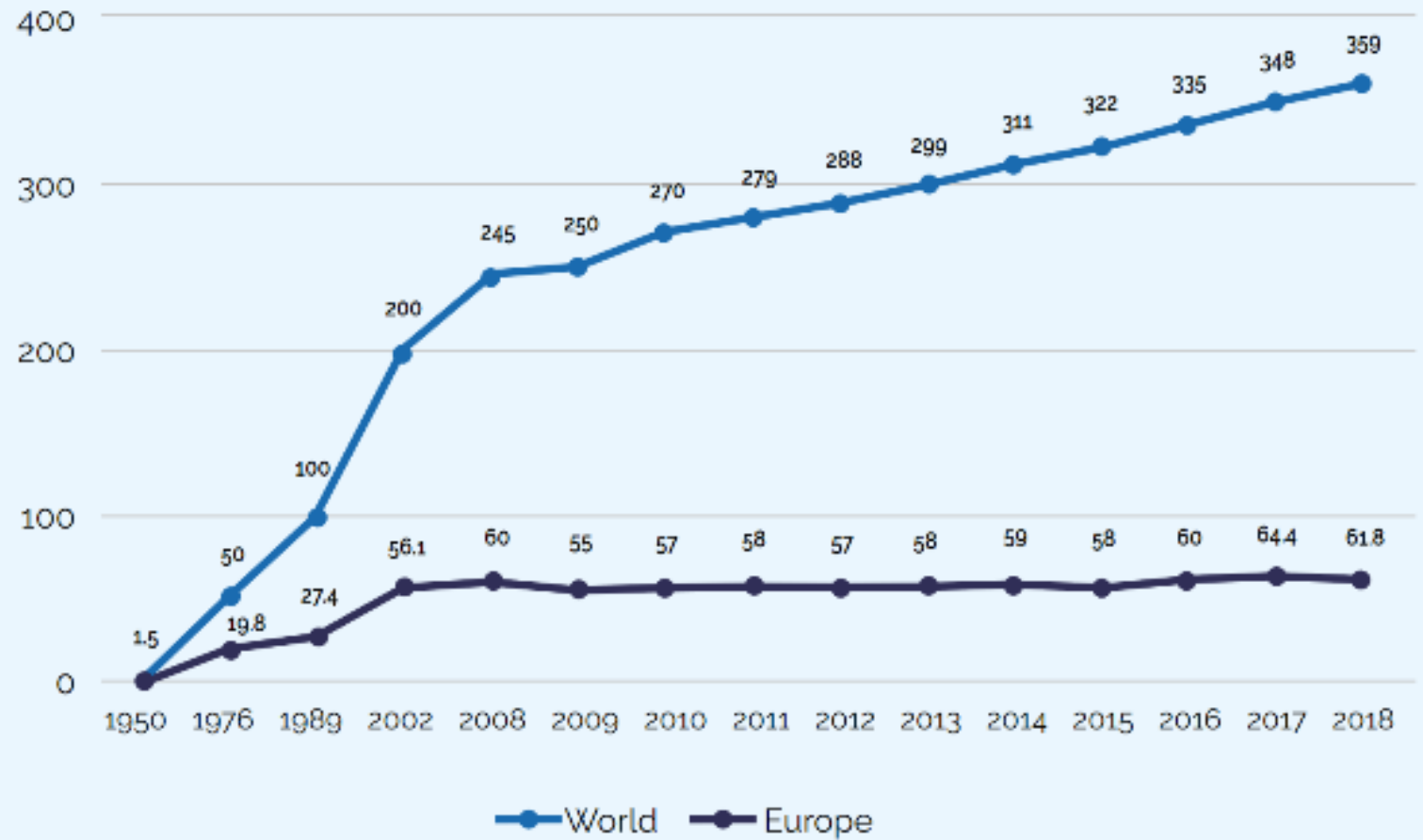


Figure 1.1: Annual production volumes of plastics worldwide 1950–2018 (statista, 2020a); original data source from PlasticsEurope (2019a)





### **Patrick Child**

Patrick Child is Deputy Director General of the Directorate-General Research and Innovation (DG RTD) at the European Commission. Mr. Child is responsible for the management and implementation of the EU's research and innovation programme Horizon 2020. In 2017-2018, he was the Commission representative and steering committee chair for Mission Innovation, an international coalition of countries committed to doubling public investment in clean energy research following the COP21 Paris conference on climate change.

