

European Commission's Joint Research Centre and the American Association for the Advancement of Science issue a call to scientists and policy-makers for integrity, openness, clarity and public engagement

Representatives from both organisations made the plea on 3 July at a session of Euroscience Open Forum 2010 in Turin, Italy. The recommendations reflect the findings of a workshop last fall at the JRC's Ispra site where 21 high-profile science and technology policy leaders gathered to discuss the use and misuse of science in policy-making. The specialists, each with pertinent experience in real-life scientific support to policy-making, offered advice on best practices and pitfalls in science policy on both sides of the Atlantic.

The role of scientific advice in policy-making worldwide is growing. Recent episodes, such as the volcanic ash crisis in Europe or the oil spill in the Gulf of Mexico are prominent examples in the public eye. Yet, daily legislative decisions about the food we eat, the air we breathe, and the energy or means of transport we use, are a constant battle-ground between what a summary report on the Ispra workshop calls "evidence-based policy versus policy-biased evidence." Policy-makers want to know the facts and to receive independent advice. Faced with claims and counter claims from interest groups, however, this is not always obvious.

The summary report of the 27 October 2009 workshop was released at the ESOF2010 meeting by Alan I. Leshner, the Chief Executive Officer of the American Association for the Advancement of Science (AAAS); Roland Schenkel, the Director-General of the Joint Research Centre and Patrick Cunningham, the Irish Chief Scientific Adviser.

Scientists must sharpen their message and engage the public

The Ispra discussions centered on how science contributes to policy-making in government, business and non-governmental organisations, and how its influence could be sharpened. Representatives of participating organisations included, amongst others, Microsoft, Greenpeace, BASF, European Science Foundation, European Environment Agency, Massachusetts Institute of Technology, and the US National Academy of Sciences.

The group settled on a series of main themes. On their behalf, Leshner, Schenkel and Cunningham issued a rallying call for scientists and policy-makers to always strive for:

- **Integrity:** *to defend and assert the inherent integrity of science*
- **Openness:** *to keep the lab door open*
- **Clarity:** *to speak in terms the public can understand*
- **Engagement:** *to demonstrate that we take our duty to society seriously*

"Science must guarantee that it is guided by values of integrity and transparency, with its work underpinned by continuous peer review and evaluation," Schenkel said. He

added: "Scientists must seek to provide a complete and accurate assessment of the potential risks in scientific research and policy. Although challenging to do so, science leaders should not create unnecessary angst as a means of motivating public support for particular science policies."

Leshner stressed that: "The public plays a critical role in affecting policy, especially by influencing the policies adopted by elected officials and policy-makers." He added: "A key role of science leaders is to inform the public and policy-makers and aid in their understanding of policy implications. It is also important for scientists to listen to public concerns."

Cunningham concluded that: "Scientists should answer, in an accurate and timely way, policymakers' requests for science information." He added: "At the same time, policymakers should encourage scientists to speak out even when their research or assessment may be unpopular. As one vocal participant put it, scientists should learn to stand up, shout up and when necessary, shut up."

Further information

- "Evidence-based policy versus policy-biased evidence: the challenge of feeding scientific advice into policy-making": <http://ec.europa.eu/dgs/jrc/index.cfm?id=2550>
- Joint Research Centre: <http://www.jrc.ec.europa.eu>
- American Association for the Advancement of Science: <http://www.aaas.org/>

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Annex: Alphabetical List of Participants and Affiliations

Trans-Atlantic Science for Policy Workshop Evidence-based policy versus policy-biased evidence (JRC Ispra, 27 October, 2009)

1. Dr. Richard Bissell (American): Head of Policy & Global Affairs, US National Academy of Sciences
2. Mr. Colin Challen (British): Member of UK Parliament, Chairman of the All Party Parliamentary Climate Change Group
3. Professor Patrick Cunningham (Irish): Chief Scientific Adviser to the Irish Government
4. Dr. Ene Ergma (Estonian): Speaker of the Estonian Parliament (Riigikogu)
5. Dr. David Goldston (American): Natural Resources Defense Council (NRDC)
6. Dr. Klaus Gretschmann (German): Director-General, European Council, Competitiveness, Research, Industry, Internal Market, Energy, Info Society and Transport
7. Dr. Hans-Olaf Henkel (German): Formerly President of the Federation of German Industry
8. Professor Leen Hordijk (Dutch): Director of the European Commission, Joint Research Centre's Institute for Environment and Sustainability (IES-JRC), Ispra, Italy
9. Dr. Paul Johnston (British): Head of Science, Greenpeace

10. Dr. Alan Leshner (American): Chief Executive Officer, AAAS & Executive Publisher, *Science*
11. Mr. Robert Madelin (British): Director-General, European Commission Health & Consumers
12. Professor Marja Makarow (Finnish): Chief Executive, European Science Foundation
13. Dr. Stefan Marcinowski (German): Member of the Board of Executive Directors, BASF
14. Dr. Jacqueline McGlade (Canadian/British): Executive Director, European Environment Agency
15. Dr. Norman Neureiter (American): Senior Advisor, AAAS Center for Science, Technology & Security Policy
16. Dr. Kerstin Niblaeus (Swedish): Senior Advisor to the Swedish Minister of Environment
17. Professor Vittorio Prodi (Italian): Member of the European Parliament
18. Dr. Roland Schenkel (German): Director-General, European Commission, Joint Research Centre
19. Dr. Eugene Skolnikoff (American): Massachusetts Institute of Technology (MIT)
20. Dr. Al Teich (American): Director, Science & Policy Programmes, AAAS
21. Dr. John Vassallo (Maltese): Microsoft Vice President, EU Affairs, Associate General Counsel & Chair, American Chamber of Commerce.