Viewpoint: How the hazard-based, European-promoted 'Precautionary Principle' has undermined global agriculture — and why we should kill it



wenty years is a long time in the wilderness.

Since 2001 and the European Environment Agency's publication, *Late Lessons from Early Warnings*, the European Commission has applied an activist interpretation of the precautionary principle. In that time, there has been a constant exodus of scientists from the European Union, innovative technologies have been restricted and trust in science has declined.

"Late Lessons" reversed the burden of proof. Instead of identifying a risk, regulators demanded that scientists prove substances were safe (safety and certainty being emotional, relative perceptions). Combined with the hazard-based regulatory approach (where levels of exposure are not factored in), the EU regulatory process became an impossible minefield for innovative technology approvals.

In these two lost decades, Europeans can no longer manage risks and procure societal benefits, opting instead to manage uncertainty by removing any substances and processes that cannot be proven to be completely safe. This incapacity was evident when the coronavirus pandemic hit Europe. Rather than reducing exposures and protecting the most vulnerable, regulators immediately imposed blanket precautionary lockdowns as the only means to keep people "safe".

Unlike uncertainty management (precaution), risk management finds the means to keep populations safer (reducing exposures to as low as reasonably achievable). There is no such thing as "safe".

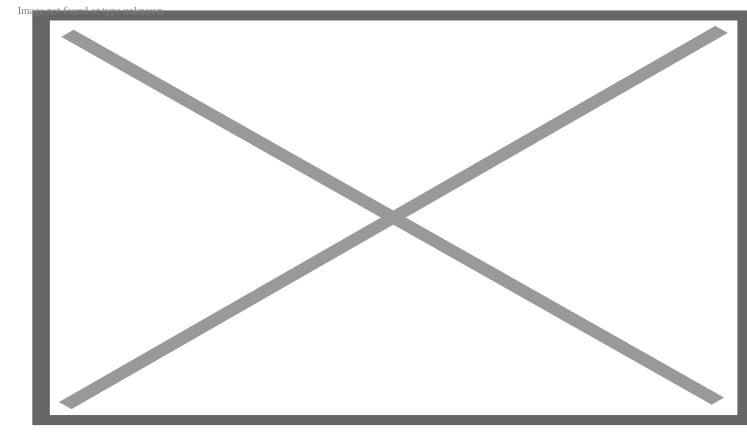
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Inconsistent applications

If we took a hazard-based approach and demanded 100% safe substances, then coffee, mobile phones and cars would have to be banned under the precautionary principle. They are not though because precaution is applied selectively (based on pressure from activist lobby groups). Where benefits are clear and their removal unimaginable, the hazard-based approach mysteriously disappears.

There is often confusion on when the precautionary principle is a useful policy tool and when it can be, well, inconvenient. When a handful of people suffered blood clots after a COVID-19 vaccine, EU Commissioners jumped to deploy the precautionary principle ... until the European Medicines Agency intervened with common sense. But it was too late; public trust was lost.

The EU has no guidance on how to apply the precautionary principle. This becomes obvious when we look at seed breeding.



Applying the precautionary principle is detrimental to consistent policies. Credit: Dmitrii Guzhanin via iStock

Precaution and seed breeding

Hypocrisy shines brightly with EU policy on seed breeding. Genetically engineered substances could not meet the (impossible) zero-risk precautionary standards, leading to an undermining of public trust in the technology. The Court of Justice of the European Union declared in 2018 that new plant breeding techniques (NPBTs) were to be considered under the restrictive 2001 GMO Directive, but they then went through some mental gymnastics to consider any mutagenesis done prior to 2001 as "safe". I suppose European authorities could not imagine having to ban durum wheat (used in most Italian pasta and genetically modified in the 1960s).

The European Commission, finalising its Green Deal "Farm2Fork" strategy, has accepted that yields will dramatically decline as they move to phase out large numbers of agricultural technologies. They may now move to, once again, being selective in their application of precaution with NPBTs. Is this a victory of deft lobbying skills? Or an opportunity arising out of a massive Green Deal policy failure which will stubbornly still be implemented?

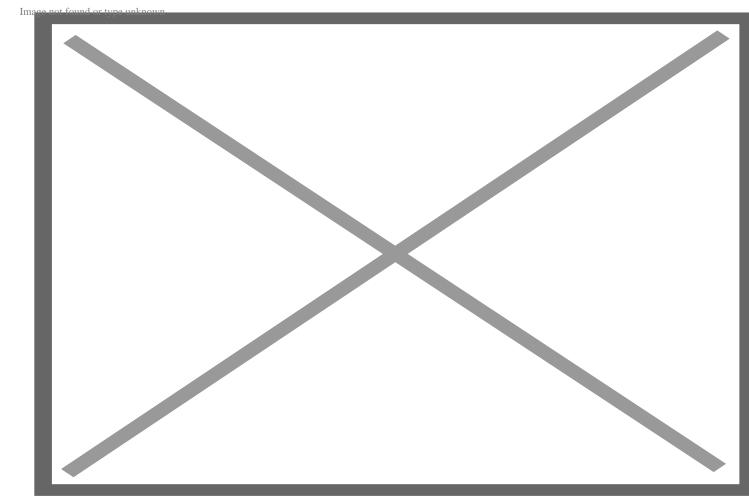
Harsh medicine

I have been active too long in Brussels to think that the European Commission will be able to continue their open-door policy to reconsidering NPBTs. I suspect anti-technology forces within the Commission will soon move to add hazard-based, precautionary restrictions on any NPBT authorisations, rendering the entire process a tragic waste of time.

And what then should industry do? Say farewell to more researchers? Develop more organic seeds? Close more EU operations?

The European participatory strategy, set out in the 2001 White Paper on European Governance, considers EU policies as only legitimised after wide-scale stakeholder engagement.

In the mid-2000s, many Brussels-based NGOs threatened to abandon the engagement process (walking out of most European Technology Platforms), until they had more influence in how the game was played. Significant public funds have been given to NGOs to ensure they have the means to be involved in the consultative processes. Risk management was largely replaced with uncertainty management (precaution) and the hazard-based approach started being applied, invalidating most exposure data and research findings. The game is now fixed in the NGO's favour.



NGOs gain influence and funding through their involvement with the precautionary principle. Credit: Kiewiev

I strongly recommend that, if the European Commission reintroduces the hazard-based precautionary approach during present NPBT consultations, the seed industry and research institutions should walk out of the process. Boycott any activities until the European Commission develops a clear strategy on the role of precaution within the larger risk management framework.

The legitimacy of EU regulations depends on stakeholder engagement. Without industry and research communities at the table, the European Commission will be forced to re-evaluate its use of such innovation-toxic policy tools.

It's time to put precaution in its place.

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