

SCIENCE-BASED POLICY ADVICE IN AGRICULTURE, FOOD, CLIMATE AND ENVIRONMENT

16-17 MARCH 2021

ORGANIZED BY AARHUS UNIVERSITY (DCA & DCE)
AND THE EUROPEAN SCIENCE ADVISORS FORUM (ESAF)

SESSION 4: PURPOSE AND POTENTIALS FOR FUTURE COLLABORATION

10:45 Creating overview of institutions, types, processes and quality assurance schemes in European science policy advice.

Prof. David Budtz Pedersen, Aalborg University, Denmark

11:00 Ideas for continued trans-European collaboration in science policy advice, beyond the classical scientific collaboration.

Director Niels Halberg, Danish Centre for Food and Agriculture, Aarhus University

11:15 Group discussion on the potentials for increased collaboration

Scientific Opinion on
Scientific Advice
for Policy Making

Most **critical problems** in the world
are highly **complex**



climate change



biodiversity loss



artificial intelligence



sustainable food

Science **advice** informs
policy on these challenges

but **science** is sometimes
complex and **uncertain**

Making **best use of evidence** for
advice is important for **good policy**

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How to provide high quality science advice for European policy?

Recommendations

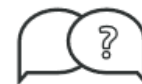


Separate scientific advice from interests, beliefs
or opinions through dialogue and agreements
Scientists and policy makers should engage
early and regularly



Consider all good science, disciplines and
multidisciplinary expertise
Ensure **rigorous** expert consultation and
evidence synthesis

be comprehensive, transparent, iterative



Refine the approach to conflicts of interests
Develop a **single code of good practice**
advising the Commission

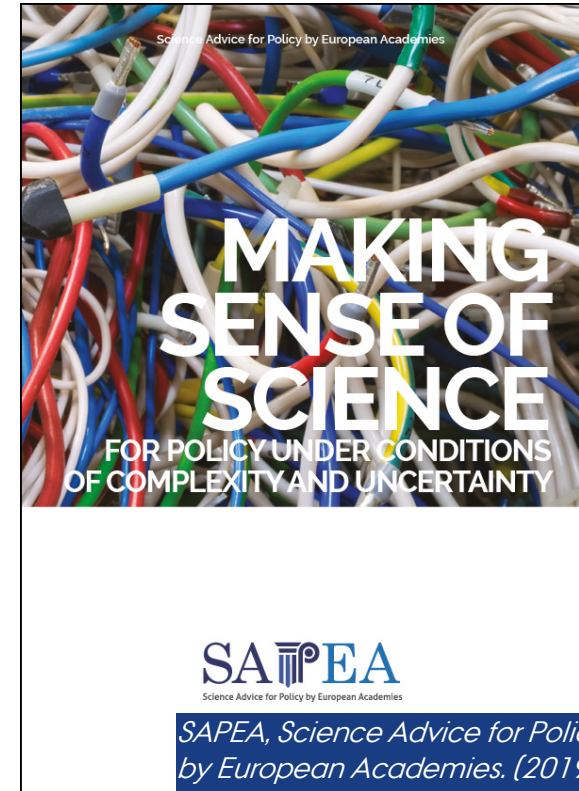
Analyse, assess and communicate **uncertainties** more
effectively

The opinion was published in September 2019. Its
recommendations are available to the new Commission.

MAKING SENSE OF SCIENCE FOR POLICY UNDER CONDITIONS OF COMPLEXITY AND UNCERTAINTY

Conclusions of the report (my selection):

- ❖ The purpose and significance of scientific advice depend on the issue and the context.
- ❖ Scientists, as well as policymakers, should be sensitive to various biases and interests
- ❖ Science advice is always affected by values, conventions and preferences.
- ❖ The effectiveness of scientific advice depends on the right composition of advisers and the quality of the dialogue between advisers and policymakers.
- ❖ The relationship between science advisers and policymakers relies on mutual trust.
- ❖ Stakeholders and citizens should be integrated into the process.



SAPEA, Science Advice for Policy by European Academies. (2019). Making sense of science for policy under conditions of complexity and uncertainty. Berlin: SAPEA. <https://doi.org/10.26356/MASOS>

