Title: How the Precautionary Principle Hinders Regulatory Engagement: The Problem of Implicit Judgments

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Many state and international authorities seek to govern the emergence of innovative technologies in alignment with the precautionary principle, a regulatory norm which holds that:

Precautions should be taken to avoid damage when two criteria are met: (1) it is feared that damage (of a certain extent) may occur and (2) knowledge about the probability of that damage is restricted.

This principle is often promoted as being a matter of common-sense, but its adoption has also been contested, with critics arguing that it is "both irrational and unscientific" and that it "stifles innovation by imposing unreasonable demands on the safety of new technologies".

Despite these assertations, the precautionary principle continues to be employed by numerous national and international regulators. Moreover, it has trickled down into everyday political discourse, with community members, activists, innovators, and politicians invoking this norm when advocating for or against the development and adoption of specific emerging technologies.

Criticisms of the precautionary principle aside, one might think that the expanding use of this standard has an obvious upside. After all, "there is broad agreement on the importance of engaging affected communities and broader publics in decision making" about emerging technologies. And, as far as the precautionary principle is employed by public stakeholders, technology developers, and regulators, it appears to represent a shared touchpoint within discussions about how to govern potentially disruptive innovations.

Yet, we observe that in addition to any problems with its reasonableness or rationality, the precautionary principle is an inherently ambiguous norm; it does not define what counts as damage or what counts as an undue extent of damage, nor does it define when our knowledge about the probability of such damage counts as being restricted. Instead, these sorts of practical judgments are left to the agents or agencies who invoke or apply the norm. What is more, the content of these judgments are rarely ever delineated, and are instead made implicitly or even unconsciously. In effect, while the precautionary principle might look like a shared discursive touchpoint, the use of this seemingly common-sense principle often obscures important differences between the views of various stakeholders, thereby hindering rather than facilitating effective regulatory engagement.

In our presentation, we will first explain the precautionary principle's problem with ambiguity in greater detail. We will then suggest a series of practical recommendations concerned with making the discourse about the precautionary principle more transparent. In this way, we hope to support more forthright and fruitful regulatory dialogue around the governance of new and innovative technologies.