### **Kestutis Sadauskas**

Kestutis Sadauskas is Director of Circular Economy & Green Growth of the Directorate-General Environment (DG ENV) at the European Commission since 2014. Prior to this, he worked for the Ministry of Foreign Affairs of the Republic of Lithuania and joined the European Commission as a member of the Cabinet of Commissioner Šemeta in 2010.

### **Professor Nicole Grobert**

Nicole Grobert is Chair of the Group of Chief Scientific Advisors to the European Commission. Moreover, she is Professor of Nanomaterials at the Department of Materials in the University of Oxford. Professor Grobert's research group focuses on the synthesis, processing, and characterisation of novel carbon, boron nitride and other non-carbon based nanomaterials.

### **Dr. Miriam Weber**

Miriam Weber is the Managing Director of HYDRA Marine Sciences and a Member of the SAPEA (Science Advice for Policy by European Academies) expert working group on the biodegradability of plastics in the open environment. As a microbiologist with a speciality in marine microbiology, her research focuses on biodegradation of plastic in the marine environment, effects of biogeochemical processes on their surrounding environment, and shallow water habitats and their microbial processes.

### **Dr. Michael Sander**

Dr. Michael Sander is a Research Group Leader, Senior Scientist and Lecturer in environmental chemistry at ETH Zurich. Dr. Sander is also a Member of the SAPEA expert working group on the biodegradability of plastics in the open environment and runs his own independent research subgroup, notably in the areas of environmental (bio)macromolecular chemistry and environmental chemistry of micropollutants.

### **Jean-Marc Nony**

Jean-Marc Nony is Director of Sustainable Development at SPHERE group. Prior to this, Mr. Nony was Director for International Business and Marketing Director within the same company. He holds a degree in Engineering from Ecole Polytechnique, France and a MBA from Harvard Business School.

### **Ioana Popescu**

Ioana Popescu is a Senior Programme Manager in the Circular Economy team at the European Environmental Citizens' Organisation for Standardisation (ECOS). Prior to this, Ms. Popescu worked as Policy Officer and Assistant Policy Officer within the same organisation, and used to work for EuropaBio as Industrial Biotechnology Officer.

### **MEP Delara Burkhardt**

MEP Delara Burkhardt is a Member of the Progressive Alliance of Socialists and Democrats in the European Parliament. As a member of the European Parliament's committee on the environment, she works mainly on climate and biodiversity protection and the circular economy. In particular, as rapporteur on this issue, she is currently working on introducing European rules for deforestation-free supply chains.

### **MEP Stéphane Bijoux**

MEP Stéphane Bijoux is a member of the Renew Europe Group in the European Parliament. MEP Bijoux is Chair of the Delegation to the Cariforum-EU Parliamentary Committee and he is the Co-Chair of the Islands & Overseas Entities Working Group of the European Parliament Intergroup on "Climate Change, Biodiversity and Sustainable Development".



- 13:20 – 13:40      Keynote intervention by European Commission:  
**Patrick Child**, Deputy Director General, DG RTD  
**Kestutis Sadauskas**, Director of Circular Economy & Green Growth, DG ENV
- 13:40 – 13:50      **Professor Nicole Grobert**, Chair of the Group of Chief Scientific Advisors to the European Commission
- 13:50 – 14:00      **Dr. Miriam Weber**, Managing Director of HYDRA Marine Sciences and Member of the SAPEA expert working group on the biodegradability of plastics in the open environment
- Dr. Michael Sander**, Senior Scientist, Research Group Leader and Lecturer in Environmental Chemistry at ETH Zurich & Member of the SAPEA expert working group on the biodegradability of plastics in the open environment
- 14:00 – 14:10      **Jean-Marc Nony**, Director of Sustainable Development, SPHERE group
- 14:10 – 14:20      **Ioana Popescu**, Senior Programme Manager, Environmental Coalition on Standards (ECOS)
- 14:20 – 14:35      Reactions from MEPs:  
**MEP Delara Burkhardt**  
**MEP Stéphane Bijoux**
- 14:35 - 14:55      Q&A
- 14:55 – 15:00      Closing remarks by **MEP Mohammed Chahim**