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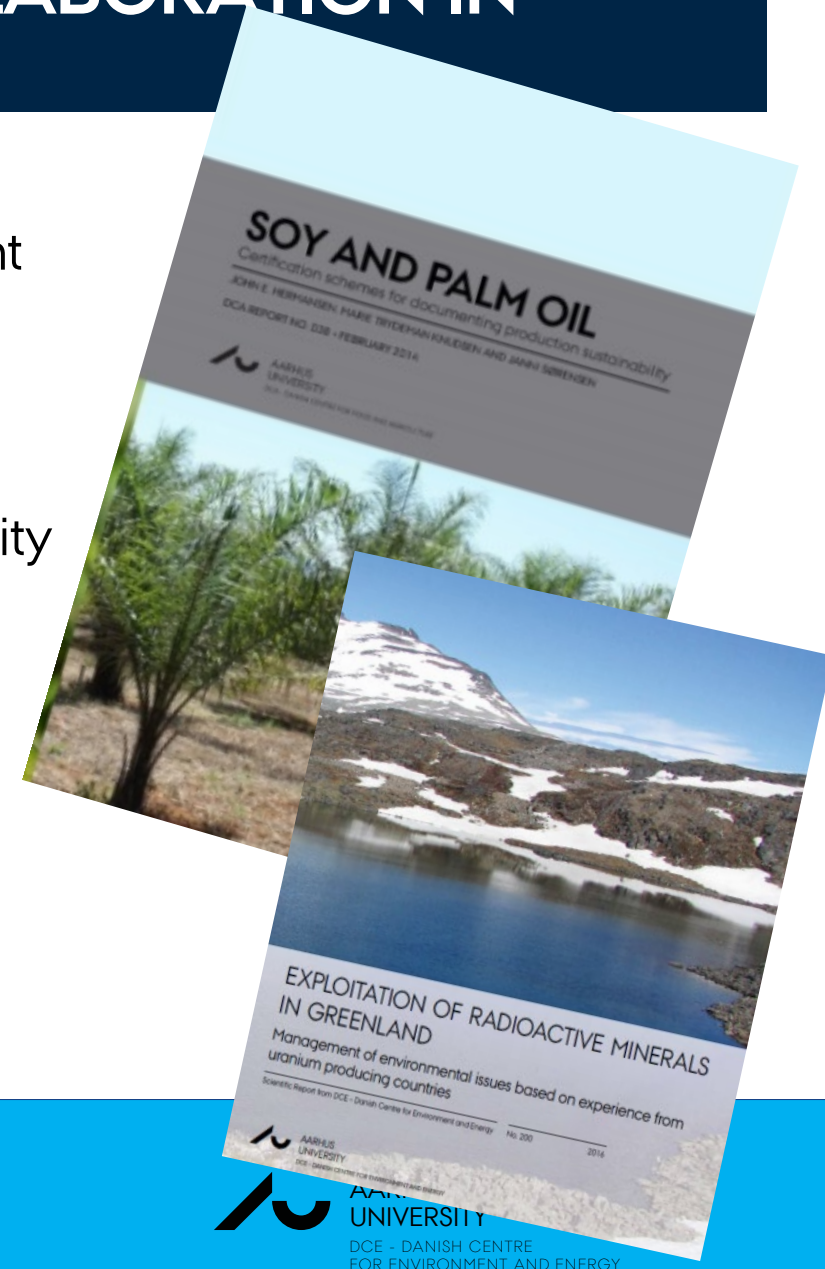
? ! Challenges

- ❖ Integrity
- ❖ Independance, arms-length,
- ❖ Disagreement between scientists (ambiguity),
- ❖ Uncertainties
- ❖ Transparency
- ❖ ...

=> *need for exchange of best practices*

IDEAS FOR CONTINUED TRANS-EUROPEAN COLLABORATION IN SCIENCE POLICY ADVICE (*META-LEVEL*)

- ❖ Best practices, shared principles vis-a-vis identification of important challenges
 - ❖ procedures and quality assurance schemes applied under different governance structures and types of science advice
 - ❖ Stakeholder engagement, uncertainties, complexities, ambiguity
 - ❖ consistency over time vs improved knowledge, recruitment,
- ❖ Developing training courses
- ❖ Peer review of "science advice processes" and quality assurance schemes
- ❖ Continue building overview of peer institutions involved in science advice and practices for dealing w challenges



- ❖ The European Science Advisors Forum (ESAF) is an independent platform of European science-based strategic advisors that promotes and facilitates the use of evidence-based science.
- ❖ ESAF is committed to sharing relevant information, enhancing the exchange of best practices and building sustainable capacity and capability across a range of different national science advisory organisations and systems in Europe.

