Appeal for the Integrity of Science and Public Policy

Insights Note 08

Published in ‘Toxicology’ and supported by more than 200 eminent scientists world-wide, this important appeal (‘An Appeal for the integrity of science and public policy’) calls on governments to embed the rules of evidence of the scientific method in statutes governing administrative policy and regulations. It highlights the erosion of scientific principles in the purported validation of scientific evidence, leading to pseudo-science that simulates and exaggerates hazards and risks, thereby justifying government actions that, over time, erode public confidence in science and government and create “regulatory failure”. Spurious science of this type includes arbitrary default assumptions that inevitably yield biased and uninterpretable results, and premature experimental accounts that are not sufficiently tested and controlled. Examples are found in animal, in vitro and in silico tests of presumed risk factors for human cancer and endocrine disturbances, and in many epidemiological surveys and environmental impact assessments. See link below:

ERF Insights

1. The Appeal provides further evidence of the mounting concern within the scientific community at the erosion of the quality of evidence used to support complex decisions. A weakening, by some scientists, of respect the “scientific method” forms part of wider process of distorting and undermining the use of evidence in decision-making. There are multiple reasons for this, including the proliferation of lesser quality academic journals seeking studies; the expansion of so-called “open science with limited quality controls; and the emergence of communities of activist scientists seeking justice rather than truth.

2. Alongside its penetrating critique of the problem of “pseudo-science’, and its powerful articulation of the scientific method, the Appeal usefully highlights gaps in the framework of laws and policies for ensuring the quality and consistency of scientific assessments. At EU-level, this is an evident problem: there are no ‘horizontal’ requirements that define the quality of scientific evidence that must be used in scientific assessments.

3. Many of the findings and recommendations of the ERF’s recent monograph, ‘Scientific Evidence and the Management of Risk’ are endorsed by the Appeal. Indeed the ERF called for the scientific community to become more extensively engaged in developing the detailed guidance needed to define the quality of scientific assessments and to defend more vigorously the scientific method and its value to society.

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