

HOW TO BECOME AN EFFECTIVE SCIENCE-POLICY ADVISOR?

16 LESSONS LEARNED



FORMAS 



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Colophon

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How to Become an Effective Science—Policy Advisor?
16 Lessons Learned

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Introduction

How to become an effective science—policy advisor? This question has emerged following the COVID pandemic crisis, where science-informed policy advice played a crucial role. After a period of distrust due to the diffusion of fake news and post-truth politics, the COVID pandemic brought science back at the centre of the political debate. Since the beginning of this crisis in 2019, politicians and policy makers were under high pressure to face the pandemic, and turned to scientific experts to better understand the challenge and make quick decisions in complex situations. While every country established different types of science-policy interfaces, decision makers and citizens had very clear the importance of science at all levels (national, regional and local governments as well as European and international ones).

The science-policy interactions have a longstanding relationship with complex dynamics. The COVID pandemic was only one of the 'wicked problem', where decision makers called for science-informed advice. Societal challenges such as the United Nations' Sustainable Development Goals are examples of wicked problems with interconnected challenges and undefined solutions. For instance, the International Panel for Climate Change (IPCC) is probably the most relevant example of science at the service of society: for decades they have been able to investigate and understand the causes of climate change, raising awareness and mobilising decision makers in what is today acknowledged to be the most important societal challenge of our time.

In this context, [Formas](#), Marie Curie Alumni Association ([MCAA](#)) and [Science Europe](#) jointly organised a side event at the SAPEA's conference on "[Science Advice Under Pressure](#)" entitled "[Good Advice for \(Young\) Science—Policy Advisors](#)". This event, organised on 29 April 2022, gathered scholars and research funders, both senior and early-career, discussing the lessons they learned on science—policy interactions. These lessons were conceived for researchers who may consider becoming science—policy advisors, and discussed in a highly interactive format. Experts asked questions to the audience, often in a quite provocative way, and the public was invited to take a position. Then, each expert explained the lesson learnt behind that question. The lessons discussed in the event consider individual skills, competencies, and training needed, as well as the possible professional paths and different organisations involved. A specific focus was devoted to the nexus between scientific integrity and autonomy at personal and institutional levels.

This multimedia report provides links to the videos where each lesson is explained using the words of experts. The objective is to provide readers with useful lessons and reflections. The full recording of the event is also available at [this link](#) and the playlist with all video clips [here](#).

The 16 Lessons Learned

LESSON 1

Researchers should learn to understand the perspective and language of policymakers.



Mostafa M. Shawrav
(MCAA)

LESSON 2

A good science policy advisor is also a peer-recognised scientific expert.



Véronique Halloin
(FNRS)

LESSON 3

Researchers should deliver policy-relevant, rather than policy-prescriptive advice.



Zbigniew W. Kundzewicz
(Polish Academy of Sciences)

LESSON 4

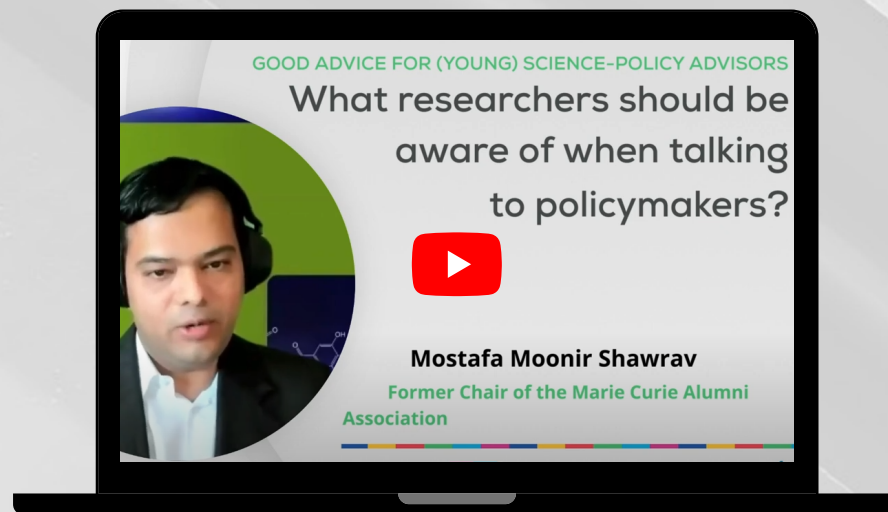
Science-Policy Advice is different from Science Communication as they address different audiences: policymakers and the general public.



Mairéad O'Driscoll
(HRB)

LESSON 5

Researchers must be aware that science is not the only source for policymakers.