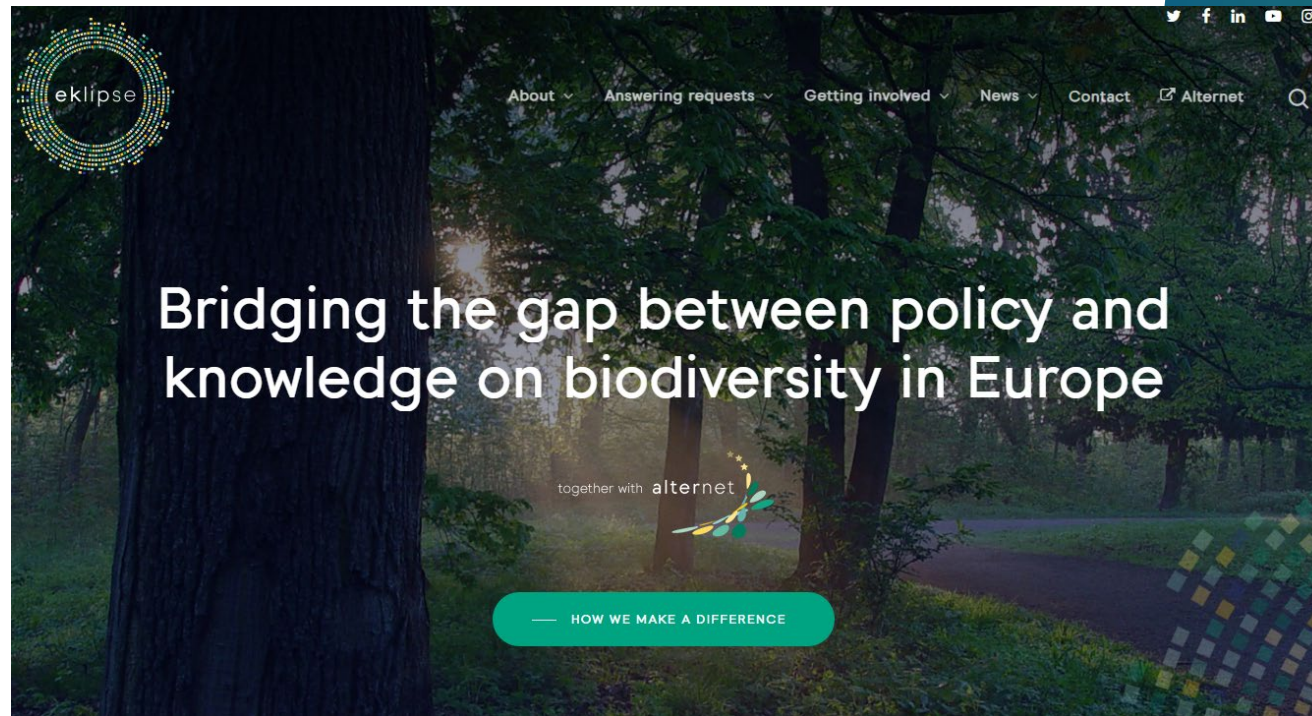
EASAC's working structure centres around enabling contributions from Europe's top scientists to important questions of EU policy-making

- ❖ INGSA is a collaborative platform for policy exchange, capacity building and research across diverse science advisory organisations and national systems.
- ❖ The network aims to enhance the global science-policy interface and improve the use of evidence based policy formation at both national and transnational levels through workshops and fora.

SAPEA

SAPEA is part of the European Commission's Scientific Advice Mechanism. Together with the Group of Chief Scientific Advisors, we provide independent scientific advice to European Commissioners to support their decision-making.

INSTITUTIONAL COLLABORATION IN ENVIRONMENTAL SCIENCE



IDEAS FOR CONTINUED TRANS-EUROPEAN COLLABORATION IN SCIENCE TO POLICY ADVICE

(TOPIC SPECIFIC ISSUES WITHIN AGRICULTURE, FOOD, CLIMATE AND ENVIRONMENT)

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- ❖ Topic specific working groups and collaboration on science advice
 - ❖ Ad hoc exchange of methods and collaboration within specific parallel science-advice processes (examples do exist already)
 - ❖ Second opinion and peer review of specific science advice tasks
 - ❖ Reference point for scientific projects and partnerships with ambitions for providing science advice *(EJP Soil, Horizon Europe partnerships, ..)*

TRANS-EUROPEAN LONG-TERM COLLABORATION ON SCIENCE ADVICE: EURCAW - AN EXAMPLE...

- ❖ Supporting the enforcement of pig welfare legislation is one of the Commission's priorities.
- ❖ Designated and with clear mandate
- ❖ EURCAW-Pigs provides scientific and technical knowledge to Competent Authorities of EU member states, to animal welfare policy workers and to their support bodies
- ❖ science, training and communication.
- ❖ *For verification of compliance with the European pig welfare legislation*



EU Reference Centre
for Animal Welfare Pigs

“For technical and scientific advice on pig welfare, please send us an email with your question. This Q2E service is open to Competent Authorities and government policy workers of EU Member States.”

AD-HOC EXCHANGE IN POLICY ADVICE RELATED TO NATIONAL IMPLEMENTATION OF EC DIRECTIVES ; - EXAMPLES OF PEER REVIEW AND SECOND OPINIONS

November 2016. International workshop on:
Estimation of nitrogen loads to the marine environment around the time of the year 1900

April 2017. International workshop/expert meeting on:
Constructed filters in the landscape for reducing nitrogen and phosphorus losses to the aquatic environment

COLLABORATION IS HIGHLY NEEDED!



Food system conceptual model