Mostafa M. Shawvra
(MCAA)

LESSON 6

Researchers should be ready to discuss with contradictory experts.



Véronique Halloin
(FNRS)

LESSON 7

Researchers should engage with policymakers, being aware that they might be instrumentalised.
This risk should not prevent them from engaging in science-based policy advice.



Zbigniew W. Kundzewicz
(Polish Academy of Sciences)

LESSON 8

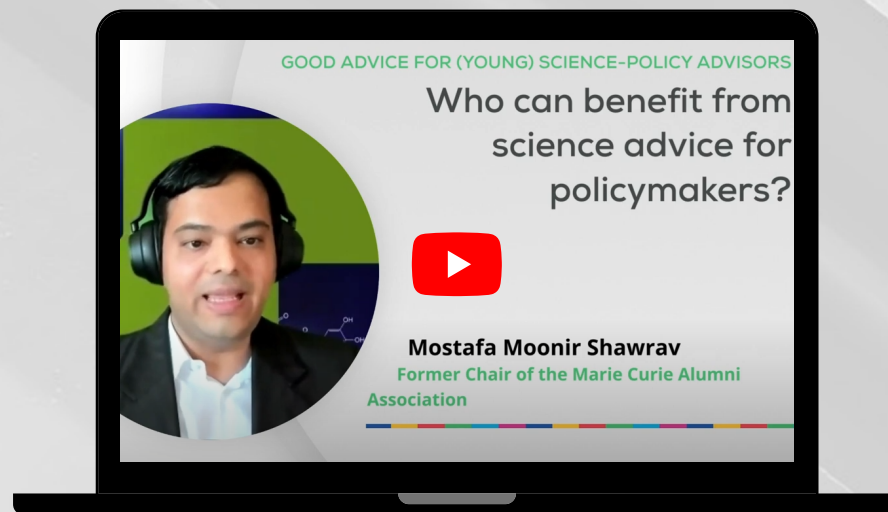
Researchers should consider the aim of their policy advice, having a clear goal for their contribution.



Mairéad O'Driscoll
(HRB)

LESSON 9

Science Advice for policymakers is also for early-career researchers, not only for senior scholars.



Mostafa M. Shawrav
(MCAA)

LESSON 10

Researchers should stick to their fields of expertise, abstaining from providing advice in other areas.



Véronique Halloin
(FNRS)

LESSON 11

Rectification of fake news and misconceptions is an important duty of scientists.



Zbigniew W. Kundzewicz
(Polish Academy of Sciences)

LESSON 12

Carefully consider the policy question and then think about the scientific advice to inform an answer.



Mairéad O'Driscoll
(HRB)

LESSON 13

Researchers should get involved in science-policy advice early in their career to develop their expertise and experience.



Mostafa M. Shawrav
(MCAA)

LESSON 14

It is not possible to act as a science policy advisor and activist at the same time.



Véronique Halloin
(FNRS)

LESSON 15

Scientists should communicate uncertainty to decision-makers rather than ignore it.



Zbigniew W. Kundzewicz
(Polish Academy of Sciences)

LESSON 16

Science advisors should know the different stages of the policy cycle: agenda setting, looking at alternatives, policy design, implementation, and evaluation.



Mairéad O'Driscoll
(HRB)

Conclusions



The lessons proposed by the experts addressed several important aspects of science-policy interfaces, without the ambition of being exhaustive. The proposed lessons aim to promote further reflections on the challenge of science-informed policymaking as well as policy-oriented research activities.

Good Advice for (Young) Science– Policy Advisors 29 April 2022

Programme

10.00–10.10 WELCOME

- Dr. Lidia BORRELL-DAMIÁN, Secretary General of Science Europe

10.10–11.10 INTERACTIVE PANEL SESSION

- Dr. Véronique HALLOIN, Secretary General of the Fund for Scientific Research (F.R.S.-FNRS)
- Prof. Dr. Zbigniew Władysław KUNDZEWICZ, Professor of Earth Sciences at the Polish Academy of Sciences
- Dr. Mairéad O'DRISCOLL, Chief Executive Officer of the Health Research Board of Ireland
- Dr. Mostafa M. SHAWVRAY, Marie Curie Alumni Association (MCAA)
- Chaired by Dr. Malin MOBJÖRK, Senior Policy Officer at Formas and Chair of the Science Europe Working Group on the Green and Digital Transition

11.10–11.20 OPEN DEBATE WITH THE AUDIENCE

11.20–11.30 PANEL CLOSE

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